




Risk Assessment Pack

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CFA Piling Risk Assessment Pack




		Title Risk Assessment Pack	
Document Type Work Instruction	Revision -/2015-08-07	Document Number 7.1KF F34	Page 2 of 5

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CHANGE RECORD

Revision	Changes	Author
1		EC
2	New HSEQ Policy	EC
3	Adblue added into COSHH assessment	EC
4	RA10 updated	EC

	Title Risk Assessment Pack		
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1. INTRODUCTION

This document is to accompany the CFA Piling Works Package Plans issued to clients. It includes the Keller HSEQ policy (Appendix A) and collates the task and materials hazards present on CFA sites. Site specific hazards are addressed through the use of form 1-1.2K F9 Site Hazard Assessment, a copy of which is include in the project Works Package Plan.

All current Risk Assessments and Hazard Assessments are available for download from the Keller Intranet (KIMS) by the Site Supervisor, attached are the current versions as noted within the change record. The CFA Contracts Manager will update this document periodically (6-monthly review).

2. HAZARD ASSESSMENT FORMS

KF HA01 Piling Rig Access and Egress

KF HA02 CFA - Using a CSP Attachment

KF HA07 Site Crane Works

KF HA10 (CFA) Continuous Flight Auger Piling

KF HA12 Lifting and Installation of Pile Reinforcement

KL HA02 Loading Unloading of Lorries

KL HA07 Site establishment

KL HA10 Mobile Elevated Work Platform

KL HA14 Forklift Truck Telescopic Handlers

KL HA16 Air Compressors

KL HA18 Loading & Unloading of Plant, Equipment, Etc

KL HA22 Concrete Pumping

KL HA23 Abrasive Wheels

KL HA25 Rite Mixer

KL HA27 Welding Cutting and Associated Work on Site



Operation / Task:	Piling Rig Access / Egress	Assessment Ref / Rev:	KF_HAO1	Prepared by:	HSEQ / Operational Teams	Rev 2 Date:	June 2015
Location:	Various Sites / Yard	Department:	Keller Divisions	Issue Date:		Rev 1 Date:	22nd March 2014
				Mar-13			

H&S Consequence, C 1 Minor Injury 2 First Aid injury 3 Major injury 4 Permanent Consequence 5 Potential Fatality	Env. Consequence, C 1 Minor Impact / operational delay 2 Community complaints 3 Major Impact 4 Legal Consequence 5 Major impact and cost	Likelihood, L 1 Improbable 2 Remote 3 Possible 4 Probable 5 Almost Certain	<table border="1"> <tr> <td></td> <td></td> <td>1</td> <td>2</td> <td>3</td> <td>4</td> <td>5</td> </tr> <tr> <td rowspan="5" style="writing-mode: vertical-rl; transform: rotate(180deg);">Severity</td> <td>1</td> <td style="background-color: #90EE90;">1</td> <td style="background-color: #90EE90;">2</td> <td style="background-color: #FFFF00;">3</td> <td style="background-color: #FFFF00;">4</td> <td style="background-color: #FFFF00;">5</td> </tr> <tr> <td>2</td> <td style="background-color: #90EE90;">2</td> <td style="background-color: #FFFF00;">4</td> <td style="background-color: #FFFF00;">6</td> <td style="background-color: #FF0000;">8</td> <td style="background-color: #FF0000;">10</td> </tr> <tr> <td>3</td> <td style="background-color: #90EE90;">3</td> <td style="background-color: #FFFF00;">6</td> <td style="background-color: #FF0000;">9</td> <td style="background-color: #FF0000;">12</td> <td style="background-color: #FF0000;">15</td> </tr> <tr> <td>4</td> <td style="background-color: #FFFF00;">4</td> <td style="background-color: #FF0000;">8</td> <td style="background-color: #FF0000;">12</td> <td style="background-color: #FF0000;">16</td> <td style="background-color: #FF0000;">20</td> </tr> <tr> <td>5</td> <td style="background-color: #FFFF00;">5</td> <td style="background-color: #FF0000;">10</td> <td style="background-color: #FF0000;">15</td> <td style="background-color: #FF0000;">20</td> <td style="background-color: #FF0000;">25</td> </tr> </table>			1	2	3	4	5	Severity	1	1	2	3	4	5	2	2	4	6	8	10	3	3	6	9	12	15	4	4	8	12	16	20	5	5	10	15	20	25	Acceptance Criteria <table border="1"> <tr> <td style="background-color: #FF0000;">R</td> <td>Red - Intolerable take immediate action</td> </tr> <tr> <td style="background-color: #FFFF00;">Y</td> <td>Yellow - Tolerable with additional controls</td> </tr> <tr> <td style="background-color: #90EE90;">G</td> <td>Green - Tolerable no further action required</td> </tr> </table>	R	Red - Intolerable take immediate action	Y	Yellow - Tolerable with additional controls	G	Green - Tolerable no further action required
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Task	Hazard	Persons at risk	Degree of risk			Control measures	Residual risk			Person responsible	Monitoring responsibility
			C	L	RR		C	L	RR		
A	Climbing onto and off piling rigs										
A1	Slipping off steps / tracks	Anyone	3	3	9	(PUWER reg 5&6) All rig operators must carry out daily checks and record on the weekly plant return forms. (this must include checking the steps) Anyone climbing onto the rig steps must ensure the step is in good order and not covered in mud / debris. Any debris on boots should be kicked off prior to climbing up. Check steps not icy during winter months. De-icer is available in work vans. Tools must never be stored on the steps. Use permanent fixtures on rig to grab hold off if necessary to aid climbing up onto tracks. (Working at height Rgs 3 & 14) No-one is to climb onto back of rig without the handrails being in place. If access is required to the mast then a MEWP or equivalent must be utilised.	3	1	3	Rig operator / any person wishing to climb onto rig	Site Supervisor / Forman
A2	Complacency	Anyone	3	3	9	Anyone climbing on rigs must remain vigilant and concentrate at all times. Foreman / Supervisors to carry out daily briefings highlighting any specific hazards. (H&S@W act 1974 section 2)	3	2	6	Rig operator / any person wishing to climb onto rig	Site Supervisor / Forman
A3	Poor Weather conditions	Anyone	3	3	9	Extra care must be taken during heavy wind or rain. Snow must be brushed off prior to climbing. Use de-icer or something equally effective to thaw out any ice when required. Boots must be kicked against tracks prior to climbing.	3	1	3	Rig operator / any person wishing to climb onto rig	Site Supervisor / Forman
A4	Storage of tools on steps	Anyone	3	3	9	Ganger must ensure that no tools are left on the steps. Plant dept. are fitting tool trays to all rigs to store the hammer, screwdriver, plastic caps, etc.	3	1	3	Rig operator / Ganger	Site Supervisor / Forman
A5	Unable to climb into rig due to shape, size, posture, fitness level.	Anyone	3	2	6	Keller will ensure that any one required to climb onto any piling rig is in good physical health. The supervisor must ensure that everyone is capable of climbing into the Cab of the Piling Rig when it is set to its maximum footprint. The company has a programme for carrying out regular health surveillance.	3	1	3	Rig operator / Ganger	Site Supervisor / Forman

Operation / Task: Welding cutting & associated hot work on site		Assessment Ref / Rev: KF_HAO2		Prepared by: HSEQ /Ops team		Rev 2 Date: June 2015																																					
Location: Construction Sites		Department: Keller Foundations UK Plant Department		Issue Date: Mar-13		Rev 1 Date: 20th March 2014																																					
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	General Note. Note: This assessment covers cutting and welding work using electric arc welding and oxygen / flammable gas equipment on various construction sites. Welding activities are only to be undertaken by trained, competent and authorised personnel. A hot works permit must be issued by the main contractor or a Keller foreman/supervisor before any welding is carried out.																																										
A Use of welding equipment.																																											
A1	Fire and explosion from the ignition of gas cylinders	Welder / Site staff	5	3	15	Gas cylinders and hoses to be checked for leaks, etc. Arc welding equipment to be examined by electrician regularly. Cylinders to be kept upright and secured. Valves to be closed when not in use. Cylinders to be fitted with appropriate regulator and gauge. Flash-back arrestors to be fitted on all lines. Cylinders must be stored in a cool dry place away from any direct heat source.	5	1	5	Welders	Mobile plant manager, site foreman																																
A2	Fire from other flammable materials	Welder / Site staff	5	3	15	Hot work permit must be in place prior to carrying out any hot work operations. Flammable materials must be removed from working area. Fire extinguisher must be available and close by at all times. Welder to check condition of welding equipment before use and to ensure that equipment is safe after use. Cutting and welding of drums or tanks that have contained flammable materials is prohibited with out following the appropriate procedure. This must include producing a separate HA in conjunction with the Workshop Manager.	5	1	5	Welders	Mobile plant manager, Supervisors																																
A3	Fumes from rods, coatings and metals.	Welder / Site staff	4	4	16	Welding etc. must be undertaken in well-ventilated areas. Local exhaust ventilation may also be required in certain circumstances to remove fumes. Health checks must be undertaken at set timescales arranged by line management / HR.	4	2	8	Welders	Mobile plant manager, Supervisors																																
A4	Hot metal surfaces.	Welder / Site staff	2	3	6	Hot work permit must be in place prior to carrying out any hot works on site. Welder to exclude other persons from the working area. Barriers and signs may be required. Welder must wear welding gloves.	2	1	2	Welders	Mobile plant manager, Supervisors																																
A5	Flying splatter	Welder / Site staff	3	3	9	Welder to exclude other persons from the working area. Barriers and signs may be required. Welder must wear flame retardant overalls, appropriate apron and welding gloves.	3	1	3	Welders	Mobile plant manager, Supervisors																																
A6	Excessive light/radiation for the welder.	Welder / Site staff	4	4	16	Approved welding Face shield must be worn by the welder	4	1	4	Welders	Mobile plant manager, Supervisors																																
A7	Excessive light/radiation for others nearby.	Welder / Site staff	4	4	16	Fireproof screens to be placed around working area. Welder to exclude other persons from the working area. Barriers and signs may be required	4	2	8	Welders	Mobile plant manager, Supervisors																																
B Storage of used hot welding rods.																																											
B1	Burns / Scalds	Welder / Site staff	2	4	8	Used weld rods should be immediately placed in a small steel bucket or such like receptacle.	2	1	2	Welders	Welder, Supervisor																																
C Storage of gas cylinders.																																											
C1	Fire and explosion.	Welder / Site staff	5	3	15	Cylinders must be stored in dedicated locked labelled cages and secured. Cylinders in use in the workshop must be stored on trolleys and isolated when not in use. Any vans carrying gas bottles must be ventilated, carry appropriate fire extinguishers and display the correct hazard warning signs.	5	1	5	Welders	Mobile plant manager, Supervisors																																
D Use of burning gear for cutting steel.																																											

Task	Hazard	Persons at risk	Degree of risk			Control measures	Residual risk			Person responsible	Monitoring responsibility
			C	L	RR		C	L	RR		
	General Note.					Note: relevant parts of the above assessment for the use of welding equipment shall apply for the use of burning gear except where amended below					
D1	Excessive light	Welder / Site staff	4	4	16	Goggles to EN 166 class 3, 4, 9-B fitted with a filter to EN169 to be worn.	4	1	4	Welders	Mobile plant manager, Supervisors



Operation / Task:	Site Crane Works	Assessment Ref / Rev:	KF_HA07			Prepared by:	HSEQ / Ops Team	Rev 2 Date:	June 2015
Location:	Anywhere	Department:	Keller			Issue Date:		Rev 1 Date:	22nd March 2014
									Mar-13

H&S Consequence, C	Env. Consequence, C	Likelihood, L						Acceptance Criteria	
1 Minor Injury	1 Minor Impact / operational delay	1 Improbable		1	2	3	4	5	R Red - Intolerable take immediate action Y Yellow - Tolerable with additional controls G Green - Tolerable no further action required
2 First Aid injury	2 Community complaints	2 Remote	1	1	2	3	4	5	
3 Major injury	3 Major Impact	3 Possible	2	2	4	6	8	10	
4 Permanent Consequence	4 Legal Consequence	4 Probable	3	3	6	9	12	15	
5 Potential Fatality	5 Major impact and cost	5 Almost Certain	4	4	8	12	16	20	
			5	5	10	15	20	25	

Task	Hazard	Persons at risk	Degree of risk			Control measures	Residual risk			Person responsible	Monitoring responsibility
			C	L	RR		C	L	RR		
	General Note					NOTE: Cranes are only to be operated by trained and competent persons. When applicable, operatives shall hold a current CPCS card Operatives under training shall be supervised by an authorised employee. All lifts are to be properly planned and supervised by suitably trained and competent persons.					
A	<u>All Activities.</u>										
A1	Overloading of crane.	Operator / Site workers	5	3	15	Project Manager to arrange for a suitable and sufficient crane to undertake required lifts. A suitable lift plan must be prepared by an Appointed person, this must be reviewed by an appointed person prior to any mobilisation of cranes. The site must be visited before preparing lift plant. Supervisor to ensure that weights of loads are known and are within the capacity of the crane.	5	1	5	Appointed Parson	Project Manager / Supervisor
A2	Trips, slips and falls	Operator / Site workers	3	4	12	The work area must be kept clean and tidy at all times. All lifting accessories must be stored off the ground in the correct storage areas whilst not in use.	3	1	3	Operator / Site workers	Supervisor
A3	Adverse ground.	Operator / Site workers	5	3	15	A suitable lift plan must be prepared by an Appointed person, this must be reviewed prior to commencing on site. The site must be visited before the lift plan is prepared. Platform certificate to be completed to confirm that platform is adequate before work commences. Platform to extend at least half a machine width beyond crane. Extra consideration to be given when working adjacent to site boundaries or hoardings.	5	1	5	Appointed Parson	Project Manager / Supervisor
A4	Contact with overhead electric cables.	Operator / Site workers	5	3	15	If overhead cables are present the Energy company provider must be contacted for assistance. No further work must continue until suitable control measures have been documented and agree. The Supervisor must confirm on the site hazard assessment that the overhead lines do not affect the crane or to arrange for improvements to be implemented before work commences.	5	1	5	Appointed Parson	Project Manager / Supervisor
A5	Collision with persons.	Operator / Site workers	5	3	15	Only trained and competent persons to operate cranes. The crane operator must ensure 360 degree vision is available at all times. Flashing beacon must always be switched on whilst plant in use. Safe exclusion zones must be provided and all non essential personnel kept out of the immediate work area. A trained Banks man must be in place supervising all crane activities. Always adhere to site traffic management plan.	5	1	5	Operator / Banksman	Supervisor
A6	Failure of lifting appliance or lifting accessories.	Site Workers	5	3	15	Current inspection certificate, not more than 12 months old, and test certificate not more than four years old, to be provided with crane. Inspection certificates, not more than six months old to be provided for lifting accessories with hired crane. Keller-owned accessories to be correctly colour-coded and to have an identification mark stamped on. Supervisor must inspect the machine on delivery. Operator to inspect the crane daily before use and to carry out routine servicing in accordance with the operators manual. Daily inspection to be made by operator and recorded on the weekly inspection report.	5	1	5	Operator / Banksman	Supervisor

Task	Hazard	Persons at risk	Degree of risk			Control measures	Residual risk			Person responsible	Monitoring responsibility
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A7	High winds.	Operator / Site workers	5	2	10	In the event of extreme weather conditions it may sometimes be necessary to review any lifting operation until such time as it is safe to proceed. A competent person, AP or crane supervisor along with the crane driver needs to assess the wind speed and cease work if it is considered too high. (If able) using an anemometer unit, readings are to be taken every 30mins and constantly monitored. Once both the AP or crane supervisor and the crane driver are comfortable with the wind speed and the fact that it is not gusting and the wind speeds are within the crane manufacturers guidelines the lift will be further assessed with regard to weight and radius. Should all parties be satisfied with the wind conditions and deem the lift to be safe, a tag line will be placed on the load prior to lifting. If the load is a cage, the cage will not be lifted until the pile is concreted to further mitigate any risks. Once the pile is concreted the cage will be lifted to the vertical and steadied with one or more tag lines and guided to the pile for placement. The pile cage is full of holes and as such the wind tends to pass through it rather than making the cage uncontrollable. The crane supervisor and the crane driver will constantly monitor the situation and abort works should they deem it to be beyond acceptable limits, or exceed the crane manufacturers operational limits. Although the safe workable wind speed varies from crane to crane, as a guide ONLY, the maximum wind speed at which lifting operations can take place is 10 metres per second (22 mph)	5	1	5	Operator / Banksman	Appointed Person / Supervisor
A8	Uncontrolled fall of load.	Banks man / Slinger/ Operator	5	2	10	Exclusion zone must be in place and adhered to	5	1	5	Banks man	Appointed Person
A9	Fall of load caused by damage to strop being used on loads of small diameter.	Banks man / Slinger/ Operator	5	3	15	Soft eyed strops are not to be used except for lifting drive tubes or for lifting CFA augers	5	1	5	Banks man	Appointed Person
A10	Movement of load on ground while slings being attached or removed.	Banks man / Slinger/ Operator	3	3	9	Loads to be placed on suitable timbers to allow access or strops underneath and chocks.	3	1	3	Banks man	Appointed Person
A11	Fall of load caused by incorrect slinging.	Banks man / Slinger/ Operator	5	3	15	Loads to be attached to the crane by a trained and component slinger. All lifting equipment used must be inspected prior to use and within it six monthly periodic inspection.	5	1	5	Banks man	Appointed Person
B Working alongside railways.											
B1	Interference with adjacent railways.	All site workers	5	3	15	The contract manager shall ensure that approval for the method of working has been obtained from the railway authority, prior to arranging any crane work. The site foreman shall ensure that the approval has been received prior to carrying out any work, which is in accordance with the agreed procedure.	5	1	5	Appointed Parson	Project Manager / Construction Manager
C Lifting near to or over adjacent buildings.											
C1	Load falling onto building.	Building occupiers	5	2	10	Loads are not to be lifted over buildings, unless this is unavoidable. In this case, consent of the building controller to be obtained. Building to be unoccupied during the lift. Site specific Hazard Assessment must be completed prior to any works commencing.	5	1	5	Appointed Parson	Project Manager / Construction Manager

Operation / Task:	Pile and Zone Tests.	Assessment Ref / Rev:	KF_HA08			Prepared by:	HSEQ / Ops teams	Rev 2 Date:	June 2015
Location:	Construction Sites	Department:	Keller Divisions			Issue Date:		Rev 1 Date:	March 2014
						May-13			

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Task	Hazard	Persons at risk	Degree of risk			Control measures	Residual risk			Person responsible	Monitoring responsibility
			C	L	RR		C	L	RR		
General Note.											
Note: This assessment covers both pile tests using anchors and pile tests with kentledge. It also covers where relevant zone tests of treated or untreated ground.											
A											
A1	Construction of test pile and anchor pile (if applicable)		N/A	N/A	N/A	See separate risk assessments for the construction of the type of pile.	N/A	N/A	N/A		
B											
B1	Crane work.		N/A	N/A	N/A	See separate risk assessment for crane work (HA 105). The contract specific Appointed Person must specify size of crane. Crane to have a minimum capacity of 50 tonnes.	N/A	N/A	N/A		
C Rigging of Kentledge test.											
C1	Ground bearing failure under kentledge.	Operator / Site Workers	5	3	15	Project manager or design engineer to confirm that the ground is suitable for loads to be applied and to confirm minimum size of platforms. An appointed person must prepare a separate lift plan if cranes are being used. Supervisor to assess ground before commencing to rig the test.	5	1	5	Appointed Person	Project Manager / Construction Manager / Supervisor
C2	Stability of kentledge.	Site Workers	5	3	15	Grillage to be suitable and sufficient for the test load. Kentledge to be suitable and stacked on the grillage in suitable manner, uniformly over the load with each layer at 900 to the layer below. Each block to rest on at least two blocks below.	5	1	5	Operator	Project Manager / Construction Manager / Supervisor
C3	Collision of kentledge with person on blocks	Site Workers	5	3	15	Person working on the kentledge blocks must be a trained and competent slinger / signaller and to be in control of crane movements. If necessary a second person to relay signals to the crane operator.	5	1	5	Banksman	Appointed Person / Supervisor
C4	Fall from height	Site Workers	5	3	15	Suitable ladder access to the top of the kentledge to be provided at all times. (Refer to HA 23: Use of Ladders for hazards involved with the use of ladders). Top of kentledge to be flat without trip hazards. A safety harness, fitted with a 1.5m lanyard shall be worn. The lanyard shall be secured to the lifting eye on the top of a kentledge block on the layer upon which the slinger is working.	5	1	5	Operator	Appointed Person / Supervisor
D Rigging of anchor pile test.											
D1	Failure of tensile rods	Operative setting up	5	15	15	Rods to be designed to carry loads. Anchor plates to be suitable. Welding to be carried out by authorised personnel.	5	1	5	Operator	Supervisor
D2	Collapse of beams.	Operative setting up	5	3	15	Minimum of four anchors to be used. Beams to be supported by a suitable cradle.	5	1	5	Operator	Supervisor
E Rigging of test equipment.											
E1	Manual handling of jack, etc.	Operative setting up equipment	3	3	9	All employees must have undergone suitable manual handling training prior to commencing works on site. Suitable manual handling assessments must be carried out for tasks carried out on site. Mechanical means to be used to transport item where reasonably practicable. Two men to lift jack, pump etc. into position, if necessary.	3	1	3	Pile Tester	Supervisor
F Undertaking test											

Task	Hazard	Persons at risk	Degree of risk			Control measures	Residual risk			Person responsible	Monitoring responsibility
			C	L	RR		C	L	RR		
F1	Working alone	Pile tester	5	3	15	If working alone on the site, the person carrying out the test shall be provided with a mobile phone and ensure an adequate lone worker procedure is in place. It must include a reporting in procedure at set times / durations. This procedure must be checked to confirm there is suitable mobile phone reception.	5	1	5	Pile Test company	Supervisor
F2	Working at night	Pile tester	5	3	15	Working alone at night should be prohibited at all times unless all other means of pile testing options have been considered. A site specific RA must be undertaken by the pile test company. This must be reviewed and agreed with the Keller Project Manager and Main Contractor site manager. Keller Supervisor must ensure the control measures are adhered to. Suitable welfare provisions must be provided by the pile test company.	5	1	5	Pile Test company	Project Manager / Main Contractor / Supervisor
F3	Failure of test beams	N/A	N/A	N/A		Test equipment, suitable and certified as sufficient for the test load, labelled and in good condition, shall be used.	N/A	N/A	N/A		
F4	Failure of hydraulic hoses	Pile tester	3	3	9	Hydraulic hoses to have capacity rated for pressures. Hoses to be routed to avoid loads being placed on them, buried if necessary. Hoses to be inspected before test commences.	3	1	3	Pile Tester	Supervisor
F5	Lifting of kentledge blocks under load.	Pile tester	3	3	9	Total weight of kentledge and test beams to exceed maximum test load by a minimum of 10%.	3	1	3	Pile Tester	Supervisor



Operation / Task:	C.F.A Piling	Assessment Ref / Rev:	KF_HA10		Prepared by:	HSEQ / Ops Team	Rev 2 Date:	07/12/2015
Location:	Sites	Department:	Keller		Issue Date:	07/12/2015	Rev 1 Date:	17/04/2013

H&S Consequence, C 1 Minor Injury 2 First Aid injury 3 Major injury 4 Permanent Consequence 5 Potential Fatality	Env. Consequence, C 1 Minor Impact / operational delay 2 Community complaints 3 Major Impact 4 Legal Consequence 5 Major impact and cost	Likelihood, L 1 Improbable 2 Remote 3 Possible 4 Probable 5 Almost Certain	<table border="1"> <tr> <td></td> <td>1</td> <td>2</td> <td>3</td> <td>4</td> <td>5</td> </tr> <tr> <td>1</td> <td>1</td> <td>2</td> <td>3</td> <td>4</td> <td>5</td> </tr> <tr> <td>2</td> <td>2</td> <td>4</td> <td>6</td> <td>8</td> <td>10</td> </tr> <tr> <td>3</td> <td>3</td> <td>6</td> <td>9</td> <td>12</td> <td>15</td> </tr> <tr> <td>4</td> <td>4</td> <td>8</td> <td>12</td> <td>16</td> <td>20</td> </tr> <tr> <td>5</td> <td>5</td> <td>10</td> <td>15</td> <td>20</td> <td>25</td> </tr> </table>		1	2	3	4	5	1	1	2	3	4	5	2	2	4	6	8	10	3	3	6	9	12	15	4	4	8	12	16	20	5	5	10	15	20	25	Acceptance Criteria <table border="1"> <tr> <td>R</td> <td>Red - Intolerable take immediate action</td> </tr> <tr> <td>Y</td> <td>Yellow - Tolerable with additional controls</td> </tr> <tr> <td>G</td> <td>Green - Tolerable no further action required</td> </tr> </table>	R	Red - Intolerable take immediate action	Y	Yellow - Tolerable with additional controls	G	Green - Tolerable no further action required
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Task	Hazard	Persons at risk	Degree of risk			Control measures	Residual risk			Person responsible	Monitoring responsibility
			C	L	RR		C	L	RR		
A	All Activities										
A1	General Note					Piling rigs and associated equipment are to be operated only by trained and competent people who are authorised on the company skills matrix. Operatives to hold current CPCS and CSCS cards (where applicable). Operatives under training shall be supervised by an authorised employee.					
A2	Inadequate lighting	Site workers	3	2	6	Site hazard assessment to confirm that lighting is adequate or to ensure artificial light is available when necessary.	3	1	3	Supervisor	Supervisor
A3	Trips, slips and Falls	Site workers	3	3	9	Before commencing on site the Construction Manager must liaise with the Main Contractor to ensure we are provided with a clean and tidy work area with adequate space for unloading. Good housekeeping practises must be encouraged by Keller site personnell at all times. Rubbish, lifting equipment, re-bar, steel off cuts, etc must not be allowed to build up. If the pedestrian routes or our immediate work area become uneven, this must be raised with the main contractor site manager.	3	2	6	All Keller employees / Main Contractor and other site workers.	Project Manager / Construction Manager / Supervisor
A4	Leptospirosis / Weils disease	Site workers	5	3	15	Food and drink must only be consumed in designated canteens. All rubbish must be disposed of correctly. Rubbish bins must not be allowed to overflow. Mess rooms must be cleaned daily. Good hygiene practises must be adhere to at all times. Hands must be washed before eating, drinking and smoking. Where there is an Identified hazard, tool box talk 13 (Weils Disease) is to be briefed out. Any cuts are to be dressed immediatley, cleanliness to be encouraged. Awareness cards are available from HSEQ admin office if required.	5	1	5	All Keller employees.	Project Manager / Construction Manager / Supervisor
A5	Excessive noise exposure for operators	Site workers	4	3	12	Noise levels for all operations have been assessed items of plant with an average noise levels of above 85DB(a) have ear protection zone signs requiring people to wear the correct ear protection. Where reasonably practicable, noise reduction methods to be adopted to reduce noise level. Keller employees must ensure all other site workers are aware of the risk of noise exposure if working close by.	4	2	8	All Keller employees	Supervisor
A6	Excessive noise exposure for other site workers and general public adjacent to the site.	Other workers / neighbours	4	2	8	Noise survey to be made available to the main contractor if required. Construction Manager should ask for dedicated piling area with succficient exclusion zone / segregation.	4	1	4	Main Contractor	Project Manager / Construction Manager / Supervisor
A7	Dust	Site workers	3	3	9	Project Manager / Construction Manager to liaise with Main Contractor prior to starting work on site to ensure adquate dust controls are in place. Keller may have to request that the main contractor has given consideration to spraying/damping down the site surface to reduce the dust. In dusty conditions suitable eye protection and dust masks must be available and worn.	3	1	3	Main Contractor	Project Manager / Construction Manager / Supervisor

Task	Hazard	Persons at risk	Degree of risk			Control measures	Residual risk			Person responsible	Monitoring responsibility
			C	L	RR		C	L	RR		
B Rigging and dismantling on site.											
B1	Inadequate piling platform causing plant to topple	Rig operator / ganger / banksman	5	3	9	Platform certificate to be completed to confirm that platform is adequate before work commences. This must be reinspected and signed off by the main contractor when ever the platform has been disturbed, or at intervals not exceeding 7 days. Platform to extend at least half a machine width beyond probe positions. Extra consideration to be given when working adjacent to site boundaries or hoardings.	5	1	5	Main Contractor	Project Manager / Construction Manager / Supervisor
B2	Ropes falling from track when rigging.	Rig operator / ganger / banksman	5	3	15	Ropes to be strapped into channel on mast when machine is being de-rigged to prevent the need for worker to climb the mast. (All sites must have copies of the Task instruction available for Rigging / De-rigging)	5	1	5	Banksman	Supervisor
C Moving about the site.											
C1	failure of piling rig.	Any site worker	5	3	15	All rigs on site must be within their respective 4 year test and current LOLER inspection, the certificate must be provided with the machine. The rig operator and supervisor must inspect the machine on delivery and ensure the rig is within it current periodic examinations. Operator is to inspect the machine daily and record on the weekly plant inspection form. Exclusion zones must be provided by the main contractor and enforced by the Keller Ganger man and or supervisor	5	1	5	Rig operator / Ganger	Supervisor
C2	Collision with worker or equipment	Any site worker	5	3	15	Construction Manager to request dedicated piling area with segregation before commencement on site. Movement of piling rig to be controlled by a trained banksman with a slinger/signaller CPCS card. All rigs must be fitted with rear view mirrors and reversing camera's, movement to be controlled by a trained banks man. No-one must be allowed to be close enough to the piling rig which will enable contact.	5	1	5	Rig operator / Ganger	Project Manager / Construction Manager / Supervisor
C3	Contact with overhead power line.	Any site worker	5	3	15	Construction Manager / Supervisor to confirm on permit to dig that overhead lines do not affect the rig or to arrange for the correct required improvements to be implemented before the work continues or commences.	5	1	5	Rig operator / Ganger	Project Manager / Construction Manager / Supervisor
C4	Inadequate piling platform	Rig operator / ganger / banksman	5	3	9	Platform certificate to be completed to confirm that platform is adequate before work commences. This must be reinspected and signed off by the main contractor when ever the platform has been disturbed, or at intervals not exceeding 7 days. Platform to extend at least half a machine width beyond probe positions. Extra consideration to be given when working adjacent to site boundaries or hoardings.	5	1	5	Main Contractor	Project Manager / Construction Manager / Supervisor
D Connecting flight string (All sites must have copies of the Task instruction available for Rigging / De-rigging)											
D1	Fall from height	Telehandler operative	5	2	10	Only trained operators are allowed to use the man riding basket. All persons in the basket shall wear a safety harness secured to a stable point in the basket. Never over reach from the basket, the MEWP must be positioned as close as possible to the item being worked on.	5	1	5	Operators	Supervisor
D2	Entrapment or nipping by auger	Rig operator / ganger / banksman	3	3	9	Person in basket who is making the connection shall not hold the flights until the flight being lowered is touching the remainder of the string. When inserting pins ensure they are just located in the auger socket, once done ensure hands are out of the way. All limbs must be kept well away from the augers until it is lowered to its final position. When re-driving the pins with force ensure hands are out of the way.	3	1	3	Operators	Supervisor
D4	Fall of tools from height	Rig operator / ganger / banksman	3	3	9	Pins; Podger; Hammer; Lifting chains must be stored in the basket in a way to prevent them falling. All non essential personnel must be kept away from the immediate work area around the augers whilst rigging is in process.	3	1	3	Operators	Supervisor

Task	Hazard	Persons at risk	Degree of risk			Control measures	Residual risk			Person responsible	Monitoring responsibility
			C	L	RR		C	L	RR		
E	Boring into the ground.										
E1	Contact with underground services	Site Workers	5	3	15	Permit to excavate must be completed and issued by the main contractor before any work commences. Services to be traced by a cable avoiding tool by a trained and competent person (main contractor). Any located utility apparatus must be uncovered by the main contractor. No mechanical excavator can be used within 500mm of any live utility apparatus. (HSG47)	5	1	5	Main Contractor, Supervisor Operator Banks man	Construction Manager Supervisor
E2	Entanglement personnel in auger	Site Workers	5	3	15	All site staff must wear Hi VI vests. Liaise with Main Contractor to ensure designated exclusion zone is provided. Consider installing metal crowd barriers if there are other site workers located close by. A trained and competent banks man must co-ordinate all rig movements. Persons wishing to approach or to pass the rig must make eye contact with the machine operator / banksman. No-one shall be located within the exclusion zones of the rig. Augers must be guarded in accordance with the requirements of the Provision and Use of Work Equipment Regulation, 1998 and the FPS Guidance Note.	5	1	5	Main Contractor / Operator / Ganger / Banksman	Operators / Ganger / Banksman / Supervisor
E3	Inadequate piling platform	Rig operator / ganger / banksman	5	3	9	Platform certificate to be completed to confirm that platform is adequate before work commences. This must be reinspected and signed off by the main contractor when ever the platform has been disturbed, or at intervals not exceeding 7 days. Platform to extend at least half a machine width beyond probe positions. Extra consideration to be given when working adjacent to site boundaries or hoardings.	5	1	5	Main Contractor	Project Manager / Construction Manager / Supervisor
F	Setting up of concrete pump and pipes										
F1	Refer to separate Hazard assessment		N/A	N/A	N/A	(see separate Hazard Assessment)	N/A	N/A	N/A		
G	Pumping Concrete										
G1	Contact with concrete / cement	Site workers	3	3	9	Chemical Suites must be available and worn whenever there is a risk of concrete or grout coming into contact with clothing. Waterproof gloves, a long sleeved top and trousers must be worn at all times whilst working with any cement based product. Sleeves and trousers must be tucked into the gloves and boots respectively. Suitable footwear must be provided and worn at all times. If standing in concrete you must always ensure suitable water tight and chemical resistant wellington boots are worn. Begin each day wearing clean clothing and finish each day with a bath or shower. Apply a protective barrier hand cream before each working shift starts. Reapply every time hands are washed. Eye protection to EN166 3,4,9 - B must be worn when working with cement based products. If cement, concrete or grout gets into the eyes, it must be dealt with immediately by flushing with clean water. Seek immediate medical attention if persistent or severe discomfort is suffered.	3	2	6	Keller employees / sub-contractors	Supervisor
H	Extracting auger from the ground.										
H1	Spoil falling from auger	All site workers	3	4	12	During extraction the auger must be cleaned by a mechanical cleaner fitted to the rigs. All non essential personnel must stand clear. If it is not practical to use a mechanical cleaner, then written permission of the contracts director must be obtained before a device attached to an excavator arm is used to clean the auger. Cleaning by hand is forbidden. (A hazard assessment for excavator, including requirements for changing buckets to be used is to be obtained and included in the site file.) Supervisors must ensure this is understood and the correct measures are followed.	3	2	6	Rig operator / Ganger	Supervisor
I	Manufacture of reinforcing cage										

Task	Hazard	Persons at risk	Degree of risk			Control measures	Residual risk			Person responsible	Monitoring responsibility
			C	L	RR		C	L	RR		
I1	Use of inappropriate bolt crops for cutting steel.	Steel fixer / site operatives	3	2	6	Bolt crops to be used for 12mm. diameter steel. For 16 mm diameter or greater the shtill saw is to be used. When using bolt crops, the operator is to ensure that the bolt crops are in good condition with straight arms and the cutting jaws are suitable.	3	1	3	Steel fixer / site operatives	Supervisor
J Use of excavator to insert reinforcing cage.											
J1	Cage falling from excavator.	Site Operatives	5	3	15	All excavator drivers must be trained, competent and familiar with quick hitch attachments. Semi - automatic quick hitch attachments are prohibited from being used on Keller activities. All lifting equipment used to lift the cages must be within its six monthly periodic inspection. The chain must be attached to the dedicated lifting eye of the excavator. All non essential personell must be kept away from the work area. The lifting operation must be controlled by the ganger man.	5	1	5	Steel fixer / Operator / site operatives	Supervisor
J2	Underside of excavator bucket striking personnel when pushing cage into pile.	Site Operatives	5	3	15	All non essential personell must be kept away from the work area. The lifting operation must be controlled by the ganger man.	5	1	5	Steel fixer / site operatives / Operator	Supervisor
K Lift rebar into pile											
K1	Rebar slipping out of fibre strop.	Any site worker	5	3	15	A coupler must be attached to the top end of the rebar to give the rebar an edge. The coupler shall act as an edging where the fibre strop can tighten on to.	5	1	5	Ganger	Supervisor
L Removal of spoil from pile position by excavator or similar.											
L1	Collision with worker, plant or structures.	All site workers	5	2	10	All site staff must wear Hi VI vests. Operator must ensure 360 degree vision is available at all times. Liaise with Main Contractor to ensure designated exclusion zone is provided. Consider installing metal crowd barriers if there are other site workers located close by. When setting up on site, ensure consideration is given to storage of materials minimising the risk of crossing pedestrian routes. A trained and competent banks man must co-ordinate all excavator movements whilst working in tight enclosed work area. Persons wishing to approach or to pass the excavator must make eye contact with the machine operator. No -one shall be located within 1m of the excavator. Excavators must always adhere to site traffic plan and never work over designated pedestrian route. Always ensure flashing beacon is used.	5	1	5	Main Contractor / Operators / banksmen	Main Contractor / Supervisor
M Climing into ot out of a piling rig cab.											
M1	Fall from height.	Rig operator / Ganger	3	2	6	(PUWER reg 5&6) All rig operators must carry out daily checks and record on the weekly plant return forms. (this must include checking the steps) Anyone climbing onto the rig steps must ensure the step is in good order and not covered in mud / debris. Any debris on boots should be kicked off prior to climbing up. Check steps not icy during winter months. De-icer is available in work vans. Tools must never be stored on the steps. Use permanent fixtures on rig to grab hold off if necessary to aid climbing up onto tracks. (Working at height Rgs 3 & 14) No-one is to climb onto back of rig without the handrails being in place. If access is required to the mast then a MEWP or equivalent must be utilised. (See seperate assessment rig access and egress)	3	1	3	Rig operator / Ganger	Supervisor



Operation / Task:		Lifting and installation of pile reinforcement		Assessment Ref / Rev:		KF_HA12		Prepared by:		P Dowland		Rev 2 Date:		June 2015																																					
Location:		Site		Department:		Keller		Issue Date:				Rev 1 Date:		March 2014																																					
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	General Note.					NOTE: All pile reinforcement is to be correctly designed. The designer shall provide details of the position of lifting points for horizontal, vertical and lifting from the horizontal to the vertical, the designer shall consider the bending moment and shear force induced as the cage is lifted from horizontal to vertical. the designer must hold adequate Professional Indemnity insurance. Further information can be found in the FPS guidance note-The Design and Lifting of Pre-Fabricated and Site Fabricated Reinforcement Cages for Piling and Walling Works.																																													
A Delivery of reinforcement to site.																																																			
A1	Vehicle/pedestrian interface	Site Staff	5	3	15	All deliveries to site are to follow the site traffic management plan, this is to be communicated to the supplier prior to delivery. All deliveries are to be directed by a banksman with suitable training and certification all other persons are to use pedestrian walkways and be kept out of the work area.	5	1	5	Supervisor	Contract Manager																																								
B Offloading, storage and movement of reinforcement.																																																			
B1	Injury through incorrect unloading of reinforcement.		N/A	N/A	N/A	For unloading of reinforcement please refer to HA Unloading and Loading of Lorries.	N/A	N/A	N/A	N/A	N/A																																								
B2	Slips, trips and falls.	Operatives	3	4	12	The offloaded reinforcement is to be stored in a predetermined area, good housekeeping of the storage area is to be carried out at all times. The reinforcement is to be placed in such a manner to avoid having to step over items to retrieve the needed reinforcement. If it is necessary to manual handle the reinforcement to the pile position a clear walkway is to be created.	3	2	6	Supervisor	Contract Manager																																								
B3	laceration's from manual handling reinforcement.	Operatives	2	5	10	Where possible the manual handling of reinforcement is to be avoided. Suitable gloves and Keller PPE requirements must be worn at all times when handling reinforcement.	2	1	3	Supervisor	Contract Manager																																								
B4	musculoskeletal injury from manual handling reinforcement.	Operatives	4	3	12	Where possible a mechanical means of moving the reinforcement is to be used. Where this is not practicable then a manual handling assessment is to have been carried out.	4	2	8	Supervisor	Contract Manager																																								
C Insertion of pile reinforcement.																																																			
C1	Striking of operative during lifting from horizontal to vertical.	Operatives	3	3	9	All personnel are to be cleared from the area of the lift. If it is required to hold tail end of reinforcement during lifting a mechanical means should be used, if this is not possible then the area is to be clear of all obstructions, the distance to lift is to as short as possible and a constant line of sight is to be kept between operator and operative holding the tail end.	3	1	3	Supervisor	Contract Manager																																								
C2	Fall of single rod reinforcement during connection.	Operatives	3	4	12	Reinforcing rod to be suspended by winch using swivel coupler that connects into rod connector. All lifting equipment is to have been inspected and have a six monthly inspection certificate. Rope lashings or strops are not to be used. Lower rod to be held by coupler resting on spanner while connection is made. Rod is not to be gripped and suspended by spanner.	3	2	6	Supervisor	Contract Manager																																								
C3	Fall of reinforcing cage into casing when being lowered in.	Operatives	3	4	12	All lifting equipment is to have been inspected and have a six monthly inspection certificate. Cage is to be lifted into position from the pre determined lifting points as per the design. Cage to be lowered in using mechanical means. When cage is being lowered into hole, hands to be kept clear of the casing. Bar to suspend cage is to be suitable for the diameter of casing used.	3	2	6	Supervisor	Contract Manager																																								

Operation / Task:		Loading & Unloading of lorries		Assessment Ref / Rev:		KL HA02		Prepared by:		HSEQ / Dept.		Created Date:		13th March 2013																																													
Location:		Site		Department:		Keller		Revision		A		Date: 20.08.2015																																															
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	General Note					Note: All lifting operations on site, including loading and unloading from lorries are to be properly planned and supervised by trained and competent persons. The unloading and loading of lorries is to be undertaken by trained and competent persons only. Operators under training shall be supervised by an authorised employee. To eliminate the requirement for working on the back of the lorry, it shall be requested that where possible items are pre slung.																																																					
A Loading or unloading on site																																																											
A1	Crane / Forklift / Telehandler usage	Operator/banks man/ site staff	5	3	15	Before any lifting operations take place, the work area must be assessed by a trained and competent person. If site specific lift plans are required these must be produced prior to any lift commencing. Ground conditions must be assessed for stability. Loading and unloading must only be carried out in the agreed designated loading/unloading areas. Exclusion zones may be required and suitable warning signs and barriers put in place.	5	1	4	Operator	Supervisor																																																
A2	Working from the truck bed/trailer Falls from height.	Operator/banks man/ site staff	4	3	12	Supervisor to ensure that if a person is required to work from a truck/trailer, the edge fall protection / bean bag system must be in place, on the truck/trailer. Where it is not practicable to have the edge fall protection in place due to the loading/ off loading procedure. A fall arresters system must be used and connected to a fixed point.	4	1	4	Operator	Supervisor																																																
A3	Manually moving load around the truck bed. Strain and sprain injuries	Operator/banks man/ site staff	4	3	12	Where possible all loads shall be positioned on the truck with either a vehicle mounted hi-ab or telehandler/forklift. If a crane is required a lift plan must be utilised. Where mechanically means are not possible due to the load, the weight of the item must be available.	4	1	4	Operator	Supervisor																																																

Operation / Task:	Site establishment	Assessment Ref / Rev:	KL HA07	Prepared by:	HSEQ/Ops	Created Date:	24/09/2013
Location:	Various	Department:		Revision:	A	Date:	20.08.2015

H&S Consequence, C	Env. Consequence, C	Likelihood, L	Acceptance Criteria						
1 Minor Injury	1 Minor Impact / operational delay	1 Improbable	Severity	1	2	3	4	5	R Red - Intolerable take immediate action
2 First Aid injury	2 Community complaints	2 Remote		1	2	3	4	5	Y Yellow - Tolerable with additional controls
3 Major injury	3 Major Impact	3 Possible		2	4	6	8	10	G Green - Tolerable no further action required
4 Permanent Consequence	4 Legal Consequence	4 Probable		3	6	9	12	15	
5 Potential Fatality	5 Major impact and cost	5 Almost Certain		4	8	12	16	20	
			5	10	15	20	25		

Task	Hazard	Persons at risk	Degree of risk			Control measures	Residual risk			Person responsible	Monitoring responsibility
			C	L	RR		C	L	RR		
A Access to site											
A1	Parked cars	All	5	3	15	The Supervisor shall ensure that access roads, including, if necessary, public roads are cleared of parked cars before vehicles arrive. Movement to be controlled by a competent banksman.	5	1	5	Site Supervisor	Contracts Manager
A2	Adverse ground	All	3	3	9	Supervisor to confirm on the hazard assessment form that platform is adequate or to arrange for required improvements to be implemented before the work commences.	3	1	3	Site Supervisor	Contracts Manager
A3	Vehicle Movements for persons on site.	All	5	3	15	Movement to be controlled by a competent banksman, if visibility is restricted. High visibility clothing must be worn. All lorries reversing need to have a banksman.	5	1	5	Site Supervisor	Contracts Manager
A4	Vehicle Movements for pedestrians outside site.	Public	5	3	15	Movement to be controlled by a competent banksman, if visibility is restricted. High visibility clothing must be worn. All lorries reversing need to have a banksman.	5	1	5	Site Supervisor	Contracts Manager
B Unloading Cabins											
B1	Trip Hazards	All	3	3	9	Site area to be kept clear of trip hazards.	3	2	6	Site Supervisor	Contracts Manager
B2	Adverse ground	Banksman	5	2	10	Supervisor to confirm on site hazard assessment form that platform is adequate or to arrange for required improvements to be implemented before the work commences.	5	1	5	Site Supervisor	Contracts Manager
B3	Collision with persons	All	5	3	15	Movement to be controlled by a competent banksman. All other people must be kept clear.	5	1	5	Site Supervisor	Contracts Manager
B4	Fall from height	Operatives	3	3	9	Cabins to be provided with slings to allow slinging from ground level.	3	1	3	Site Supervisor	Contracts Manager
C Electrical connections of cabins and other plant.											
C1	Electrocution	Electrician	5	2	10	Inspection certificates for internal wiring, plugs and appliances are to be provided when the cabin and its appliances are delivered. All electrical systems shall be installed by the company electrician or by a qualified electrical contractor. On completion of the installation a certificate of installation will be completed. User checks, formal visual checks and combined inspections and tests to be carried out in accordance with the table in the safety instruction: Inspections Of Electrical Equipment On Site.	5	1	5	Site Supervisor	Contracts Manager
D Crane Work.											
D1	Crane work in General	Operatives	N/A	N/A	N/A	Please refer to a separate risk assessment for crane work.	N/A	N/A	N/A		
E Site Clearance.											
E1	Puncture wound from a needle stick	Operatives	4	3	12	On site (railway embankments with access for the public alongside parks etc.) where needle sticks might reasonably be expected to be found, a sharp box, tongs and specialist gloves shall be provided. Tool box talks to be given explaining the hazards of needle sticks and the correct procedure for disposal. No person is to touch a needle stick without the required protective clothing. Any person who suffers a needle stick puncture will be required to seek medical attention.	4	1	4	Site Supervisor	Contracts Manager
E2	Asbestos	Operatives	4	3	12	Work is to cease on the discovery of asbestos. The affected area is to be cordoned off. Work is only to re-commence upon the written instruction with the correct management systems in place.	4	1	4	Site Supervisor	Contracts Manager
F Unloading plant or equipment in the street outside a site.											

Task	Hazard	Persons at risk	Degree of risk			Control measures	Residual risk			Person responsible	Monitoring responsibility
			C	L	RR		C	L	RR		
F1	Trip hazards for members of the public	Public	3	3	9	Trip hazards to be protected or a man to stand guard. If unloading is occurring after dark, the trip hazard need to be protected or lit. All vehicles reversing must have a competent banksman.	3	2	6	Site Supervisor	Contracts Manager
G Erecting tower scaffold platforms											
G1	Working Platforms	Operatives	N/A	N/A	N/A	Please refer to a separate risk assessment: tower scaffold.	N/A	N/A	N/A		
H Erecting scaffolding for working platforms.											
H1	Erecting scaffolding	Operatives	3	3	9	Scaffolding will be erected by a sub-contractor, from which a risk assessment will be required. Scaffolders must have CPCS cards. Scaffolding to be erected in accordance with the requirements of SG4: The use of fall arrest equipment whilst erecting altering & dismantling scaffolding. All scaffolding is to be inspected weekly by a competent person.	3	2	6	Site Supervisor	Contracts Manager
I While using a ladder											
I1	Ladder use inside or outside	Operatives	N/A	N/A	N/A	Please refer to the risk assessment: use of ladders.	N/A	N/A	N/A		
J Access to site cabins											
J1	Slipping on steps/stairs	All	3	3	9	Steps are meant to have an anti-slip surface. In particular, plywood sheeting is to be covered with chicken mesh or similar and must be kept free from mud etc.	3	2	6	Site Supervisor	Contracts Manager
K											



Operation / Task:	Mobile Elevated work	Assessment Ref / Rev:	KL_HA10	Prepared by:	HSEQ / Ops Teams	Created Date:	22nd March 2013
Location:	Work Sites	Department:	Keller	Revision:	A	Date:	20.08.2015

H&S Consequence, C 1 Minor Injury 2 First Aid injury 3 Major injury 4 Permanent Consequence 5 Potential Fatality	Env. Consequence, C 1 Minor Impact / operational delay 2 Community complaints 3 Major Impact 4 Legal Consequence 5 Major impact and cost	Likelihood, L 1 Improbable 2 Remote 3 Possible 4 Probable 5 Almost Certain	<table border="1"> <tr> <td></td> <td></td> <td>1</td> <td>2</td> <td>3</td> <td>4</td> <td>5</td> </tr> <tr> <td rowspan="5">Severity</td> <td>1</td> <td>1</td> <td>2</td> <td>3</td> <td>4</td> <td>5</td> </tr> <tr> <td>2</td> <td>2</td> <td>4</td> <td>6</td> <td>8</td> <td>10</td> </tr> <tr> <td>3</td> <td>3</td> <td>6</td> <td>9</td> <td>12</td> <td>15</td> </tr> <tr> <td>4</td> <td>4</td> <td>8</td> <td>12</td> <td>16</td> <td>20</td> </tr> <tr> <td>5</td> <td>5</td> <td>10</td> <td>15</td> <td>20</td> <td>25</td> </tr> </table>			1	2	3	4	5	Severity	1	1	2	3	4	5	2	2	4	6	8	10	3	3	6	9	12	15	4	4	8	12	16	20	5	5	10	15	20	25	Acceptance Criteria R Red - Intolerable take immediate action Y Yellow - Tolerable with additional controls G Green - Tolerable no further action required
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	4	4	8	12	16	20																																				
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Task	Hazard	Persons at risk	Degree of risk			Control measures	Residual risk			Person responsible	Monitoring responsibility
			C	L	RR		C	L	RR		
	General Note.					Note: only trained/competent persons to operate the Mobile Elevated Work platform (MEWP). MEWP operator shall read the MEWP Operating & Safety Manual. Safe working load to be marked.					
A	Travelling to point of work.										
A1	Operator not trained or unauthorized to use the MEWP.	Site Workers	5	2	10	Only trained and unauthorised person shall use the mobile elevated work platform. Mobile elevated work platform ignition keys to be taken out of the ignition when not in use.	5	1	5	Operator	Supervisor
A2	Failure of machine	Site Workers	5	2	10	All users must carry out pre-use checks daily and fill in the daily plant inspection form. The MEWP must be maintained and serviced as per operators manual. The MEWP SWL must never be exceeded. 6 mthly periodic inspections must be carried out by a trained and competent person.	5	1	5	Operator	Supervisor
A3	Over turning due to inadequate surface	Site Workers	5	3	15	Regular inspections of the work area and traffic routes must be undertaken by the main contractor and Keller site foreman. Route to working area must be in good condition without pot holes. Mobile elevated work platform boom must be in a safe mode position when travelling over a distance.	5	1	5	Principal Contractor / Operator	Supervisor
B	Using the MEWP.										
B1	Fall from height.	Operator	5	2	10	Only trained operators are allowed to use the MEWP. All persons in the mobile elevated work platform basket shall wear a safety harness secured to a stable point in the basket. Never over reach from the basket, the MEWP must be positioned as close as possible to the item being worked on.	5	1	5	Operator	Supervisor
B2	Operating moving mobile elevated work platform without a clear vision	Site Worker	5	2	10	The operator must assess the area to be worked in prior to positioning the MEWP. Before the operator moves the mobile elevated work platform a banks man shall be utilised to ensure a clear and safe movement.	5	1	5	Operator	Supervisor
B3	Working in the vicinity of electricity.	Site Workers	5	3	15	The on site hazard assessment must make note of any overhead electric cables. If there is the need to work close by to any overhead electric cables, the local electricity provider must be contacted for advice. A request for the Electricity to be switched off and locked out before work is carried out may be required.	5	1	5	Construction Manager	Project Manager
B4	Falling equipment.	Site Workers	5	3	15	All equipment within the MEWP is to be properly secured to prevent them falling. All non essential personnel must be kept away from the immediate work area around the augers whilst rigging is in process.	5	1	5	Construction Manager	Project Manager
C	Storing of MEWP.										
C1	Theft / Vandalism	Anyone	4	3	12	Keys must always be removed form all items of plant when the operator is away from the machine. Always lock up machines at night.	4	1	4	Operator	Supervisor



Operation / Task:	Forklift Truck and Telescopic Handlers.	Assessment Ref / Rev:	KL_HA14	Prepared by:	HSEQ / Ops team	Created Date:	22nd March 2013
Location:	Work locations	Department:	Keller	Revision	A	Date:	20.08.2015

H&S Consequence, C	Env. Consequence, C	Likelihood, L	Severity						Acceptance Criteria R Red - Intolerable take immediate action Y Yellow - Tolerable with additional controls G Green - Tolerable no further action required
1 Minor Injury	1 Minor Impact / operational delay	1 Improbable		1	2	3	4	5	
2 First Aid injury	2 Community complaints	2 Remote		2	4	6	8	10	
3 Major injury	3 Major Impact	3 Possible		3	6	9	12	15	
4 Permanent Consequence	4 Legal Consequence	4 Probable		4	8	12	16	20	
5 Potential Fatality	5 Major impact and cost	5 Almost Certain		5	10	15	20	25	

Task	Hazard	Persons at risk	Degree of risk			Control measures	Residual risk			Person responsible	Monitoring responsibility
			C	L	RR		C	L	RR		
A	General Note.										
A1	Note:					Forklift trucks and telescopic handlers are only to be operated by trained and competent persons. Operatives under training shall be supervised by an authorised employee. Telehandlers are not to be used on the highway unless they are road legal and the operator holds a current UK driving licence. Operator of forklift truck or telescopic handler to wear seat belt. Forklift truck or telescopic handler to have rollover protection.					
B	Use of forklift truck of telescopic handler on site.										
B1	Overturning of truck due to inadequate surface.	Operator	5	3	15	Supervisor to confirm on site hazard assessment form that platform is adequate or to arrange for required improvements to be implemented before work commences. Loads to be carried with forks at lowest practicable level.	5	1	5	Operator	Supervisor
B2	Overturning of truck on sloping surface.	Operator	5	3	15	No travelling across the gradient. Load to be on uphill side of truck when travelling up or down a gradient.	5	1	5	Operator	Supervisor
B3	Overturning truck due to overloading.	Operator	5	3	15	Weight of loads to be carried to be known (unless clearly not near the capacity of the truck or telescopic handler) and within the capacity of the truck or telescopic handler. Load centre distance not to be exceeded.	5	1	5	Operator	Supervisor
B5	Failure of truck or hydraulics.	Operator / site workers	5	2	10	Current inspection certificate, not more than 12 months old to be provided with the machine. Foreman to inspect the machine on delivery. Operator to inspect the machine daily before use and carry out routine servicing in accordance with the operators handbook. Daily inspection to be made by operator and a weekly inspection report completed and returned to plant dept.	5	1	5	Operator	Supervisor
B6	Impact or collision.	Operator / site workers	5	3	15	Forklift truck or telescopic handler to be fitted with flashing beacon and audible reversing warning. 360 degree visibility assessment must be carried out on all plant. Forklift and telehandler must always stick to designated traffic routes. Banksman to be used for manoeuvring operations in restricted areas, or when visibility is restricted and when others are working nearby. When travelling unloaded make sure forks face downhill with tilt to suit gradient.	5	1	5	Operator	Supervisor
B7	Displaced or falling loads.	Operator / site workers	5	3	15	Machine to be suitable for loads to be lifted. The SWL must never be exceeded. Forks to be correctly spaced. Cement and other bagged materials to be shrink wrapped where practicable. Loose loads on pallets to be secured.	5	1	5	Operator	Supervisor
B8	Door swinging	Operator / site workers	3	3	9	Doors of cab to be closed when machine is in motion.	3	1	3	Operator	Supervisor
B9	Movement of unattended machine.	Operator / site workers	5	2	10	Machine to be parked on level ground when ever possible. Hand brake to be on with machine in neutral. Forks to be tilting forward and lowered to the ground. The machine must be switched off and the keys removed when the operator leaves the vehicle.	5	1	5	Operator	Supervisor

Task	Hazard	Persons at risk	Degree of risk			Control measures	Residual risk			Person responsible	Monitoring responsibility
			C	L	RR		C	L	RR		
B10	Theft / Vandalism	Operator / site workers / Intruder	4	3	12	Keys must always be removed from all items of plant when the operator is away from the machine. Always lock up machines at night, if available always place shutters over windows and doors.	4	1	4	Operator	Supervisor
B11	Movement of load on ground while slings being attached or removed.	Operator / site workers	3	3	9	Loads to be placed on suitable timbers to allow access for strops to go underneath and chocks, if movement of load is possible, to be used to prevent movement as load is taken by timbers.	3	1	3	Operator	Supervisor
C Persons standing on forks or a platform on the forks to work.											
C1	Person falling off forks or platform.	Operator / site workers	5	4	20	Working on the forks or any platform other than a purpose built man rider is strictly forbidden at all times. Only trained and competent persons are to operate the man rider. Purpose built man rider to have certificate of thorough examination issued not more than 6 months previously. Daily inspections must be carried out and recorded on the Weekly plant inspection form. All operators involved in any quick hitch attachments must be adequately trained and competent.	3	1	3	Operator	Supervisor
D Storing of quick fit man-rider.											
D1	Hydraulics and electrical cable damaged or blocked with grit/mud.	Operator / site workers	4	3	12	When not in use the man-rider hydraulic hoses and electrical cable shall be stored in a purpose-made bracket. Man-rider cage shall be stored on level ground, this will enable easy adaptation.	4	1	4	Operator	Supervisor
E Adapting quick fit man-rider to telehandler.											
E1	Note:					General note, For heights greater than 6 meters, a man rider controlled from its platform must be used. Operator to have received training in its use.					
E2	Fault in man-rider.	Operator / site workers	5	3	15	Man-rider to have a 6-month certificate of thorough examination. Foreman to inspect the machine on delivery. Operator to inspect the machine daily before use and to carry out routine servicing in accordance with the operators manual. Daily inspection to be made by operator and recorded on the weekly inspection report.	5	1	5	Operator	Supervisor
E3	Locking pin not engaging.	Operator / site workers	5	3	15	All operators must be trained and competent in quick hitch attachments. Man-rider operator shall ensure that locking pin is engaged in the man rider bracket.	5	1	5	Operator	Supervisor
E4	Incorrect connection of electrical cables/hydraulic pipes.	Operator / site workers	5	3	15	All operators must be trained and competent. All hydraulic pipes and electrical cables shall be connected to enable the man-rider to be operated independently from the telehandler cab controls. Controls on platform to be tested before platform is lifted above the ground.	5	1	5	Operator	Supervisor
F Positioning of man-rider.											
F1	Untrained operative positioning telehandler.	Operator / site workers	5	3	15	Only operatives holding a current CPCS card and trained in the use of the remote controlled platform shall operate the telehandler with the platform.	5	1	5	Operator	Supervisor
F2	Over riding or not using hydraulic stabilisers.	Operator / site workers	5	3	15	Hydraulic stabilisers shall be used so that the front wheels are lifted off the ground. Safety measures are in place to make the man-rider un-operative from inside, if the stabilisers are not firmly on the ground.	5	1	5	Operator	Supervisor
G Operating the man-rider.											
G1	Persons operating man rider from telehandler cab.	Operator / site workers	5	3	15	Once in position, telehandler operator shall engage switch in cab to make telehandler controls inactive and the man rider controls active. The man riding basket is only allowed to be controlled by the operator in the basket.	5	1	5	Operator	Supervisor
G2	Untrained person operating the man rider.	Operator / site workers	5	3	15	Only person trained and competent shall operate the quick fit man rider.	5	1	5	Operator	Supervisor
G3	Working on uneven ground or soft ground.	Operator / site workers	5	3	15	Telehandler with quick fit man rider must only be used on a firm and level platform.	5	1	5	Operator	Supervisor
G4	Fall from height.	Operator / site workers	5	3	15	Persons in man rider to wear harness with lanyards clipped to anchor positions provided. The lanyard must be short enough to prevent contact with the ground or other objects. Door to be secured and shut.	5	1	5	Operator	Supervisor
H Working in slewed position over extended time.											

Task	Hazard	Persons at risk	Degree of risk			Control measures	Residual risk			Person responsible	Monitoring responsibility
			C	L	RR		C	L	RR		
H1	Man-rider turned right or left.	Operator / site workers	5	3	15	Safety pin must be used when the man-rider is turned left or right to stop it from moving, there are purpose-made eye holes on the man-rider and bracket for this function.	5	1	5	Operator	Supervisor
I	Descending/lowering man-rider.										
I1	A person disembarking the man-rider before it is lowered to the ground.	Operator	5	3	15	Safety harness shall be worn and persons to remain in the man-rider, until it is safe to disembark. The man riding operation must only be controlled by the person in the basket.	5	1	5	Operator	Supervisor
J	Use of quick hitch attachments.										
J1	Fall of attachment.	Operator / site workers	5	3	15	Operators to be trained in quick hitch for the particular machine, 6 month through examination certificate required for the attachment.	5	1	5	Operator	Supervisor
K	Use/fitting of forks.										
K1	Not attaching the fork mounted hook correctly.	Site Workers	5	3	15	All persons using the folk mounted hook shall be trained in the correct fitting.	5	1	5	Operator	Supervisor
K2	The fork mounted hook slipping of the folks.	Site Workers	5	1	5	The fork mounted hook is designed in such away that when attached to the fork, the locking bar automatically engages behind the folks.	5	1	5	Operator	Supervisor
K3	Using a damaged fork mounted hook.	Site Workers	5	2	10	The fork mounted hook and frame must be examined before use and weekly. A 6 monthly certification inspection must be carried out by a competent person. If damaged in anyway the fork mounted hook must not be used.	5	1	5	Operator	Supervisor
K5	Manual Handling caused injuries	Operatives	3	3	9	All Keller personnel have been trained in the correct procedure when carrying out manual handling. If needed a second or third person must be used to aid any lifting or carrying operations.	3	1	3	Operator	Supervisor
L	Fuel Storage / Refuelling										
L1	Fuel Spillage causing pollution	Environment	5	2	10	Always store diesel bowser away from any water course and surface water drainage systems. Ensure adequate drip trays and spill kits are located close by. Ensure plant nappies are used when ever filling up items of plant. Ensure diesel bowsers are locked when not in use. Only store fuel in appropriate fuel cans. Oil and fuel must be stored with in adequate bunds in the stores units.	5	1	5	Supervisor Operator Banks man	Supervisor
L2	Flammable liquid causing fire	Environment Site Workers Members of Public	5	4	20	Ensure any fuel stored is away from a direct heat source with in an appropriate bowser or fuel can. All refuelling must only be carried out when the item of plant is switched off. Appropriate fire extinguishers must be close by to any item of plant being refuelled. Always ensure the correct PPE is being warn. i.e. Gloves, Overalls, Glasses.	5	1	5	Supervisor Operator Banks man	Supervisor



Operation / Task:	360 Excavator Operation	Assessment Ref / Rev:	KL_HA15	Prepared by:	GME	Created Date	20.03.2013
Location:	Various	Department:	Keller Ltd Divisions	Revision	C	Date	20.08.2015

H&S Consequence, C	Env. Consequence, C	Likelihood, L						Acceptance Criteria
1 Minor Injury	1 Minor Impact / operational delay	1 Improbable		1	2	3	4	5
2 First Aid injury	2 Community complaints	2 Remote	1	1	2	3	4	5
3 Major injury	3 Major Impact	3 Possible	2	2	4	6	8	10
4 Permanent Consequence	4 Legal Consequence	4 Probable	3	3	6	9	12	15
5 Potential Fatality	5 Major impact and cost	5 Almost Certain	4	4	8	12	16	20
			5	5	10	15	20	25

Acceptance Criteria
R Red - Intolerable take immediate action
Y Yellow - Tolerable with additional controls
G Green - Tolerable no further action required

Task	Hazard	Persons at risk	Degree of risk			Control measures	Residual risk			Person responsible	Monitoring responsibility
			C	L	RR		C	L	RR		
	General Note					Plant operators shall have a CPCS card. All hand tools shall be visually inspected by the user, for damage. PPE to be worn at all times. High Visibility vests, Hearing protection to EN 352-2, hand protection to EN 388 (mechanical hazards) and EN 374-3 (re-fuelling), protective footwear to EN 345, eye protection to EN166, head protection to EN397.					
A	Access & Egress										
A1	Slipping off steps / tracks	Anyone	3	3	9	Anyone climbing onto the machine steps must ensure that the step is in good order and not covered in mud / debris. Any debris on boots should be kicked off prior to climbing up. Check steps not icy during winter months. De-icer is available in work vans. Tools must never be stored on the steps. Use permanent fixtures on rig to grab hold off if necessary to aid climbing up onto tracks. No-one is to climb onto back of rig without the handrails being in place. If access is required to the mast then a MEWP or equivalent must be utilised.	3	1	3	Excavator operator	Site Supervisor
A2	Visual Obstructions	Anyone	3	3	9	Anyone climbing on to machines must remain vigilant and concentrate at all times. Supervisors to carry out daily briefings highlighting any specific hazards.	3	2	6	Excavator operator	Site Supervisor
A3	Poor Weather conditions	Anyone	3	3	9	Extra care must be taken during heavy wind or rain. Snow must be brushed off prior to climbing. Use de-icer or something equally effective to thaw out any ice when required. Boots must be kicked against tracks prior to climbing.	3	1	3	Excavator operator	Site Supervisor
A4	Storage of tools on steps	Operatives	3	3	9	Ganger must ensure that no tools are left on the steps. Plant dept. to look at possibility of placing a tool tray in a suitable position to store the hammer, screwdriver, plastic caps, etc.	3	1	3	Excavator operator	Site Supervisor



Operation / Task:	Air Compressors.	Assessment Ref / Rev:	KL_HA16	Prepared by:	HSEQ / Ops teams	Created Date:	22nd March 2013
Location:	Sites and Yards	Department:	Keller	Revision:	A	Date:	20.08.2015

H&S Consequence, C	Env. Consequence, C	Likelihood, L						Acceptance Criteria
1 Minor Injury	1 Minor Impact / operational delay	1 Improbable		1	2	3	4	5
2 First Aid injury	2 Community complaints	2 Remote	1	1	2	3	4	5
3 Major injury	3 Major Impact	3 Possible	2	2	4	6	8	10
4 Permanent Consequence	4 Legal Consequence	4 Probable	3	3	6	9	12	15
5 Potential Fatality	5 Major impact and cost	5 Almost Certain	4	4	8	12	16	20
			5	5	10	15	20	25

Task	Hazard	Persons at risk	Degree of risk			Control measures	Residual risk			Person responsible	Monitoring responsibility
			C	L	RR		C	L	RR		
A	Use of air compressor.										
A1	Compressor moving across site.	Site workers	3	3	9	Compressor to be placed on firm, level ground. Hand brake is to be engaged and if necessary, wheels chocked.	3	1	3	Operator	Supervisor
A2	Blast of air caused by the air valves not being closed.	Site workers	3	3	9	Operator to ensure valves are closed and hoses are connected before start up.	3	1	3	Operator	Supervisor
A3	Hose disconnecting striking person.	Site workers	5	3	15	Whip checks to be fitted to all connections in the airline. Air compressor to be switch off and stored air released before joints are disconnected, end of line remote from compressor must be attached to equipment to be used whilst compressor is running. Air must only be turned off at valve. Ensure non essential personnel are kept away from our work area where ever possible.	5	1	5	Operator	Supervisor
B	Re fuelling.										
B1	Slippery site caused by spillage.	Site workers	3	3	9	All spillages to be immediately cleared up. Drip tray to be placed underneath compressor.	3	1	3	Operator	Supervisor
B2	Fuel splashing on skin.	Site workers	2	3	6	Persons fuelling compressor to wear rubber gloves, eye protection.	2	1	2	Operator	Supervisor
B3	Fire.	Site workers	5	3	15	Hot refuelling is prohibited, Refuelling of plant and equipment must only take place when made dead "switched off".	5	1	5	Operator	Supervisor
C	End of shift or prolonged break.										
C1	Leaving compressor running allowing unauthorised use.	Site workers	4	3	12	Compressor to be switched off at end of shift or prolonged breaks; equipment must be locked out preventing the use by unauthorised persons.	4	1	4	Operator	Supervisor
C2	Air left in receiver when hoses are disconnected.	Operator	4	3	12	Before disconnecting hoses or equipment, operator to ensure that air is purged out of receiver and hose.	4	1	4	Operator	Supervisor
D	Breakdown of compressor.										
D1	Breakages or Lack of maintenance may run the compressor to destruction	Operator	4	3	12	In order to reduce the risk of injury from a breakdown, the operator shall carry out daily pre-user checks.	4	1	4	Operator	Supervisor
E	Location of compressor.										
E1	Noise.	Site workers	4	3	12	Compressor to have a noise rating as low as is reasonable practicable. All operators and persons in the immediate work area must wear suitable ear protection. Persons not wearing ear protection to be excluded from the immediate work area.	4	1	4	Keller employees / sub-contractors	Supervisor
E2	Fumes.	Site workers	5	3	15	Compressor to be positioned in a well ventilated area. The exhaust should be pointed away from any office, mess room or stores units. If it is necessary to work in an area that is not well ventilated, fume extraction measures are to be provided.	5	1	5	Keller employees / sub-contractors	Supervisor

Operation / Task:		Dumpers.	Assessment Ref / Rev:		KL HA17					Prepared by:	HSEQ / Ops Teams	Created Date:	22nd March 2013																																																						
Location:		Any site	Department:		All Keller Divisions					Revision	A	Date:	20.08.2015																																																						
H&S Consequence, C		Env. Consequence, C		Likelihood, L		Acceptance Criteria																																																													
1 Minor Injury 2 First Aid injury 3 Major injury 4 Permanent Consequence 5 Potential Fatality		1 Minor Impact / operational delay 2 Community complaints 3 Major Impact 4 Legal Consequence 5 Major impact and cost		1 Improbable 2 Remote 3 Possible 4 Probable 5 Almost Certain		<table border="1"> <tr> <td></td> <td></td> <td>1</td> <td>2</td> <td>3</td> <td>4</td> <td>5</td> <td></td> <td></td> <td></td> </tr> <tr> <td rowspan="5" style="writing-mode: vertical-rl; transform: rotate(180deg);">Severity</td> <td>1</td> <td>1</td> <td>2</td> <td>3</td> <td>4</td> <td>5</td> <td></td> <td></td> <td></td> </tr> <tr> <td>2</td> <td>2</td> <td>4</td> <td>6</td> <td>8</td> <td>10</td> <td></td> <td></td> <td></td> </tr> <tr> <td>3</td> <td>3</td> <td>6</td> <td>9</td> <td>12</td> <td>15</td> <td></td> <td></td> <td></td> </tr> <tr> <td>4</td> <td>4</td> <td>8</td> <td>12</td> <td>16</td> <td>20</td> <td></td> <td></td> <td></td> </tr> <tr> <td>5</td> <td>5</td> <td>10</td> <td>15</td> <td>20</td> <td>25</td> <td></td> <td></td> <td></td> </tr> </table>								1	2	3	4	5				Severity	1	1	2	3	4	5				2	2	4	6	8	10				3	3	6	9	12	15				4	4	8	12	16	20				5	5	10	15	20	25			
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Task	Hazard	Persons at risk	Degree of risk			Control measures	Residual risk			Person responsible	Monitoring responsibility																																																								
			C	L	RR		C	L	RR																																																										
	General Notes.					NOTE: Dumpers are only to be operated by trained and competent persons authorised on the company skills matrix. Operatives shall hold a current CPCS card. Operatives undergoing training shall be supervised by an authorised employee. Never operated the controls unless seated on the machine.																																																													
A All Operations																																																																			
A1	Failure of working parts of dumper. Failure of brakes	Operator / Site Staff	5	3	15	Dumper must be in good working order before being used. Foreman to inspect machine on delivery. Operator to inspect the machine daily before use and to carry out routine servicing in accordance with operators manual. Daily inspections must be carried out and recorded on the weekly plant return sheet. Supervisor to arrange for faults identified to be rectified or for the dumper to be exchanged.	5	1	5	Operator / Supervisor	Supervisor / Construction Manager																																																								
A2	Cuts to tyres, insufficient tread or incorrect tyre pressures	Operator / Site Staff	5	3	15	As for hazard A1. Operators to check tyre pressure if there is doubt whether or not the pressure is correct. Supervisor to carry compressor attachments to allow the inflation of tyres on site. If the tyre is damaged the tyre must be repaired or replaced immediately.	5	1	5	Operator / Supervisor	Supervisor / Construction Manager																																																								
B Loading of dumper.																																																																			
B1	Dumper moving.	Site Workers & Operator	3	2	6	Driver to switch off engine apply brake and to dismount from dumper before loading. Driver to ensure that during loading other persons stand back.	3	1	3	Operator Banks man Supervisor	Construction Manager Supervisor Principal Contractor																																																								
B2	Overloading of dumper.	Site Workers & Operator	5	3	15	Load to be applied evenly into dumper skip. Load in skip not to exceed dumper capacity. Load not to impair vision.	5	1	5	Operator / Supervisor	Supervisor / Construction Manager																																																								
B3	Load spilling from dumper or loading equipment.	Site Workers & Operator	3	3	9	Load in skip not to exceed dumper capacity. Operator / banks man to ensure that other persons stand clear, during loading.	3	1	3	Operator Banks man Supervisor	Construction Manager Supervisor Principal Contractor																																																								
C Travelling across site.																																																																			
C1	Collision with other plant	Site Workers & Operator	4	3	12	Only trained and competent persons to operate dumpers. The machine operator must ensure 360 degree vision is available at all times. Flashing beacon must always be switched on whilst plant in use. Allow for wet brakes not working as well as dry brakes. A trained Banksman may be required to supervise dumper movements. Always adhere to site traffic management plan.	4	1	4	Operator Banks man Supervisor	Construction Manager Supervisor Principal Contractor																																																								
C2	Unsuitable surface.	Operator	3	3	9	Supervisor to confirm on site hazard assessment that routes and roads are suitable for dumpers or to arrange for improvements necessary to be implemented before work commences. Operator must always adhere to designated site traffic routes and speed limits. Foreman to supervise speeds of dumper during use on site.	3	1	3	Operator Banks man Supervisor	Construction Manager Supervisor Principal Contractor																																																								

Task	Hazard	Persons at risk	Degree of risk			Control measures	Residual risk			Person responsible	Monitoring responsibility
			C	L	RR		C	L	RR		
C3	Harm caused to operator by dumper overturning	Operator / Site Staff	5	3	15	Anti roll bar to be fitted to all dumpers. The site speed limits and traffic routes must be adhered to at all times. The dumper must never be used on gradients which are too steep. The dumper must travel on slopes with the load facing uphill. Maximum gradient 1 in 6. Low gear to be engaged when traveling down slopes. If unsure stop and seek clarification from the site supervisor or HSEQ department	5	1	5	Operator / Supervisor	Construction Manager Supervisor Principal Contractor
C4	Dust	Operator / Site Staff	2	4	8	Speeds to be kept down. Supervisor to supervise speeds of dumper during use on site. Dust to be suppressed by main contractor. If the dust cloud becomes dangerous or is hard to control then the dumper work must be stopped until the Principal Contractor has solved the problem. In the yard the road sweeper will carry out regular sweeping operations.	2	2	4	Supervisor / Yard Foreman	Main Contractor / Depot Manager
C5	Fall from dumper.	Operator	5	3	15	Dumper must be fitted with safety belt which is to be worn while the dumper is moving. Never operated the controls unless seated on the machine.	5	1	5	Operator	Supervisor
D Storage of Plant											
D1	Theft / Vandalism	Site Workers Members of Public	5	3	15	Keys must always be removed from all items of plant when the operator is away from the machine. Always lock up machines at night, if available always place shutters over windows and doors.	5	1	5	Operator	Supervisor
D2	Dumper rolling way.	Site Workers Members of Public	5	3	15	Dumper to be parked on flat ground with the handbrake on. Always use stop blocks when tipping into excavations. Allow for wet brakes not working as well as dry brakes.	5	1	5	Operator	Supervisor
E Refuelling											
E1	Fuel Spillage causing pollution	Environment	5	2	10	Always store diesel bowser away from any water course and surface water drainage systems. Ensure adequate drip trays and spill kits are located close by. Ensure plant nappies are used when ever filling up items of plant. Ensure diesel bowsers are locked when not in use. Only store fuel in appropriate fuel cans. Oil and fuel must be stored with in adequate bunds in the stores units.	5	1	5	Foreman Supervisor Operator Banks man	Supervisor
E2	Flammable liquid causing fire	Environment Site Workers Members of Public	5	4	20	Ensure any fuel stored is away from a direct heat source with in an appropriate bowser or fuel can. All refuelling must only be carried out when the item of plant is switched off. Appropriate fire extinguishers must be close by to any item of plant being refuelled. Always ensure the correct PPE is being worn. i.e. Gloves, Overalls, Glasses. Fuel must be stored in the correct containers when not being used.	5	1	5	Foreman Supervisor Operator Banks man	Supervisor

Operation / Task:	Concrete breakers & scabblers on site.	Assessment Ref / Rev:	KL_HA21	Prepared by:	HSEQ / Ops teams	Rev 2 Date:	June 2015
Location:	Construction Sites	Department:	Keller Divisions	Issue Date:		Rev 1 Date:	22nd March 2014
						May-13	

H&S Consequence, C	Env. Consequence, C	Likelihood, L	Acceptance Criteria				
1 Minor Injury	1 Minor Impact / operationa	1 Improbable					
2 First Aid injury	2 Community compla	2 Remote	1	2	3	4	5
3 Major injury	3 Major Impact	3 Possible	2	4	6	8	10
4 Permanent Consequence	4 Legal Consequence	4 Probable	3	6	9	12	15
5 Potential Fatality	5 Major impact and c	5 Almost Certain	4	8	12	16	20
			5	10	15	20	25

Task	Hazard	Persons at risk	Degree of risk			Control measures	Residual risk			Person responsible	Monitoring responsibility
			C	L	RR		C	L	RR		
A Use of breaker or scabbler.											
A1	Noise.	Site workers	4	4	16	All operators and persons in the immediate work area must wear suitable ear protection. Persons not wearing ear protection to be excluded from the immediate work area, a distance of at least 20 metres from the noise producer.	4	2	8	Main Contractor / Keller employees / sub-contractors	Supervisor
A2	Vibration.	Operator	4	4	16	Scabbler to be selected that will give a vibration acceleration dose as low as reasonably possible. If quoted root mean square vibration acceleration level is above 2.5 m/s ² , then the contract manager shall arrange for the operator to have exposure reduced, e.g. by job rotation. i.e. maximum 10 mins on then 10 mins off. Thermal gloves may be required. Maximum daily dose over eight hours shall not exceed 5.0 m/s ² . If the daily dose remains above 2.5 m/s ² , health surveillance to be arranged by the Construction / General Manager.	4	2	8	Keller employees / sub-contractors	Supervisor / Construction Manager / General Manager
A3	Flying particles	Keller Operative	4	3	12	All non essential personnel must be kept away from the immediate area whilst cutting is being carried out. Suitable eye protection must be worn at all times by all personnel whilst cutting is being carried out.	4	1	4	Keller employees / sub-contractors	Supervisor
A4	Inhalation of dust	Site workers	4	3	12	Dust suppression must be used at all times. E.g. Water to dampen down any concrete being cut. Suitable dust mask must be worn when ever there is a risk of dust being produced and inhaled.	4	1	4	Keller employees / sub-contractors	Supervisor
B Use of air line.											
B1	Breakage of air line.	Site workers	3	2	6	The user shall check the condition daily before use and complete a weekly inspection form for the airline and the tool being used. Whip checks to be fitted to all joints and between the air tool and the line. All non essential personnel should be excluded from the immediate work area.	3	1	3	Keller employees / sub-contractors	Supervisor
B2	Trip Hazard	Site workers	3	3	9	Before commencing on site the Construction Manager must liaise with the Main Contractor to ensure we are provided with a clean and tidy work area with adequate space for unloading. All airlines and leads must be laid to ensure the chance of a trip hazard is minimised, this may require it to be hung in the air or covered over. Good housekeeping practises must be encouraged by Keller site personnel at all times. Rubbish, lifting equipment, re-bar, steel off cuts, etc. must not be allowed to build up.	3	2	6	All Keller employees / Main Contractor and other site workers.	Construction Manager / Supervisor
C Use of compressor.											

Task	Hazard	Persons at risk	Degree of risk			Control measures	Residual risk			Person responsible	Monitoring responsibility
			C	L	RR		C	L	RR		
C1	Noise.	Site workers	4	3	12	Compressor to have a noise rating as low as is reasonable practicable. All operators and persons in the immediate work area must wear suitable ear protection. Persons not wearing ear protection to be excluded from the immediate work area. (See separate HA use of air compressors)	4	1	4	Keller employees / sub-contractors	Supervisor
C2	Fumes.	Site workers	5	3	15	Compressor to be positioned in a well ventilated area. The exhaust should be pointed away from any office, mess room or stores units. If it is necessary to work in an area that is not well ventilated, fume extraction measures are to be provided.	5	1	5	Keller employees / sub-contractors	Supervisor



Operation / Task:	Concrete Pumping.	Assessment Ref / Rev:	KL_HA22	Prepared by:	HSEQ / Ops teams	Rev 2 Date:	June 2015
Location:	Yard / Work sites	Department:	Keller	Issue Date:		Rev 1 Date:	22nd March 2014

H&S Consequence, C	Env. Consequence, C	Likelihood, L	<table border="1"> <tr> <td></td> <td>1</td> <td>2</td> <td>3</td> <td>4</td> <td>5</td> </tr> <tr> <td>1</td> <td>1</td> <td>2</td> <td>3</td> <td>4</td> <td>5</td> </tr> <tr> <td>2</td> <td>2</td> <td>4</td> <td>6</td> <td>8</td> <td>10</td> </tr> <tr> <td>3</td> <td>3</td> <td>6</td> <td>9</td> <td>12</td> <td>15</td> </tr> <tr> <td>4</td> <td>4</td> <td>8</td> <td>12</td> <td>16</td> <td>20</td> </tr> <tr> <td>5</td> <td>5</td> <td>10</td> <td>15</td> <td>20</td> <td>25</td> </tr> </table>		1	2	3	4	5	1	1	2	3	4	5	2	2	4	6	8	10	3	3	6	9	12	15	4	4	8	12	16	20	5	5	10	15	20	25	Acceptance Criteria
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1 Minor Injury	1 Minor Impact / operational delay	1 Improbable	R Red - Intolerable take immediate action																																					
2 First Aid injury	2 Community complaints	2 Remote	Y Yellow - Tolerable with additional controls																																					
3 Major injury	3 Major Impact	3 Possible	G Green - Tolerable no further action required																																					
4 Permanent Consequence	4 Legal Consequence	4 Probable																																						
5 Potential Fatality	5 Major impact and cost	5 Almost Certain																																						

Task	Hazard	Persons at risk	Degree of risk			Control measures	Residual risk			Person responsible	Monitoring responsibility
			C	L	RR		C	L	RR		
	General Note.					NOTE: Mobile concrete pumps, hired without an operator, are only to be operated by trained and competent persons authorised on the company skills matrix. Operatives under training shall be supervised by an authorised employee. Operators of lorry mounted pumps shall hold a current CPCS Card. Lorries reversing to the mixer areas must always be controlled with a banks man.					
A	Use of concrete pump.										
A1	Concrete splashes in eyes	Pump Man	4	3	12	Operator to wear suitable eye protection which must prevent splashes entering the eyes whilst working adjacent to pumping area. e.g. (Goggles, Bolle Tracker Glasses, Visor)	4	1	4	Pump Man	Supervisor
A2	Concrete splashes on skin	Pump Man	2	4	8	Chemical Suits must be available and worn whenever there is a high risk of concrete or grout coming into contact with normal clothing or the skin. Chemical resistant gloves, a long sleeved top and trousers must be worn at all times whilst working with any cement based products. Suitable water tight footwear must be provided and worn at all times. Apply barrier cream before the start of each working shift, reapply after washing hands.	2	1	2	Pump Man	Supervisor
A3	Moving parts of pump	Pump Man	4	3	12	Supervisor to inspect examination certificate of pump on arrival. Daily inspection to be completed by operator and recorded on the weekly safety inspection which must be The moving part of the drum must be adequately guarded on the top podium to prevent contact with moving parts. Hopper grill to be secured when operating. Engine to be stopped before lifting grill.	4	1	4	Pump Man	Supervisor
A4	Excessive noise exposure for the operator.	Pump Man / Any one close by	4	4	16	Noise levels for all operations have been assessed. Items of plant with average noise levels above 85 dB(A) have Ear Protection Zone signs requiring persons to wear ear protection. Where reasonably practicable, noise reduction methods to be adopted to reduce noise levels.	4	1	4	Pump Man	Supervisor
B	Pumping Concrete.										
B1	Pipe connections parting, during concreting	Any site worker	4	3	12	Couplings to be fitted to all joints. Pipes and couplings, including hose clips and safety chains, or whip checks, to be inspected daily. It is advisable to use pipe protectors or burry concrete hoses where ever possible to reduce the risk of damage caused by vehicles constantly running over the hoses.	4	1	4	Pump Man	Supervisor
B2	Pipe bursting during concreting	Any site worker	4	3	12	Concrete hoses must be inspected in the yard prior to delivery to site. The pump man must visually inspect the hoses daily and record on the hose inspection form. Site foreman to ensure this is carried out. Plant Dept. to maintain a register. Pipe kinks must be avoided where ever possible. It is advisable to use pipe protectors or burry concrete hoses where ever possible to reduce the risk of damage caused by vehicles constantly running over the hoses.	4	1	4	Pump Man	Supervisor
C	Cleaning hose lines with compressed air.										
C1	Escape of compressed air.	Pump Man / Ganger	4	3	12	No couplings are to be undone until the pressure has been released.	4	1	4	Ganger / Pump Man	Supervisor

Task	Hazard	Persons at risk	Degree of risk			Control measures	Residual risk			Person responsible	Monitoring responsibility
			C	L	RR		C	L	RR		
C2	Concrete splashing across site	Any site worker	3	4	12	Supervisor to supervise work. Persons to stand clear. Pressure to be released before pipe coupling is loosened. Suitable Eye protection to prevent concrete entering the eyes must be worn. Methods of containing concrete to be adopted in preferred order.	3	2	6	Ganger / Pump Man	Supervisor
C3	Cleaning ball flying out	Any site worker	3	4	12	Ball catcher to be used. End of run to be shielded. Persons to be kept clear.	3	2	1	Ganger / Pump Man	Supervisor
D	Clearing a concrete blockage.										
D1	Use compressed air and blow out cannon to clear a blockage.	Any site worker	4	4	16	Compressed air and the blow out cannon shall not be used to dislodge a concrete blockage in the line. All non essential personal must be excluded from the immediate area. Blockages shall be cleared before any compressed air is used to clean out pipelines . Chemical Suits must be available and worn whenever there is a high risk of concrete or grout coming into contact with normal clothing or the skin. Chemical resistant gloves, suitable water tight footwear and a full face visor must be worn.	4	1	4	Ganger / Pump Man	Supervisor
D3	Collapsed rubber hose, ball not running through the line.	Ganger / Pump man	3	3	9	The person disconnecting the pipe shall only do so if the ball has run through the system, if the pipe has a kink or is collapsed it shall be straightened to ensure the ball is not trapping air in the pipe line.	3	1	3	Ganger / Pump Man	Supervisor
D4	Concrete splashing across site.	Any site worker	3	3	9	Pump man to instruct the pump man to reverse the concrete pump. All non essential personnel must be kept away from mixers / delivery lorries	3	1	3	Ganger / Pump Man	Supervisor
E	Moving concrete hoses across the site.										
E1	Parting of hose / musckletor injuries	Any site worker	4	3	12	Hoses are to be moved across the site by machinery. Correct web slings, not rope lashing, to be used. Slings to be inspected before use. Personnel to stand clear. Crook type attachments must be used to move the hose short distances. Grabbing the hose and trying to move it manually should be avoided at all times.	4	1	4	Ganger / Pump Man	Supervisor

Operation / Task:	Abrasive Wheels	Assessment Ref / Rev:	KL_HA23	Prepared by:	HSEQ / Ops teams	Rev 2 Date:	June 2015
Location:	Work Locations / Anywhere	Department:	Keller	Issue Date:		Rev 1 Date:	22nd March 2014
				Mar-13			

H&S Consequence, C	Env. Consequence, C	Likelihood, L						Acceptance Criteria
1 Minor injury	1 Minor Impact / operational delay	1 Improbable		1	2	3	4	5
2 First Aid injury	2 Community complaints	2 Remote	1	1	2	3	4	5
3 Major injury	3 Major Impact	3 Possible	2	2	4	6	8	10
4 Permanent Consequence	4 Legal Consequence	4 Probable	3	3	6	9	12	15
5 Potential Fatality	5 Major impact and cost	5 Almost Certain	4	4	8	12	16	20
			5	5	10	15	20	25

Task	Hazard	Persons at risk	Degree of risk			Control measures	Residual risk			Person responsible	Monitoring responsibility
			C	L	RR		C	L	RR		
	General Note					Note: Abrasive wheels are only to be operated by trained, competent and authorised personnel only. Operators under training shall be supervised by an authorised employee. Wheels are only to be changed by trained and competent persons.					
A	Pre-start inspection										
A1	Using a faulty grinder	Operator / anyone close by	3	3	12	Operator shall carry out a visual inspection before use. All faults shall be reported to the supervisor. If faults are found the grinder shall be tagged OUT OF ORDER and locked out.	3	1	4	Operator	Supervisor
A3	Grinding stone wheel not square or has grooves	Operator / anyone close by	3	3	9	Grinding stone wheel shall be square with the guide rest. Only a trained /competent person may dress the grinding wheel stone, using the correct tool to do so.	3	1	3	Operator	Supervisor
B	Fitting new grinding wheel / stone										
B1	Wheel / disc coming off machine	Operator / anyone close by	4	3	12	Only trained/competent persons to change the wheel stone. Before using machine, must ensure the Stone is secured firmly to spindle. Power source must be disconnected prior to fitting new wheel.	4	1	4	Operator	Supervisor
B2	Machine operating causing injury to persons	Operator / anyone close by	4	3	12	Power source must be disconnected prior to fitting a new wheel.	4	1	4	Operator	Supervisor
B3	Contact with the wheel or disc	Operator / anyone close by	2	3	6	Gloves must be worn whilst handling discs / wheels. The correct tools must be used. The guide rest shall not be more the 3 mm away from the stone.	2	1	2	Operator	Supervisor
B4	Fitting incorrect stone, causing the stone to burst	Operator / anyone close by	4	3	12	Persons fitting the stone shall ensure that the stone is the correct type for the job; this must include checking that the correct revolutions on the stone are correct for the revolution on the machine spindle and that the damper discs are in place on the stone.	4	1	4	Operator	Supervisor
C	Using the grinder										
C1	Flying Particles / Sparks or swarf causing injury	Operator / anyone close by	4	2	8	Operator to ensure that other personnel are not in the area. Correct PPE must be worn, this should include ear plugs, safety goggles, overalls. The shield on the grinder shall be lowered over the stone and the guide rest shall not be more the 3 mm away from the stone.	4	1	4	Operator	Supervisor
C2	Untidy work area causing slips, trips and falls	Operator / anyone close by	3	3	9	Operator to ensure that other personnel are not in the area. Material shall not be stacked or stored around the grinder; area around the static grinder shall be kept clear of waste materials. Any mess created must be swept up as soon as possible. Supervisor to carry out regular workarounds encouraging good housekeeping practises.	3	1	3	Operator	Supervisor
C3	Entanglement / Contact with moving wheel	Operator / anyone close by	4	3	12	The guard must always be in place when using the grinder. Loose clothing must not be worn when using the grinder. Long hair to be tied back or a cap to be worn. Jewellery to be removed.	4	1	4	Operator	Supervisor
C6	Sparks causing a fire	Operator / anyone close by	5	3	15	When working on site a Hot Work Permit must be issued before using any sstill saw or grinder. Combustible and flammable materials must not be stored near the grinder. Before commencing any grinding activities the operator must ensure the work area is free from any such material. Fire extinguishers must be located close to hand. All workshop staff are trained in the use of fire extinguishers.	5	1	5	Operator	Supervisor

Task	Hazard	Persons at risk	Degree of risk			Control measures	Residual risk			Person responsible	Monitoring responsibility
			C	L	RR		C	L	RR		
C6	Noise	Operator / anyone close by	4	4	16	Suitable ear protection must be worn at all times whilst using abrasive wheels. Anyone working close by must be warned and they must also wear suitable hearing protection.	4	1	4	Operator	Supervisor
C7	Dusts from materials being cut	Operator / anyone close by	4	3	12	Dust mask to be worn.	4	1	4	Operator	Supervisor
C8	Vibration	Operator / anyone close by	4	3	12	It is recommended that continuous use of grinding activities should not exceed 10 mins. Job rotation with other plant staff should be encouraged. Anyone who has been identified as suffering from early stage HAVs must be assessed by their line manager / Occupational Health as to their compatibility to operate Vibrating machinery.	4	1	4	Operator	Supervisor
C9	Bursting of the wheel or disc due to incorrect wheel/ stone being used	Operator / anyone close by	5	2	10	Operator to check machine and wheel before use. Persons fitting the stone shall ensure that the stone is the correct type for the job; this must include checking that the correct revolutions on the stone are correct for the revolution on the machine spindle and that the damper discs are in place on the stone.	5	1	5	Operator	Supervisor



Operation / Task:		Maintenance and Inspection of plant		Assessment Ref / Rev:		KL_HA26		Prepared by:		HSEQ / Dept.		Rev 2 Date:		June 2015																																													
Location:		Various Sites		Department:		Keller		Issue Date:				Rev 1 Date:		22nd March 2014																																													
H&S Consequence, C 1 Minor Injury 2 First Aid injury 3 Major injury 4 Permanent Consequence 5 Potential Fatality		Env. Consequence, C 1 Minor Impact / operational delay 2 Community complaints 3 Major Impact 4 Legal Consequence 5 Major impact and cost		Likelihood, L 1 Improbable 2 Remote 3 Possible 4 Probable 5 Almost Certain		<table border="1"> <tr> <td></td> <td></td> <td>1</td> <td>2</td> <td>3</td> <td>4</td> <td>5</td> </tr> <tr> <td rowspan="5">Severity</td> <td>1</td> <td>1</td> <td>2</td> <td>3</td> <td>4</td> <td>5</td> </tr> <tr> <td>2</td> <td>2</td> <td>4</td> <td>6</td> <td>8</td> <td>10</td> </tr> <tr> <td>3</td> <td>3</td> <td>6</td> <td>9</td> <td>12</td> <td>15</td> </tr> <tr> <td>4</td> <td>4</td> <td>8</td> <td>12</td> <td>16</td> <td>20</td> </tr> <tr> <td>5</td> <td>5</td> <td>10</td> <td>15</td> <td>20</td> <td>25</td> </tr> </table>								1	2	3	4	5	Severity	1	1	2	3	4	5	2	2	4	6	8	10	3	3	6	9	12	15	4	4	8	12	16	20	5	5	10	15	20	25	Acceptance Criteria <table border="1"> <tr> <td>R</td> <td>Red - Intolerable take immediate action</td> </tr> <tr> <td>Y</td> <td>Yellow - Tolerable with additional controls</td> </tr> <tr> <td>G</td> <td>Green - Tolerable no further action required</td> </tr> </table>				R	Red - Intolerable take immediate action	Y	Yellow - Tolerable with additional controls	G	Green - Tolerable no further action required
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Task	Hazard	Persons at risk	Degree of risk			Control measures	Residual risk			Person responsible	Monitoring responsibility																																																
			C	L	RR		C	L	RR																																																		
	General Note					Note: All maintenance and inspection is to be carried out by competent persons who are trained and are on the company data base. All maintenance and inspection is to be carried out as required by the Plant Department and rig manufacturer, following the manufactures operating instructions																																																					
A	Maintenance and inspection of plant																																																										
A1	Entrapment by moving plant.	Operator	4	3	12	All plant is to be isolated by the removal of keys and the operator controls locked out prior to maintenance/inspection taking place. Signage informing others that maintenance/inspection is taking place should be placed in a prominent position on the cab.	4	1	4	Operator	Site supervisor																																																
A2	Falls from height.	Operator	5	3	15	Any work at height be from behind suitable fall prevention equipment i.e. permanent handrail system, if this is not in place then the hierarchy of control must be followed, use work equipment or other measures to prevent falls where they cannot avoid working at height; and where the risk of a fall cannot be eliminated, use work equipment or other measures to minimise the distance and consequences should one occur.	5	1	5	Operator	Site supervisor																																																
A3	Exposure to harmful substances.	Operator	4	3	12	All operators must follow the control measures of the associated COSHH assessments and wear the correct PPE as recommended.	4	1	4	Operator	Site supervisor																																																




Operation / Task:	Welding cutting & associated hot work on site	Assessment Ref / Rev:	KL_HA27	Prepared by:	HSEQ /Ops team	Rev 2 Date:	June 2015
Location:	Construction Sites	Department:	All	Issue Date:		Rev 1 Date:	22 March 2014

H&S Consequence, C	Env. Consequence, C	Likelihood, L	Acceptance Criteria					
1 Minor Injury	1 Minor Impact / operational delay	1 Improbable		1	2	3	4	5
2 First Aid injury	2 Community complaints	2 Remote	1	1	2	3	4	5
3 Major injury	3 Major Impact	3 Possible	2	2	4	6	8	10
4 Permanent Consequence	4 Legal Consequence	4 Probable	3	3	6	9	12	15
5 Potential Fatality	5 Major impact and cost	5 Almost Certain	4	4	8	12	16	20
			5	5	10	15	20	25

Task	Hazard	Persons at risk	Degree of risk			Control measures	Residual risk			Person responsible	Monitoring responsibility
			C	L	RR		C	L	RR		

<p>General Note.</p> <p>Note: This assessment covers cutting and welding work using electric arc welding and oxygen / flammable gas equipment on various construction sites. Welding activities are only to be undertaken by trained, competent and authorised personnel.</p> <p>A hot works permit must be issued by the main contractor or a Keller foreman/supervisor before any welding is carried out.</p>											
A Use of welding equipment.											
A1	Fire and explosion from the ignition of gas cylinders	Welder / Site staff	5	3	15	Gas cylinders and hoses to be checked for leaks, etc. Arc welding equipment to be examined by electrician regularly. Cylinders to be kept upright and secured. Valves to be closed when not in use. Cylinders to be fitted with appropriate regulator and gauge. Flash-back arrestors to be fitted on all lines. Cylinders must be stored in a cool dry place away from any direct heat source.	5	1	5	Welders	Mobile plant manager, site foreman
A2	Fire from other flammable materials	Welder / Site staff	5	3	15	Hot work permit must be in place prior to carrying out any hot work operations. Flammable materials must be removed from working area. Fire extinguisher must be available and close by at all times. Welder to check condition of welding equipment before use and to ensure that equipment is safe after use. Cutting and welding of drums or tanks that have contained flammable materials is prohibited with out following the appropriate procedure. This must include producing a separate HA in conjunction with the Workshop Manager.	5	1	5	Welders	Mobile plant manager, Supervisors
A3	Fumes from rods, coatings and metals.	Welder / Site staff	4	4	16	Welding etc. must be undertaken in well-ventilated areas. Local exhaust ventilation may also be required in certain circumstances to remove fumes. Health checks must be undertaken at set timescales arranged by line management / HR.	4	2	8	Welders	Mobile plant manager, Supervisors
A4	Hot metal surfaces.	Welder / Site staff	2	3	6	Hot work permit must be in place prior to carrying out any hot works on site. Welder to exclude other persons from the working area. Barriers and signs may be required. Welder must wear welding gloves.	2	1	2	Welders	Mobile plant manager, Supervisors
A5	Flying splatter	Welder / Site staff	3	3	9	Welder to exclude other persons from the working area. Barriers and signs may be required. Welder must wear flame retardant overalls, appropriate apron and welding gloves.	3	1	3	Welders	Mobile plant manager, Supervisors
A6	Excessive light/radiation for the welder.	Welder / Site staff	4	4	16	Approved welding Face shield must be worn by the welder	4	1	4	Welders	Mobile plant manager, Supervisors
A7	Excessive light/radiation for others nearby.	Welder / Site staff	4	4	16	Fireproof screens to be placed around working area. Welder to exclude other persons from the working area. Barriers and signs may be required	4	2	8	Welders	Mobile plant manager, Supervisors
B Storage of used hot welding rods.											
B1	Burns / Scalds	Welder / Site staff	2	4	8	Used weld rods should be immediately placed in a small steel bucket or such like receptacle.	2	1	2	Welders	Welder, Supervisor
C Storage of gas cylinders.											
C1	Fire and explosion.	Welder / Site staff	5	3	15	Cylinders must be stored in dedicated locked labelled cages and secured. Cylinders in use in the workshop must be stored on trolleys and isolated when not in use. Any vans carrying gas bottles must be ventilated, carry appropriate fire extinguishers and display the correct hazard warning signs.	5	1	5	Welders	Mobile plant manager, Supervisors
D Use of burning gear for cutting steel.											

Task	Hazard	Persons at risk	Degree of risk			Control measures	Residual risk			Person responsible	Monitoring responsibility
			C	L	RR		C	L	RR		
	General Note.					Note: relevant parts of the above assessment for the use of welding equipment shall apply for the use of burning gear except where amended below					
D1	Excessive light	Welder / Site staff	4	4	16	Goggles to EN 166 class 3, 4, 9-B fitted with a filter to EN169 to be worn.	4	1	4	Welders	Mobile plant manager, Supervisors

	Title Risk Assessment Pack		
Document Type Work Instruction	Revision -/2015-08-07	Document Number 7.1KF F34	Page 4 of 5

3. COSHH ASSESSMENT FORMS

- CA 03 Antifreeze Concentrate
- CA 04 Antifreeze
- CA 08 Cement, OPC, SR, RHPC
- CA 12 Concrete Mould Oil
- CA 13 Concrete Pump Prima
- CA 14 Concrete Readymix
- CA 22 Diesel Fuel Esso
- CA 47 Multi-Purpose Grease (Electrolube)
- CA 48 Gear Oil XG 80W-90 Q8
- CA 67 Q8 Rembrandt EP 2 - Grease
- CA 69 Q8 T 55 - Lubricating Oil for Transmissions
- CA 71 Environ MV 32, 46 Hydraulic Fluid
- CA 100 Unleaded Petrol
- CA 103 Yellow Linemarker Paint
- CA 108 Adblue

Description of product: <i>(Include name)</i>	Shell Rotella ELC Concentrate Antifreeze and coolant.
Describe the activity or work process. <i>(Include how long, how often this is carried out, the quantity of substance used, where it is to be used, what it is used for and who by)</i>	Antifreeze coolant used in all internal combustion engines, such as drilling rigs, generators etc. Normally used during servicing and maintenance of engines on plant and equipment within the depot environment. Also used on site if cooling system of plant and equipment requires draining and replenishing after maintenance. Substance normally used by fitters. On average, 2 to 3 litres are used on a full cooling system replenish. Product decanted from container via hand pump or through funnel into engine radiator

Identify the persons at risk:	Employees <input checked="" type="checkbox"/> <i>(including trainees)</i>	Contractors <input type="checkbox"/>	Public <input type="checkbox"/>
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Manufacturer name, address and telephone number. <i>(A copy of a current safety data sheet for this substance should be attached to this assessment)</i>	Name: SOPUS Products Address: PO BOX 4427, Houston, TX 77210-4427, USA Tel: Spill Information : 877-242-7400 Health Information : 877-504-9351 Website: http://www.shell.com/rotella.html Email:
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Classification *(state the category of danger)*

 <input type="checkbox"/> Unstable Explosive	 <input type="checkbox"/> Corrosive	 <input checked="" type="checkbox"/> Hazardous to the Aquatic Environment
 <input type="checkbox"/> Flammable	 <input checked="" type="checkbox"/> Harmful (Toxic / Irritant)	 <input type="checkbox"/> Acute Toxicity
 <input type="checkbox"/> Oxidising	 <input checked="" type="checkbox"/> Health Hazard	 <input type="checkbox"/> Gas under pressure

Hazard Type

<input type="checkbox"/> Gas	<input checked="" type="checkbox"/> Vapour	<input type="checkbox"/> Mist	<input type="checkbox"/> Fume	<input type="checkbox"/> Dust	<input checked="" type="checkbox"/> Liquid	<input type="checkbox"/> Solid	<input type="checkbox"/> Other (State)
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Route of Exposure

<input checked="" type="checkbox"/> Inhalation	<input checked="" type="checkbox"/> Skin	<input checked="" type="checkbox"/> Eyes	<input checked="" type="checkbox"/> Ingestion	<input type="checkbox"/> Other (State)
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Workplace Exposure Limits (WELs) *please indicate n/a where not applicable*

Long-term exposure level (8hrTWA): VAPOUR 52mg/ m ³ (Ethane-1,2-diol)	Short-term exposure level (15 mins): VAPOUR 104mg/m ³ (Ethane-1,2-diol)
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State the Risks to Health from Identified Hazards

Inhalation: Slightly irritating to respiratory system. **Skin Contact:** May cause moderate irritation to skin.
Eye Contact: Moderately irritating to eyes. **Ingestion:** Harmful if swallowed. May cause acidosis, cardiopulmonary and kidney effects. Ingestion may cause drowsiness and dizziness.
Other Information : Possibility of organ or organ system damage from prolonged exposure
 Intentional abuse, misuse or other massive exposure may cause multiple organ damage and or death.
Aggravated Medical Conditions: Pre-existing medical conditions of the following organ(s) or organ system(s) may be aggravated by exposure to this material: Kidney. Cardiovascular system.

Control Measures: *(e.g. ventilation, training, supervision)*

Ensure product is pumped into plant / engine cooling systems where possible. If not possible, use small container sizes to replenish the coolant system. Ensure good industrial hygiene practise is carried out before and after use and the identified PPE identified is worn during product handling and replenishing.



Title **Hazardous Substance (COSHH) Assessment**

Document Type Assessment	Revision A-/2014/11/10	Document ID CA_03	Form Number 1-3.1K_F1	Page 2 of 3
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Is health surveillance or monitoring required?

Yes
 No

Personal Protective Equipment (state type and standard)

<input type="checkbox"/>	Dust mask	<input type="checkbox"/>	Visor
<input type="checkbox"/>	Respirator	<input checked="" type="checkbox"/>	Goggles
<input checked="" type="checkbox"/>	EN 374 Nitrile Gloves	<input checked="" type="checkbox"/>	Overalls
<input type="checkbox"/>		<input checked="" type="checkbox"/>	Other

Safety glasses are to be worn to EN166 Field of Use 3 Protection against liquids (droplets or splashes) when filling receptacles on cooling systems

Overalls are to be worn should the task/risks require them.

Good general ventilation is required

First Aid Measures

Eye contact: Flush eye with copious quantities of water. If persistent irritation occurs, obtain medical attention.

Ingestion: DO NOT DELAY. If swallowed, do not induce vomiting: transport to nearest medical facility for additional treatment. If vomiting occurs spontaneously, keep head below hips to prevent aspiration.

Inhalation: Remove to fresh air. If rapid recovery does not occur, transport to nearest medical facility for additional treatment.

Skin contact: Remove contaminated clothing. Flush exposed area with water and follow by washing with soap if available. If persistent irritation occurs, obtain medical attention.

Storage

Keep container tightly closed and in a cool, well-ventilated place. Use properly labelled and closable containers. Store at ambient temperature.

Transport

If transport to site required, ensure containers are in good condition, lid is tightly closed and containers are suitably secured within the vehicle so as to prevent sudden movement and impact where spillage may occur.

Fire fighting

Suitable Extinguishing Media : Foam, water spray or fog. Dry chemical powder, carbon dioxide, sand or earth may be used for small fires only.

Unsuitable Extinguishing Media : Do not use water in a jet.

Protective Equipment for Firefighters: Proper protective equipment including breathing apparatus must be worn when approaching a fire in a confined space.

Spillage:

Protective measures : Use appropriate containment to avoid environmental contamination. Prevent from spreading or entering drains, ditches or rivers by using sand, earth, or other appropriate barriers.

Clean Up Methods : Do not flush away residues with water. Retain as contaminated waste. For small liquid spills, transfer by mechanical means to a labelled, sealable container for product recovery or safe disposal. Allow residues to evaporate or soak up with an appropriate absorbent material and dispose of safely. Remove contaminated soil and dispose of safely.

Disposal of Substances & Contaminated Containers

Material Disposal: Recover or recycle if possible. Do not dispose into the environment, in drains or in water courses.


Local Legislation: Disposal should be in accordance with applicable regulations.



Title **Hazardous Substance (COSHH) Assessment**

Document Type Assessment	Revision A-/2014/11/10	Document ID CA_03	Form Number 1-3.1K_F1	Page 3 of 3
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Is exposure adequately controlled?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Risk Rating Following Control Measures		
High <input type="checkbox"/>	Medium <input type="checkbox"/>	Low <input checked="" type="checkbox"/>




	Title Hazardous Substance (COSHH) Risk Assessment			
Document Type Assessment	Revision -/2013/10/08	Document ID CA_04	Form Number 1-3.1K_F1	Page 1 of 2

Description of product: <i>(Include name)</i>	Antifreeze
Describe the activity or work process. <i>(Include how long, how often this is carried out, the quantity of substance used, where it is to be used, what it is used for and who by)</i>	Antifreeze and coolant for engines and industrial equipment

Identify the persons at risk:	Employees <i>(including trainees)</i> <input checked="" type="checkbox"/>	Contractors <input type="checkbox"/>	Public <input type="checkbox"/>
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Manufacturer name, address and telephone number. <i>(A copy of a current safety data sheet for this substance should be attached to this assessment)</i>	Name: Kuwait Petroleum International Lubricants (UK) Ltd Address: Knowsthorpe Gate, Cross Green Industrial Estate, Leeds, LS9 ONP United Kingdom Tel: 01132 350555 Fax: 01332 485026 Back up Supplier: Name: Tetrosyl Limited Address: Bevis Green Works, Walmersley, Bury, BL9 6RE Tel: 01617 64581 Fax: 01617 975899
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Classification (state the category of danger)

 <input type="checkbox"/> Unstable Explosive	 <input type="checkbox"/> Corrosive	 <input type="checkbox"/> Hazardous to the Aquatic Environment
 <input type="checkbox"/> Flammable	 <input checked="" type="checkbox"/> Harmful (Toxic / Irritant)	 <input type="checkbox"/> Acute Toxicity
 <input type="checkbox"/> Oxidising	 <input type="checkbox"/> Health Hazard	 <input type="checkbox"/> Gas under pressure

Hazard Type

<input type="checkbox"/> Gas	<input type="checkbox"/> Vapour	<input type="checkbox"/> Mist	<input type="checkbox"/> Fume	<input type="checkbox"/> Dust	<input checked="" type="checkbox"/> Liquid	<input type="checkbox"/> Solid	<input type="checkbox"/> Other (State)
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Route of Exposure

<input type="checkbox"/> Inhalation	<input checked="" type="checkbox"/> Skin	<input checked="" type="checkbox"/> Eyes	<input checked="" type="checkbox"/> Ingestion	<input type="checkbox"/> Other (State)
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Workplace Exposure Limits (WELs) please indicate n/a where not applicable


Long-term exposure level (8hrTWA): ethanediol 10 mg/m3 (sk) Through Skin	Short-term exposure level (15 mins): 104 mg/m3(sk) Through Skin
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State the Risks to Health from Identified Hazards









Harmful if swallowed

Control Measures: (e.g. ventilation, training, supervision)

Ensure funnels are used when dispensing into receptacle mouth of coolant system or where possible use hand pump from main container to minimise risk of spillage and splashes
Ensure containers come in suitable sizes with regards to manual handling and ease of pouring into receptacles etc

	Title Hazardous Substance (COSHH) Risk Assessment			
Document Type Assessment	Revision -/2013/10/08	Document ID CA_04	Form Number 1-3.1K_F1	Page 2 of 2

Is health surveillance or monitoring required? Yes No

Personal Protective Equipment (state type and standard)			
 <input type="checkbox"/>		 <input type="checkbox"/>	
Dust mask		Visor	
 <input type="checkbox"/>		 <input checked="" type="checkbox"/>	Safety glasses are to be worn to EN166 Field of Use 3 Protection against liquids (droplets or splashes) when filling receptacles on cooling systems
Respirator		Goggles	
 <input checked="" type="checkbox"/>	Wear suitable gloves tested to EN374	 <input checked="" type="checkbox"/>	Overalls are to be worn should the task/risks require them.
Gloves		Overalls	
 <input checked="" type="checkbox"/>	Suitable footwear required	 <input type="checkbox"/>	Good general ventilation is required
Footwear		Other	

First Aid Measures

Eye contact: Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention if irritation occurs.

Ingestion: wash out mouth with water. Remove dentures if any. Move exposed person to fresh air. Keep person warm and at rest. Have conscious person drink several glasses of water or milk. Induce vomiting, head should be kept low so vomit doesn't enter the lungs. The product contains BITREX. Never give anything by mouth to an unconscious person. Place them in the recovery position and get medical attention immediately. Maintain an open airway and loosen tight clothing.

Inhalation: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing is irregular or if respiratory arrest occurs provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth to mouth resuscitation. Get medical attention and maintain an open airway. Loosen tight clothing.

Skin contact: Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. Wash clothing before reuse. Clean shoes thoroughly before reuse.

Storage

Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials, and food and drink. Keep container tightly closed and sealed until ready for use. Keep opened containers upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination.

Transport

The product is not covered by the international regulation on the transport of dangerous goods (IMDG, IATA, ADR/RID)

Fire fighting

Use dry chemical, CO2 alcohol-resistant foam or water spray (fog). Do NOT use water. Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

Spillage:

Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Always approach the release from upwind. Prevent entry into sewers, water courses, basements or confined areas.


Disposal of Substances & Contaminated Containers

Dispose of via a licensed waste disposal contractor.

Is exposure adequately controlled? Yes No

Risk Rating Following Control Measures

High Medium Low

		Title Hazardous Substance (COSHH) Risk Assessment		
Document Type Assessment	Revision -/2013/10/08	Document ID CA_08	Form Number 1-3.1K_F1	Page 1 of 2

Description of product: <i>(Include name)</i>	Cement, OPC, SR, RHPC
Describe the activity or work process. <i>(Include how long, how often this is carried out, the quantity of substance used, where it is to be used, what it is used for and who by)</i>	Cement is used as an ingredient of grout, which is then pumped into holes drilled in the grout or into cavities behind structures. It is mixed in grout mixers. It's stored in bag form and in bulk in silos

Identify the persons at risk:	Employees <input checked="" type="checkbox"/> <i>(including trainees)</i>	Contractors <input type="checkbox"/>	Public <input type="checkbox"/>
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Manufacturer name, address and telephone number. <i>(A copy of a current safety data sheet for this substance should be attached to this assessment)</i>	Name: Castle Cement Limited Address: Park Square, 3160 Solihull Parkway, Birmingham Business Park, Birmingham, B37 7YN Tel: 08457 227853 Fax: 01780 727154
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Classification (state the category of danger)

 <input type="checkbox"/> Unstable Explosive	 <input type="checkbox"/> Corrosive	 <input type="checkbox"/> Hazardous to the Aquatic Environment
 <input type="checkbox"/> Flammable	 <input type="checkbox"/> Harmful (Toxic / Irritant)	 <input type="checkbox"/> Acute Toxicity
 <input type="checkbox"/> Oxidising	 <input checked="" type="checkbox"/> Health Hazard	 <input type="checkbox"/> Gas under pressure

Hazard Type

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Gas	Vapour	Mist	Fume	Dust	Liquid	Solid	Other (State)

Route of Exposure

<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Inhalation	Skin	Eyes	Ingestion	Other (State)

Workplace Exposure Limits (WELs) please indicate n/a where not applicable


Long-term exposure level (8hrTWA): 10mg/m3 total inhalable dust, 4mg/m3 respirable dust.	Short-term exposure level (15 mins):
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State the Risks to Health from Identified Hazards

Risk of serious damage to eyes, contact with wet concrete or wet mortar may cause irritation, dermatitis or burns.

Control Measures: (e.g. ventilation, training, supervision)









Ensure plant & equipment is maintained in accordance with manufacturers instructions
 Ensure concrete pump lines are inspected and recorded on a weekly basis
 Ensure good hygiene practices are maintained by effective supervision and information and training
 Ensure task specific PPE is used and maintained as and when required

	Title Hazardous Substance (COSHH) Risk Assessment			
Document Type Assessment	Revision -/2013/10/08	Document ID CA_08	Form Number 1-3.1K_F1	Page 2 of 2

Is health surveillance or monitoring required?

Yes
 No

Personal Protective Equipment (state type and standard)

 <input checked="" type="checkbox"/>	Dust Mask to EN 149 types FFP2S	 <input type="checkbox"/>	
 <input type="checkbox"/>		 <input checked="" type="checkbox"/>	Safety Glasses to EN 166 class F
 <input checked="" type="checkbox"/>	Gloves or Gauntlets must be worn	 <input checked="" type="checkbox"/>	Overalls with long sleeves, full length trousers
 <input checked="" type="checkbox"/>	Waterproof Boots	 <input type="checkbox"/>	

First Aid Measures

Eye contact: A quick response is essential to avoid permanent damage to the eyes. Wash eyes immediately with plenty of clean water for at least 15 minutes and seek medical advice without delay.

Ingestion: Do not induce vomiting. Wash out mouth with water and give the patient plenty of water to drink.

Inhalation: If irritation occurs, move to fresh air. If nose or airways become inflamed seek medical advice.

Skin contact: Wash the affected area thoroughly with soap and water before continuing. If irritation, pain or other skin trouble occurs seek medical advice. Contaminated clothing should be washed thoroughly before re-used.

Storage

Keep out of reach of children, to be kept clear of the ground and in cool dry conditions. Bulk cement must be kept in silos that are waterproof, clean and protected from contamination.

Transport

Cement is not covered by the international regulation of transport of dangerous goods (IMDG, IATA, ADR/RID) no classification is required.

Fire fighting

Cements are non-flammable and non-explosive. They will not facilitate combustion with other materials and all types of extinguishing media are suitable.

Spillage:

Recover the spillage in a dry state if possible. Minimise generation of airborne dust. The product can be slurred by the addition of water but will subsequently set as a hard material. Keep children away from the clean-up operation.

Disposal of Substances & Contaminated Containers


Dispose of empty bags or surplus cement to a place authorised to accept builders waste. Keep out of reach of children.

Is exposure adequately controlled?

Yes
No

Risk Rating Following Control Measures

High
Medium
Low

		Title Hazardous Substance (COSHH) Risk Assessment		
Document Type Assessment	Revision -/2014/05/28	Document ID CA_12	Form Number 1-3.1K_F1	Page 1 of 2

Description of product: <i>(Include name)</i>	Concrete Mould Oil
Describe the activity or work process. <i>(Include how long, how often this is carried out, the quantity of substance used, where it is to be used, what it is used for and who by)</i>	Used in concrete cube making process to prevent sticking

Identify the persons at risk:	Employees <input checked="" type="checkbox"/> <i>(including trainees)</i>	Contractors <input type="checkbox"/>	Public <input type="checkbox"/>
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Manufacturer name, address and telephone number. <i>(A copy of a current safety data sheet for this substance should be attached to this assessment)</i>	Name: Direct Chemicals Address: P.O Box 3786, Bracknell, Berkshire, RG12 7TH Tel: 01189 892666 Fax: 01189 890929 WEB: www.dichem.co.uk
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Classification (state the category of danger)

 <input type="checkbox"/> Unstable Explosive	 <input type="checkbox"/> Corrosive	 <input type="checkbox"/> Hazardous to the Aquatic Environment
 <input type="checkbox"/> Flammable	 <input checked="" type="checkbox"/> Harmful (Toxic / Irritant)	 <input type="checkbox"/> Acute Toxicity
 <input type="checkbox"/> Oxidising	 <input type="checkbox"/> Health Hazard	 <input type="checkbox"/> Gas under pressure

Hazard Type

<input type="checkbox"/> Gas	<input checked="" type="checkbox"/> Vapour	<input type="checkbox"/> Mist	<input type="checkbox"/> Fume	<input type="checkbox"/> Dust	<input checked="" type="checkbox"/> Liquid	<input type="checkbox"/> Solid	<input checked="" type="checkbox"/> Other (State)
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Route of Exposure

<input type="checkbox"/> Inhalation	<input checked="" type="checkbox"/> Skin	<input checked="" type="checkbox"/> Eyes	<input checked="" type="checkbox"/> Ingestion	<input type="checkbox"/> Other (State)
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Workplace Exposure Limits (WELs) please indicate n/a where not applicable

Long-term exposure level (8hrTWA): Petroleum Distillate 5mg/m3	Short-term exposure level (15 mins): Petroleum Distillate 10mg/m3
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State the Risks to Health from Identified Hazards

R65: Harmful may cause lung damage if swallowed.
R66: Repeated exposure may cause skin dryness or cracking.

Control Measures: (e.g. ventilation, training, superviso

Use in a well ventilated area.
Apply by brushing.
Wear oil resistant gloves and safety glasses.

Is health surveillance or monitoring required?









Yes No

Personal Protective Equipment (state type and standard)



Title **Hazardous Substance (COSHH) Risk Assessment**

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 <input type="checkbox"/>		 <input type="checkbox"/>	
Dust mask		Visor	
 <input type="checkbox"/>		 <input checked="" type="checkbox"/>	Standard protective equipment
Respirator		Goggles	
 <input checked="" type="checkbox"/>	Standard protective equipment	 <input checked="" type="checkbox"/>	Standard protective equipment
Gloves		Overalls	
 <input checked="" type="checkbox"/>	Standard protective equipment	 <input type="checkbox"/>	
Footwear		Other	

First Aid Measures

Eye contact: Flush with plenty of clean water for at least 15 minutes. If irritation persists obtain medical attention.

Ingestion: Milk or water to drink may be beneficial. Do not induce vomiting without medical advice. Aspiration hazard may cause rapid absorption via lungs, resulting in injury to other body systems. Do not induce vomiting without medical advice.

Inhalation: Remove to fresh air – if symptoms persist seek medical advice.

Skin contact: Wash off with soap and water. The application of skin reconditioning cream (emollient) can be beneficial.

Storage

Store between 10-35°C, store in mild steel, stainless steel or polyethylene. Store in a cool dry place away from heat or sources of combustion.

Transport

The product is not classified as hazardous for transport.

Fire fighting

Not classes as flammable but inherently combustible. If involved in fire may emit noxious fumes. Fire fighters should enter area wearing breathing apparatus.

Spillage:

Soak liquid in absorbent material and collect solids in a container. Wash down floor area as spillage can be slippery. Dispose only in accordance with Local Authority Regulations, via an authorised waste disposal agent.

Disposal of Substances & Contaminated Containers

Product should be disposed of via an authorised waste disposal contractor in accordance with all local and national regulations. Wash out containers with water, running the washings to sewage treatment plant system. Dispose of empty containers in accordance with local and national regulations. Advice can be obtained from the Waste Regulation Authority whether special waste regulations apply to this product.

Is exposure adequately controlled?

Yes No

Risk Rating Following Control Measures

High Medium Low



Title **Hazardous Substance (COSHH) Assessment**

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Description of product: <i>(Include name)</i>	Concrete Pump Primer (Prime-a-Pump)
Describe the activity or work process. <i>(Include how long, how often this is carried out, the quantity of substance used, where it is to be used, what it is used for and who by)</i>	Primes concrete pump prior to pumping. A powder mixture of lubricant, gelling agent, and buffer. The product is supplied in a plastic milk bottle style container and comes in a powder form. Two sizes of bottle are available: 225g and 450g. A small bottle of Prime-a-Pump is simply emptied and stirred into 15ltrs of water, left for 15 minutes to thicken prior to the start of pumping operations. During this time, the mixture thickens and takes on a slippery texture, which adheres to all the pump's internal surfaces once it is applied. Used and applied at the start of each shift

Identify the persons at risk:	Employees <input checked="" type="checkbox"/> <i>(including trainees)</i>	Contractors <input type="checkbox"/>	Public <input type="checkbox"/>
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Manufacturer name, address and telephone number. <i>(A copy of a current safety data sheet for this substance should be attached to this assessment)</i>	Name: Landsdowne Products Ltd Address: Tollgate House, Crossroads, Pen-y-cefn, Caerwys, Flintshire, CH7 5BP Tel: 0845 300 8073 Website: www.landsdowneproducts.co.uk Email: info@landsdowneproducts.co.uk
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Classification *(state the category of danger)*

 <input type="checkbox"/> Unstable Explosive	 <input type="checkbox"/> Corrosive	 <input type="checkbox"/> Hazardous to the Aquatic Environment
 <input type="checkbox"/> Flammable	 <input checked="" type="checkbox"/> Harmful (Toxic / Irritant)	 <input type="checkbox"/> Acute Toxicity
 <input type="checkbox"/> Oxidising	 <input type="checkbox"/> Health Hazard	 <input type="checkbox"/> Gas under pressure

Hazard Type

<input type="checkbox"/> Gas	<input type="checkbox"/> Vapour	<input type="checkbox"/> Mist	<input type="checkbox"/> Fume	<input checked="" type="checkbox"/> Dust	<input checked="" type="checkbox"/> Liquid	<input type="checkbox"/> Solid	<input type="checkbox"/> Other (State) Gel state after mixing
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Route of Exposure

<input checked="" type="checkbox"/> Inhalation	<input checked="" type="checkbox"/> Skin	<input checked="" type="checkbox"/> Eyes	<input checked="" type="checkbox"/> Ingestion	<input type="checkbox"/> Other (State)
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Workplace Exposure Limits (WELs) *please indicate n/a where not applicable*

Long-term exposure level (8hrTWA): N/A	Short-term exposure level (15 mins): N/A
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State the Risks to Health from Identified Hazards

Breathing in dust when mixing with water
Being splashed with product when mixing with water
Ingestion if good industrial hygiene practises not carried out

Control Measures: *(e.g. ventilation, training, supervision)*

Handle and mix in well ventilated areas
Avoid excessive dust by pouring into water at a steady rate



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Is health surveillance or monitoring required?

Yes
 No

Personal Protective Equipment (state type and standard)

	<input checked="" type="checkbox"/>	FFP3 Disposable or Reusable after Face Fit training when mixing powder product with water.		<input type="checkbox"/>	
	<input type="checkbox"/>			<input checked="" type="checkbox"/>	Safety glasses are to be worn to EN166 Field of Use 3 Protection against liquids (droplets or splashes) when carrying out mixing and pouring operations.
	<input checked="" type="checkbox"/>	Suitable gloves are to be worn to prevent skin contact		<input type="checkbox"/>	
	<input type="checkbox"/>			<input type="checkbox"/>	

First Aid Measures

Eye contact: Immediately wash eye for approx. 15 minutes

Ingestion: Rinse out mouth with water and give plenty of water to drink. Do not induce vomiting. Seek medical attention.

Inhalation: Rinse out mouth with water and give water to drink. Do not induce vomiting.

Skin contact: Wash with plenty of water and remove contaminated clothing.

Storage

Ambient temperatures and dry conditions

Transport

Not classified as hazardous for transport

Fire fighting

Not combustible

Spillage:

Minor spill - wash to drain. Major spill - sweep up avoiding dust and wash spill area with plenty of water.

Disposal of Substances & Contaminated Containers


Via an authorised disposal agent to an approved disposal site.

Is exposure adequately controlled?

Yes
No

Risk Rating Following Control Measures










High
Medium
Low

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Description of product: <i>(Include name)</i>	Concrete Ready-mix
Describe the activity or work process. <i>(Include how long, how often this is carried out, the quantity of substance used, where it is to be used, what it is used for and who by)</i>	Used for constructing foundations for various wall systems and other general uses around site.

Identify the persons at risk:	Employees <input checked="" type="checkbox"/> <i>(including trainees)</i>	Contractors <input checked="" type="checkbox"/>	Public <input type="checkbox"/>
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Manufacturer name, address and telephone number. <i>(A copy of a current safety data sheet for this substance should be attached to this assessment)</i>	Name: Tarmac Central Limited Address: Tunstead House, Buxton, SK17 8TG Tel: 01298 768555
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Classification <i>(state the category of danger)</i>					
 <input type="checkbox"/> Unstable Explosive	 <input type="checkbox"/> Corrosive	 <input type="checkbox"/> Hazardous to the Aquatic Environment			
 <input type="checkbox"/> Flammable	 <input checked="" type="checkbox"/> Harmful (Toxic / Irritant)	 <input type="checkbox"/> Acute Toxicity			
 <input type="checkbox"/> Oxidising	 <input type="checkbox"/> Health Hazard	 <input type="checkbox"/> Gas under pressure			

Hazard Type							
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Gas	Vapour	Mist	Fume	Dust	Liquid	Solid	Other (State)

Route of Exposure					
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Inhalation	Skin	Eyes	Ingestion	Other	(State)

Workplace Exposure Limits (WELs) <i>please indicate n/a where not applicable</i>	
Long-term exposure level (8hrTWA):	Short-term exposure level (15 mins):
Total Dust (Inhalable) 10mg/m3 Respirable Dust 4mg/m3 Respirable Quartz Crystalline Silica SiO2 0.1mg/m3	

State the Risks to Health from Identified Hazards
Inhalation of dust during mixing operations and maintenance of plant and worksite (cleaning off of dried cement) Alkali burns if in contact with skin. Irritant and allergic dermatitis if in contact with skin. Irritation of nose and throat.

Control Measures: <i>(e.g. ventilation, training, supervision)</i>
Ensure plant & equipment is maintained in accordance with manufacturers instructions. Ensure concrete pump lines are inspected and recorded on a weekly basis. Ensure good hygiene practices are maintained by effective supervision and information and training. Ensure task specific PPE is used and maintained as and when required.











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Is health surveillance or monitoring required?

Yes
 No

Personal Protective Equipment (state type and standard)			
 <input checked="" type="checkbox"/>	FFP3	 <input type="checkbox"/>	
Dust mask		Visor	
 <input type="checkbox"/>		 <input checked="" type="checkbox"/>	Safety glasses are to be worn to EN166 Field of Use 3 Protection against liquids (droplets or splashes)
Respirator		Goggles	
 <input checked="" type="checkbox"/>	EN374 if directly handling wet cement	 <input checked="" type="checkbox"/>	To EN 13982-1-2004
Gloves		Overalls	
 <input checked="" type="checkbox"/>	Safety Wellington Boots	 <input type="checkbox"/>	
Footwear		Other	

First Aid Measures

Eye contact: Flush eyes with water for 15 minutes and seek medical attention.

Ingestion: Remove to fresh air. If person is conscious, rinse out mouth and give water to drink. Seek medical advice

Inhalation: Remove from the dusty area to fresh air and seek medical attention.

Skin contact: Wash skin with plenty of soap and water, remove contaminated clothing. Seek medical advice in the case of persistent or severe irritation.

Storage

Ready mixed concrete is normally used upon receipt. Hardening process can be delayed with additions and /or mixtures. Unauthorised use of additives should be prevented.

Transport

Not classified as dangerous for transport.

Fire fighting

Concrete is non-flammable and is not combustible.

Spillage:

Prevent from entering drains. Clean up spillages before they dry.

Disposal of Substances & Contaminated Containers


Dispose of to an authorised tip.

Is exposure adequately controlled?

Yes
No

Risk Rating Following Control Measures

High
Medium
Low



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Description of product: <i>(Include name)</i>	Diesel
Describe the activity or work process. <i>(Include how long, how often this is carried out, the quantity of substance used, where it is to be used, what it is used for and who by)</i>	Diesel bowser is required on site to refuel plant and equipment

Identify the persons at risk:	Employees <input checked="" type="checkbox"/> <i>(including trainees)</i>	Contractors <input checked="" type="checkbox"/>	Public <input type="checkbox"/>
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Manufacturer name, address and telephone number. <i>(A copy of a current safety data sheet for this substance should be attached to this assessment)</i>	Name: Esso Petroleum Company Ltd Address: Ermyrn Wy, ExxonMobil House, Leatherhead, Surrey, KT22 8UX Tel: 01372 222 000 Email / Website: sds.uk@exxonmobil.com
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Classification (state the category of danger)

 <input type="checkbox"/> Unstable Explosive	 <input type="checkbox"/> Corrosive	 <input checked="" type="checkbox"/> Hazardous to the Aquatic Environment
 <input type="checkbox"/> Flammable	 <input checked="" type="checkbox"/> Harmful (Toxic / Irritant)	 <input type="checkbox"/> Acute Toxicity
 <input type="checkbox"/> Oxidising	 <input type="checkbox"/> Health Hazard	 <input type="checkbox"/> Gas under pressure

Hazard Type

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Gas	Vapour	Mist	Fume	Dust	Liquid	Solid	Other (State)

Route of Exposure

<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Inhalation	Skin	Eyes	Ingestion	Other (State)

Workplace Exposure Limits (WELs) please indicate n/a where not applicable


Long-term exposure level (8hrTWA): Fuels, diesel , No 2 Stable Aerosol: 5mg/m3 Fuels, diesel , No 2 Vapour 200mg/m3	Short-term exposure level (15 mins):
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State the Risks to Health from Identified Hazards

May cause central nervous system depression. High-pressure injection under skin may cause serious damage. Under conditions of poor personal hygiene and prolonged repeated contact, some polycyclic aromatic compounds (PACs) have been suspected as a cause of skin cancer in humans. May be irritating to the eyes, nose, throat, and lungs.

Control Measures: (e.g. ventilation, training, supervision)









Avoid all personal contact. Do not siphon by mouth. Do not use as a cleaning solvent or other non-motor fuel uses. For use as a motor fuel only. It is dangerous and/or unlawful to put petrol into unapproved containers. Do not fill container while it is in or on a vehicle. Static electricity may ignite vapour and cause fire. Place container on ground when filling and keep nozzle in contact with container. Do not use electronic devices (including but not limited to cellular phones, computers, calculators, pagers or other electronic devices etc.) in or around any fuelling operation or storage area unless the devices are certified intrinsically safe by an approved national testing agency and to the safety standards required by national and/or local laws and regulations. Prevent small spills and leakage to avoid slip hazard. Material can accumulate static charges which may cause an electrical spark (ignition source). Use proper bonding and/or ground procedures. However, bonding and grounds may not eliminate the hazard from static accumulation. Consult local applicable standards

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for guidance. Additional references include American Petroleum Institute 2003 (Protection Against Ignitions Arising out of Static, Lightning and Stray Currents) or National Fire Protection Agency 77 (Recommended Practice on Static Electricity) or CENELEC CLC/TR 50404 (Electrostatics - Code of practice for the avoidance of hazards due to static electricity).

Is health surveillance or monitoring required? Yes No

Personal Protective Equipment (state type and standard)

 <input type="checkbox"/> Dust mask		 <input type="checkbox"/> Visor	
 <input type="checkbox"/> Respirator		 <input checked="" type="checkbox"/> Goggles	Safety glasses are to be worn to EN166 Field of Use 3 Protection against liquids (droplets or splashes)
 <input checked="" type="checkbox"/> Gloves	Impervious gloves to be used when handling and refueling (chemically resistant)	 <input type="checkbox"/> Overalls	
 <input type="checkbox"/> Footwear		 <input type="checkbox"/> Other	

First Aid Measures

Eye contact: Flush thoroughly with water. If irritation occurs, get medical assistance

Ingestion: Seek immediate medical attention. Do not induce vomiting.

Inhalation: Remove from further exposure. For those providing assistance, avoid exposure to yourself or others. Use adequate respiratory protection. If respiratory irritation, dizziness, nausea, or unconsciousness occurs, seek immediate medical assistance. If breathing has stopped, assist ventilation with a mechanical device or use mouth-to-mouth resuscitation.

Skin contact: Remove contaminated clothing. Dry wipe exposed skin and cleanse with waterless hand cleaner and follow by washing thoroughly with soap and water. For those providing assistance, avoid further skin contact to yourself or others. Wear impervious gloves. Launder contaminated clothing separately before reuse. Discard contaminated articles that cannot be laundered. If product is injected into or under the skin, or into any part of the body, regardless of the appearance of the wound or its size, the individual should be evaluated immediately by a physician as a surgical emergency. Even though initial symptoms from high pressure injection may be minimal or absent, early surgical treatment within the first few hours may significantly reduce the ultimate extent of injury.

Storage

The container choice, for example storage vessel, may effect static accumulation and dissipation. Keep container closed. Handle containers with care. Open slowly in order to control possible pressure release. Store in a cool, well-ventilated area. Storage containers should be earthed and bonded. Fixed storage containers, transfer containers and associated equipment should be earthed and bonded to prevent accumulation of static charge. Keep away from incompatible materials.

Transport

Only transport in approved receptacles

Fire fighting

EXTINGUISHING MEDIA
 Suitable Extinguishing Media: Use water fog, foam, dry chemical or carbon dioxide (CO2) to extinguish flames. Unsuitable Extinguishing Media: Straight streams of water.

SPECIAL HAZARDS ARISING FROM THE SUBSTANCE OR MIXTURE: Hazardous Combustion Products: Smoke, Fume, Aldehydes, Sulphur oxides, Incomplete combustion products, Oxides of carbon

ADVICE FOR FIRE FIGHTERS: Fire Fighting Instructions: Evacuate area. Prevent run-off from fire control or dilution from entering streams, sewers or drinking water supply. Fire-fighters should use standard protective equipment and in enclosed spaces, self-contained breathing apparatus (SCBA). Use water spray to cool fire exposed surfaces and to protect personnel.

Spillage:

NOTIFICATION PROCEDURES: In the event of a spill or accidental release, notify relevant authorities in accordance with all



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applicable regulations.

PROTECTIVE MEASURES: Avoid contact with spilled material. Warn or evacuate occupants in surrounding and downwind areas if required, due to toxicity or flammability of the material. See Section 5 for fire fighting information. See the Hazard Identification Section for Significant Hazards. See Section 4 for First Aid Advice. See Section 8 for advice on the minimum requirements for personal protective equipment. Additional protective measures may be necessary, depending on the specific circumstances and/or the expert judgment of the emergency responders. For emergency responders: Respiratory protection: half-face or full-face respirator with filter(s) for organic vapor and, when applicable, H2S, or Self Contained Breathing Apparatus (SCBA) can be used depending on the size of spill and potential level of exposure. If the exposure cannot be completely characterized or an oxygen deficient atmosphere is possible or anticipated, SCBA is recommended. Work gloves that are resistant to aromatic hydrocarbons are recommended. Note: gloves made of polyvinyl acetate (PVA) are not water-resistant and are not suitable for emergency use. Chemical goggles are recommended if splashes or contact with eyes is possible. Small spills: normal antistatic work clothes are usually adequate. Large spills: full body suit of chemical resistant, antistatic material is recommended.

ENVIRONMENTAL PRECAUTIONS: Large Spills, Dyke far ahead of liquid spill for later recovery and disposal. Prevent entry into waterways, sewers, basements or confined areas.

METHODS AND MATERIAL FOR CONTAINMENT AND CLEANING UP: Land Spill, Eliminate all ignition sources (no smoking, flares, sparks or flames in immediate area). Stop leak if you can do so without risk. All equipment used when handling the product must be grounded. Do not touch or walk through spilled material. Prevent entry into waterways, sewer, basements or confined areas. Vapour-suppressing foam may be used to reduce vapour. Use clean non-sparking tools to collect absorbed material. Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers. Large Spills: Water spray may reduce vapour, but may not prevent ignition in enclosed spaces.

Water Spill: Stop leak if you can do so without risk. Eliminate sources of ignition. Warn other shipping. If the Flash Point exceeds the Ambient Temperature by 10 deg C or more, use containment booms and remove from the surface by skimming or with suitable absorbents when conditions permit. If the Flash Point does not exceed the Ambient Air Temperature by at least 10C, use booms as a barrier to protect shorelines and allow material to evaporate. Seek the advice of a specialist before using dispersants. Water spill and land spill recommendations are based on the most likely spill scenario for this material; however, geographic conditions, wind, temperature, (and in the case of a water spill) wave and current direction and speed may greatly influence the appropriate action to be taken. For this reason, local experts should be consulted. Note: Local regulations may prescribe or limit action to be taken.

Disposal of Substances & Contaminated Containers

Disposal recommendations based on material as supplied. Disposal must be in accordance with current applicable laws and regulations, and material characteristics at time of disposal.


WASTE TREATMENT METHODS, Product is suitable for burning in an enclosed controlled burner for fuel value or disposal by supervised incineration at very high temperatures to prevent formation of undesirable combustion products.

REGULATORY DISPOSAL INFORMATION: European Waste Code: 13 07 01*

NOTE: These codes are assigned based upon the most common uses for this material and may not reflect contaminants resulting from actual use. Waste producers need to assess the actual process used when generating the waste and its contaminants in order to assign the proper waste disposal code(s). This material is considered as hazardous waste pursuant to Directive 91/689/EEC on hazardous waste, and subject to the provisions of that Directive unless Article 1(5) of that Directive applies.

Empty Container Warning Empty Container Warning (where applicable): Empty containers may contain residue and can be dangerous. Do not attempt to refill or clean containers without proper instructions. Empty drums should be completely drained and safely stored until appropriately reconditioned or disposed. Empty containers should be taken for recycling, recovery, or disposal through suitably qualified or licensed contractor and in accordance with governmental regulations. Do not pressurise, cut, weld, braze, solder, drill, grind or expose such containers to heat, flame, sparks, static electricity or other sources of ignition. They may explode and cause injury or death.

Is exposure adequately controlled?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Risk Rating Following Control Measures		
High <input type="checkbox"/>	Medium <input type="checkbox"/>	Low <input checked="" type="checkbox"/>










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Description of product: <i>(Include name)</i>	Multi-Purpose grease
Describe the activity or work process. <i>(Include how long, how often this is carried out, the quantity of substance used, where it is to be used, what it is used for and who by)</i>	Multi-purpose grease for use on moving and bearing surfaces on items of plant and equipment. Used during planned and reactive maintenance operations

Identify the persons at risk:	Employees <input checked="" type="checkbox"/> <i>(including trainees)</i>	Contractors <input type="checkbox"/>	Public <input type="checkbox"/>
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Manufacturer name, address and telephone number. <i>(A copy of a current safety data sheet for this substance should be attached to this assessment)</i>	Name: ELECTROLUBE. A division of HK WENTWORTH LTD Address: ASHBY PARK, COALFIELD WAY, ASHBY DE LA ZOUCH, LEICESTERSHIRE LE65 1JF UNITED KINGDOM Tel: +44 (0)1530 419600 Email / Website: info@hkw.co.uk
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Classification (state the category of danger)

 <input type="checkbox"/> Unstable Explosive	 <input type="checkbox"/> Corrosive	 <input type="checkbox"/> Hazardous to the Aquatic Environment
 <input type="checkbox"/> Flammable	 <input checked="" type="checkbox"/> Harmful (Toxic / Irritant)	 <input type="checkbox"/> Acute Toxicity
 <input type="checkbox"/> Oxidising	 <input type="checkbox"/> Health Hazard	 <input type="checkbox"/> Gas under pressure

Hazard Type

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Gas	Vapour	Mist	Fume	Dust	Liquid	Solid	Other (State) Semi solid grease

Route of Exposure

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Inhalation	Skin	Eyes	Ingestion	Other (State)

Workplace Exposure Limits (WELs) please indicate n/a where not applicable

Long-term exposure level (8hrTWA): N/A	Short-term exposure level (15 mins): N/A
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State the Risks to Health from Identified Hazards

Not regarded as a health or environmental hazard under current legislation.
 Prolonged or repeated exposure on skin may cause severe irritation / dermatitis

Control Measures: (e.g. ventilation, training, supervision)

ENGINEERING MEASURES
 All handling to take place in well-ventilated area.



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HAND PROTECTION

Use suitable protective gloves if risk of skin contact. The most suitable glove must be chosen in consultation with the gloves supplier, who can inform about the breakthrough time of the glove material.

EYE PROTECTION

If risk of splashing, wear safety goggles or face shield.

OTHER PROTECTION

Wear appropriate clothing to prevent any possibility of skin contact.

HYGIENE MEASURES

DO NOT SMOKE IN WORK AREA! Wash at the end of each work shift and before eating, smoking and using the toilet. Wash promptly if skin becomes wet or contaminated. Use appropriate skin cream to prevent drying of skin. When using do not eat, drink or smoke.

Is health surveillance or monitoring required?

Yes

No

Personal Protective Equipment (state type and standard)

<input type="checkbox"/>		<input type="checkbox"/>	
Dust mask		Visor	
<input type="checkbox"/>		<input checked="" type="checkbox"/>	Standard mandatory light eye protection
Respirator		Goggles	
<input checked="" type="checkbox"/>	Latex glove or similar	<input type="checkbox"/>	
Gloves		Overalls	
<input type="checkbox"/>		<input type="checkbox"/>	
Footwear		Other	

First Aid Measures

Eye contact: Make sure to remove any contact lenses from the eyes before rinsing. Promptly wash eyes with plenty of water while lifting the eye lids. Continue to rinse for at least 15 minutes. Get medical attention if any discomfort continues.

Ingestion: Rinse mouth thoroughly. Drink plenty of water. Get medical attention.

Inhalation: n/a

Skin contact: Wash the skin immediately with soap and water. Get medical attention if irritation persists after washing.

Storage

Store in tightly closed original container in a dry, cool and well-ventilated place. Keep in original container.

Transport

The product is not covered by international regulation on the transport of dangerous goods

Fire fighting

EXTINGUISHING MEDIA: Extinguish with foam, carbon dioxide, dry powder or water fog.

SPECIAL FIRE FIGHTING PROCEDURES: Use water to keep fire exposed containers cool and disperse vapours. Water spray may be used to flush spills away from exposures and dilute spills to non-flammable mixtures.

UNUSUAL FIRE & EXPLOSION HAZARDS: No unusual fire or explosion hazards noted.

PROTECTIVE MEASURES IN FIRE: Self contained breathing apparatus and full protective clothing must be worn in case of fire.

Spillage:

Absorb in vermiculite, dry sand or earth and place into containers. Flush with plenty of water to clean spillage area.



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Disposal of Substances & Contaminated Containers

Dispose of waste and residues in accordance with local authority requirements.

Is exposure adequately controlled?

Yes


No

Risk Rating Following Control Measures

High

Medium

Low

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Description of product: <i>(Include name)</i>	Multi-Purpose Grease
Describe the activity or work process. <i>(Include how long, how often this is carried out, the quantity of substance used, where it is to be used, what it is used for and who by)</i>	Used to lubricate joints on plant and equipment

Identify the persons at risk:	Employees <input checked="" type="checkbox"/> <i>(including trainees)</i>	Contractors <input type="checkbox"/>	Public <input type="checkbox"/>
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Manufacturer name, address and telephone number. <i>(A copy of a current safety data sheet for this substance should be attached to this assessment)</i>	Name: Granvillie Oil & Chemicals Ltd Address: 29 Goldthorpe Industrial Estate, Rotherham, S63 9BL Tel: 01709 890099 Fax:
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Classification (state the category of danger)

 <input type="checkbox"/> Unstable Explosive	 <input type="checkbox"/> Corrosive	 <input type="checkbox"/> Hazardous to the Aquatic Environment
 <input type="checkbox"/> Flammable	 <input checked="" type="checkbox"/> Harmful (Toxic / Irritant)	 <input type="checkbox"/> Acute Toxicity
 <input type="checkbox"/> Oxidising	 <input type="checkbox"/> Health Hazard	 <input type="checkbox"/> Gas under pressure

Hazard Type

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Gas	Vapour	Mist	Fume	Dust	Liquid	Solid	Other (State)

Route of Exposure

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Inhalation	Skin	Eyes	Ingestion	Other (State)

Workplace Exposure Limits (WELs) please indicate n/a where not applicable

Long-term exposure level (8hrTWA):	Short-term exposure level (15 mins):
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State the Risks to Health from Identified Hazards

Irritant on prolonged exposure to the skin.

Control Measures: (e.g. ventilation, training, supervision)

All operatives are to be briefed on this assessment and ensure correct PPE is worn.
 Ensure good hygiene practices are maintained by effective supervision and information and training



Title **Hazardous Substance (COSHH) Risk Assessment**

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Is health surveillance or monitoring required?

Yes
 No

Personal Protective Equipment (state type and standard)			
 <input type="checkbox"/>		 <input type="checkbox"/>	
Dust mask		Visor	
 <input type="checkbox"/>		 <input checked="" type="checkbox"/>	Light eye protection
Respirator		Goggles	
 <input checked="" type="checkbox"/>	Suitable gloves are to be worn	 <input type="checkbox"/>	
Gloves		Overalls	
 <input type="checkbox"/>		 <input type="checkbox"/>	
Footwear		Other	

First Aid Measures

Eye contact: Flush eyes with water for 15 minutes and, if irritation occurs, seek medical attention.

Ingestion: Wash mouth out thoroughly with water and give plenty to drink. Keep warm and seek medical attention. Do not induce vomiting.

Inhalation: N/A

Skin contact: Wash skin with plenty of water, remove contaminated clothing.

Storage

Store in proper containers

Transport

N/A

Fire fighting

Use dry powder or Carbon Dioxide extinguishers. Toxic fumes may be given off.

Spillage:

N/A

Disposal of Substances & Contaminated Containers

Dispose of at licensed tips

Is exposure adequately controlled?

Yes
No

Risk Rating Following Control Measures

High
Medium
Low



Title **Hazardous Substance (COSHH) Assessment**









Document Type Assessment	Revision -/2013/10/10	Document ID CA_67	Form Number 1-3.1K_F1	Page 1 of 3
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Description of product: <i>(Include name)</i>	Q8 Rembrandt EP 2 Grease
Describe the activity or work process. <i>(Include how long, how often this is carried out, the quantity of substance used, where it is to be used, what it is used for and who by)</i>	Used by fitters and machine operators for lubricating moving parts

Identify the persons at risk:	Employees <input checked="" type="checkbox"/> <i>(including trainees)</i>	Contractors <input type="checkbox"/>	Public <input type="checkbox"/>
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Manufacturer name, address and telephone number. <i>(A copy of a current safety data sheet for this substance should be attached to this assessment)</i>	Name: Kuwait Petroleum International Lubricants (UK) Ltd Address: Knowsthorpe Gate, Cross Green Ind Est, Leeds, LS9 ONP Tel: 0113 2350555
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Classification (state the category of danger)

 <input type="checkbox"/> Unstable Explosive	 <input type="checkbox"/> Corrosive	 <input type="checkbox"/> Hazardous to the Aquatic Environment
 <input type="checkbox"/> Flammable	 <input type="checkbox"/> Harmful (Toxic / Irritant)	 <input type="checkbox"/> Acute Toxicity
 <input type="checkbox"/> Oxidising	 <input type="checkbox"/> Health Hazard	 <input type="checkbox"/> Gas under pressure

Hazard Type

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Gas	Vapour	Mist	Fume	Dust	Liquid	Solid	Other (State)

Route of Exposure

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Inhalation	Skin	Eyes	Ingestion	Other (State)

Workplace Exposure Limits (WELs) please indicate n/a where not applicable

Long-term exposure level (8hrTWA): 5mg/m3	Short-term exposure level (15 mins):
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State the Risks to Health from Identified Hazards

Possible defatting to skin
May cause skin dryness and irritation
Prolonged or repeated contact can defat the skin and can lead to irritation, cracking and/or dermatitis

Control Measures: (e.g. ventilation, training, supervision)

Wash hands before and after use
Good ventilation is required









Is health surveillance or monitoring required?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	Yes	No



Title **Hazardous Substance (COSHH) Assessment**

Document Type Assessment	Revision -/2013/10/10	Document ID CA_67	Form Number 1-3.1K_F1	Page 2 of 3
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Personal Protective Equipment (state type and standard)

 <input type="checkbox"/> Dust mask		 <input type="checkbox"/> Visor	
 <input type="checkbox"/> Respirator		 <input checked="" type="checkbox"/> Goggles	
 <input checked="" type="checkbox"/> Gloves	Chemical resistant to EN374	 <input type="checkbox"/> Overalls	
 <input type="checkbox"/> Footwear		 <input type="checkbox"/> Other	

First Aid Measures

Eye contact: Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention if irritation occurs.

Ingestion: Wash out mouth with water. Move exposed person to fresh air. Keep person warm and at rest. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.

Inhalation: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.

Skin contact: Wash skin thoroughly with soap and water or use recognised skin cleanser. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.

Storage

Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials and food and drink. Keep container tightly closed and sealed until ready for use.

Transport

n/a

Fire fighting

Use dry chemical, CO2, Alcohol-resistant foam or water spray (fog)
Do not use water jet.

Spillage

Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container.
Move containers from spill area. Prevent entry into sewers, water courses, basements and confined areas.
Contain and collect spillage with non-combustible, absorbent material e.g sand, earth, vermiculite or diatomaceous earth and place in container for disposal.

Disposal of Substances & Contaminated Containers

Hazardous waste



Title **Hazardous Substance (COSHH) Assessment**

Document Type Assessment	Revision -/2013/10/10	Document ID CA_67	Form Number 1-3.1K_F1	Page 3 of 3
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Is exposure adequately controlled?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Risk Rating Following Control Measures		
High <input type="checkbox"/>	Medium <input type="checkbox"/>	Low <input checked="" type="checkbox"/>



Title **Hazardous Substance (COSHH) Assessment**

Document Type Assessment	Revision -/2013/10/10	Document ID CA_69	Form Number 1-3.1K_F1	Page 1 of 3
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Description of product: <i>(Include name)</i>	Q8 T 55 75W-80 Lubricating oil for automotive transmissions
Describe the activity or work process. <i>(Include how long, how often this is carried out, the quantity of substance used, where it is to be used, what it is used for and who by)</i>	

Identify the persons at risk:

Employees <i>(including trainees)</i>	<input checked="" type="checkbox"/>	Contractors	<input type="checkbox"/>	Public	<input type="checkbox"/>
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Manufacturer name, address and telephone number. <i>(A copy of a current safety data sheet for this substance should be attached to this assessment)</i>	Name: Kuwait Petroleum International Lubricants (UK) Ltd Address: Knowsthorpe Gate, Cross Green Ind Est, Leeds, LS9 ONP Tel: 0113 2350555
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Classification (state the category of danger)

	<input type="checkbox"/> Unstable Explosive		<input type="checkbox"/> Corrosive		<input checked="" type="checkbox"/> Hazardous to the Aquatic Environment
	<input type="checkbox"/> Flammable		<input checked="" type="checkbox"/> Harmful (Toxic / Irritant)		<input type="checkbox"/> Acute Toxicity
	<input type="checkbox"/> Oxidising		<input type="checkbox"/> Health Hazard		<input type="checkbox"/> Gas under pressure

Hazard Type

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Gas	Vapour	Mist	Fume	Dust	Liquid	Solid	Other (State)

Route of Exposure

<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Inhalation	Skin	Eyes	Ingestion	Other (State)

Workplace Exposure Limits (WELs) please indicate n/a where not applicable

Long-term exposure level (8hrTWA): 5mg/m3	Short-term exposure level (15 mins):
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State the Risks to Health from Identified Hazards

May cause sensitisation by skin contact.
Avoid contact with skin. May cause skin dryness and irritation.
Defatting to skin
Do not get into eyes, skin or on clothing
Avoid breathing in vapour or mist

Control Measures: (e.g. ventilation, training, supervision)









Wash hands before and after use
Good ventilation is required

Is health surveillance or monitoring required?

Yes No

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Personal Protective Equipment (state type and standard)

 <input type="checkbox"/>	Dust mask	 <input type="checkbox"/>	Visor
 <input type="checkbox"/>	Respirator	 <input checked="" type="checkbox"/>	Goggles
 <input checked="" type="checkbox"/>	Gloves	 <input type="checkbox"/>	Overalls
 <input type="checkbox"/>	Footwear	 <input type="checkbox"/>	Other
Chemical resistant to EN734			

First Aid Measures

Eye contact: Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention if irritation occurs.

Ingestion: Wash out mouth with water. Move exposed person to fresh air. Keep person warm and at rest. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe.

Inhalation: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if adverse health effects persist or are severe.

Skin contact: Wash skin thoroughly with soap and water or use recognised skin cleanser. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Get medical attention.

Storage

Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage.

Transport

Hazardous waste

Fire fighting

Use dry chemical, CO2, Alcohol-resistant foam or water spray (fog)
Do not use water jet.

Spillage

Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container.

Prevent entry into sewers, water courses, basements and confined areas. Contain and collect spillage with non-combustible, absorbent material e.g sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations.

Inform relevant authorities if environmental pollution occurs.

Disposal of Substances & Contaminated Containers

Hazardous waste



Title **Hazardous Substance (COSHH) Assessment**

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Is exposure adequately controlled?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Risk Rating Following Control Measures		
High <input type="checkbox"/>	Medium <input type="checkbox"/>	Low <input checked="" type="checkbox"/>

Description of product: <i>(Include name)</i>	Environ MV 32, 46 Hydraulic Fluid
Describe the activity or work process. <i>(Include how long, how often this is carried out, the quantity of substance used, where it is to be used, what it is used for and who by)</i>	Environ MV is designed as heavy duty hydraulic power transmission fluids for use in equipment, which must operate over a wide range of temperatures. Typically Environ MV oils are used in hydraulic systems, machine tools, hydraulic presses, rotary compressors and centrifugal pumps. The ashless or zinc-free additive system used in Environ MV oils makes them especially suitable for the use in environmentally sensitive areas.

Identify the persons at risk:	Employees <input checked="" type="checkbox"/> <i>(including trainees)</i>	Contractors <input type="checkbox"/>	Public <input type="checkbox"/>
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Manufacturer name, address and telephone number. <i>(A copy of a current safety data sheet for this substance should be attached to this assessment)</i>	Name: Petro-Canada Lubricants Inc Address: 2310 Lakeshore Road West, Mississauga, Ontario Canada, L5J 1K2 Tel: 01217 817264 Fax: 01217 817401 Email / Website: EUSDA@suncor.com
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Classification *(state the category of danger)*

	<input type="checkbox"/> Unstable Explosive		<input type="checkbox"/> Corrosive		<input type="checkbox"/> Hazardous to the Aquatic Environment
	<input type="checkbox"/> Flammable		<input checked="" type="checkbox"/> Harmful (Toxic / Irritant)		<input type="checkbox"/> Acute Toxicity
	<input type="checkbox"/> Oxidising		<input type="checkbox"/> Health Hazard		<input type="checkbox"/> Gas under pressure

Hazard Type

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Gas	Vapour	Mist	Fume	Dust	Liquid	Solid	Other (State)

Route of Exposure

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Inhalation	Skin	Eyes	Ingestion	Other (State)

Workplace Exposure Limits (WELs) *please indicate n/a where not applicable*

Long-term exposure level (8hrTWA): 5mg/m3	Short-term exposure level (15 mins):
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State the Risks to Health from Identified Hazards

Hygiene Measures: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove Potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Control Measures: *(e.g. ventilation, training, supervision)*

No special ventilation requirements. Good general ventilation should be sufficient to control worker exposure to airborne contaminants. If this product contains ingredients with exposure limits, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure below any recommended or statutory limits. Wash hands before and after use

Is health surveillance or monitoring required?

Yes No



Title **Hazardous Substance (COSHH) Assessment**

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Personal Protective Equipment (state type and standard)

<input type="checkbox"/>		<input type="checkbox"/>	
<input checked="" type="checkbox"/>	Use a properly fitted air-purifying or air-fed respirator complying with an approved standard	<input checked="" type="checkbox"/>	Safety eyewear complying with an approved standard should be worn if the risk assessment indicates this is necessary to avoid exposure to liquid splashes, mist or dust.
<input checked="" type="checkbox"/>	Chemical resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products.	<input type="checkbox"/>	
<input type="checkbox"/>		<input type="checkbox"/>	

First Aid Measures

Eye contact: Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.

Ingestion: Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.

Inhalation: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.

Skin contact: Wash skin thoroughly with soap and water or use recognised skin cleanser. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.

Storage

Store in original container protected from direct sunlight in a dry, cool well ventilated area, away from incompatible materials and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination.

Transport

n/a

Fire fighting

Use an extinguishing agent suitable for the surrounding fire.

Spillage:

Small Spills: Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water soluble. Alternatively, or if water insoluble absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Large Spills: Stop leak if without risk. Move containers from spill area Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations. Dispose of via a licensed waste disposal contractor.











Disposal of Substances & Contaminated Containers

Waste packaging should be recycled. Not classified as hazardous

Is exposure adequately controlled?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
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Risk Rating Following Control Measures

High <input type="checkbox"/>	Medium <input type="checkbox"/>	Low <input checked="" type="checkbox"/>
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		Title Hazardous Substance (COSHH) Assessment		
Document Type Assessment	Revision A-/2014/11/14	Document ID CA_100	Form Number 1-3.1K_F1	Page 1 of 2
Description of product: <i>(Include name)</i>		Esso Unleaded Petrol		
Describe the activity or work process. <i>(Include how long, how often this is carried out, the quantity of substance used, where it is to be used, what it is used for and who by)</i>		Petrol used to re-fill small generators on site and Stihl cut off saws. Petrol contained in 5 ltr plastic or metal container or 25ltr metal Gerry can. Refuelling normally carried out by operatives and supervisors on site. Refuelling dependant on usage of equipment but likely to be at least on refuel per shift. Fuel tank capacity on Stihl Saw TS410 / 420 is 0.7 litres of fuel.		
Identify the persons at risk:		Employees <input checked="" type="checkbox"/> <i>(including trainees)</i>	Contractors <input type="checkbox"/>	Public <input type="checkbox"/>
Manufacturer name, address and telephone number. <i>(A copy of a current safety data sheet for this substance should be attached to this assessment)</i>		Name: Esso Petroleum Company Limited Address: ExxonMobil House, Ermyn Way, Leatherhead, Surrey, KT22 8UX Tel: 01372 222000 Email sds-uk@exxonmobil.com Website: www.exxonmobil.co.uk		
Classification <i>(state the category of danger)</i>				
 <input type="checkbox"/> Unstable Explosive	 <input type="checkbox"/> Corrosive	 <input checked="" type="checkbox"/> Hazardous to the Aquatic Environment		
 <input checked="" type="checkbox"/> Flammable	 <input checked="" type="checkbox"/> Harmful (Toxic / Irritant)	 <input type="checkbox"/> Acute Toxicity		
 <input type="checkbox"/> Oxidising	 <input checked="" type="checkbox"/> Health Hazard	 <input type="checkbox"/> Gas under pressure		
Hazard Type				
<input type="checkbox"/> Gas	<input checked="" type="checkbox"/> Vapour	<input type="checkbox"/> Mist	<input type="checkbox"/> Fume	<input type="checkbox"/> Dust
<input checked="" type="checkbox"/> Liquid	<input type="checkbox"/> Solid	<input type="checkbox"/> Other (State)		
Route of Exposure				
<input checked="" type="checkbox"/> Inhalation	<input checked="" type="checkbox"/> Skin	<input checked="" type="checkbox"/> Eyes	<input checked="" type="checkbox"/> Ingestion	<input type="checkbox"/> Other (State)
Workplace Exposure Limits (WELs) <i>please indicate n/a where not applicable</i>				
Long-term exposure level (8hrTWA): Benzene – 3.25mg/m3 Low boiling point naphitha – 300mg/m3 Toluene – 191mg/m3		Short-term exposure level (15 mins): 2.5mg/m3 500mg/m3 574mg/m3		
State the Risks to Health from Identified Hazards				
May cause cancer. May cause heritable genetic damage. Possible risk of harm to the unborn child. Harmful: may cause lung damage if swallowed. Irritating to skin. Vapours may cause drowsiness and dizziness. May be irritating to the eyes, nose, throat, and lungs. May cause central nervous system depression. High-pressure injection under skin may cause serious damage. Prolonged and repeated exposure to benzene may cause serious injury to blood forming organs and is associated with anaemia and to the later development of acute myelogenous leukaemia (AML). If ingested, material may be aspirated into the lungs and cause chemical pneumonitis. Treat appropriately.				
Control Measures: <i>(e.g. ventilation, training, supervision)</i>				
Ensure generators are properly earthed on site. Ensure small generators and cut off saws etc. have cooled down sufficiently before attempting to refuel. (DO NOT REFUEL HOT) Petroleum can accumulate static charges which may cause an electrical spark (ignition source). DO NOT use mobile phone or any other communication device when refueling DO NOT smoke when refueling				
Is health surveillance or monitoring required?				
Yes <input type="checkbox"/>		No <input checked="" type="checkbox"/>		



Title **Hazardous Substance (COSHH) Assessment**

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Personal Protective Equipment (state type and standard)

<input type="checkbox"/>		<input type="checkbox"/>	
<input type="checkbox"/>		<input checked="" type="checkbox"/>	Safety glasses are to be worn to EN166 Field of Use 3 Protection against liquids (droplets or splashes) when refuelling.
<input checked="" type="checkbox"/>	EN 374 Nitrile Gloves	<input checked="" type="checkbox"/>	If prolonged or repeated contact is likely, chemical, and oil resistant clothing is recommended.
<input type="checkbox"/>		<input type="checkbox"/>	

First Aid Measures

Eye contact: Flush thoroughly with water. If irritation occurs, get medical assistance.
Ingestion: Seek immediate medical attention. Do not induce vomiting.
Inhalation: Remove from further exposure. For those providing assistance, avoid exposure to yourself or others. Use adequate respiratory protection. If respiratory irritation, dizziness, nausea, or unconsciousness occurs, seek immediate medical assistance. If breathing has stopped, assist ventilation with a mechanical device or use mouth-to-mouth resuscitation.
Skin contact: Wash contact areas with soap and water. Remove contaminated clothing. Launder contaminated clothing before reuse. If product is injected into or under the skin, or into any part of the body, regardless of the appearance of the wound or its size, the individual should be evaluated immediately by a physician as a surgical emergency. Even though initial symptoms from high pressure injection may be minimal or absent, early surgical treatment within the first few hours may significantly reduce the ultimate extent of injury.

Storage

Ample fire water supply should be available. A fixed sprinkler/deluge system is recommended. Keep container closed. Handle containers with care. Open slowly in order to control possible pressure release. Store in a cool, well-ventilated area. Outside or detached storage preferred. Storage containers should be earthed and bonded. Drums must be earthed and bonded and equipped with self-closing valves, pressure vacuum bungs and flame arresters.

Transport

Hazard class 3

Fire fighting

Use water fog, foam, dry chemical or carbon dioxide (CO2) to extinguish flames.
 Inappropriate Extinguishing Media: Straight streams of water. Unusual Fire Hazards: **EXTREMELY FLAMMABLE**. Vapour is flammable and heavier than air. Vapour may travel across the ground and reach remote ignition sources, causing a flashback fire danger.

Spillage

Avoid contact with spilled material. Land Spill: Eliminate all ignition sources (no smoking, flares, sparks or flames in immediate area). Stop leak if you can do so without risk. All equipment used when handling the product must be grounded. Do not touch or walk through spilled material. Prevent entry into waterways, sewer, basements or confined areas. Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers. Water Spill: Eliminate all ignition sources (no smoking, flares, sparks or flames in immediate area). Stop leak if you can do so without risk. Do not confine in area of spill. Allow liquid to evaporate from the surface. Prevent entry into waterways, sewers, basements or confined areas.

Disposal of Substances & Contaminated Containers

Treat as hazardous waste.

Is exposure adequately controlled?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
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Risk Rating Following Control Measures

High <input type="checkbox"/>	Medium <input type="checkbox"/>	Low <input checked="" type="checkbox"/>
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Title **Hazardous Substance (COSHH) Risk Assessment**

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Disposal of Substances & Contaminated Containers

Product is suitable for burning in an enclosed controlled burner for fuel value or disposal by supervised incineration at very high temperatures to prevent formation of undesirable combustion products.
Empty Container Warning (where applicable): Empty containers may contain residue and can be dangerous. Do not attempt to refill or clean containers without proper instructions. Empty drums should be completely drained and safely stored until appropriately reconditioned or disposed. Empty containers should be taken for recycling, recovery, or disposal through suitably qualified or licensed contractor and in accordance with governmental regulations. **DO NOT PRESSURISE, CUT, WELD, BRAZE, SOLDER, DRILL, GRIND, OR EXPOSE SUCH CONTAINERS TO HEAT, FLAME, SPARKS, STATIC ELECTRICITY, OR OTHER SOURCES OF IGNITION. THEY MAY EXPLODE AND CAUSE INJURY OR DEATH.**

Is exposure adequately controlled?

Yes


No

Risk Rating Following Control Measures

High

Medium

Low

		Title Hazardous Substance (COSHH) Risk Assessment		
Document Type Assessment	Revision -/2013/10/10	Document ID CA_103	Form Number 1-3.1K_F1	Page 1 of 3

Description of product: <i>(Include name)</i>	Aerosol Solutions Yellow Linemarker 750ml
Describe the activity or work process. <i>(Include how long, how often this is carried out, the quantity of substance used, where it is to be used, what it is used for and who by)</i>	Marker paint is used to mark pile positions on site prior to carrying out piling operations. It is used by setting out engineers and site foreman in open air environment.

Identify the persons at risk:	Employees <input checked="" type="checkbox"/> <i>(including trainees)</i>	Contractors <input checked="" type="checkbox"/>	Public <input type="checkbox"/>
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Manufacturer name, address and telephone number. <i>(A copy of a current safety data sheet for this substance should be attached to this assessment)</i>	Aerosol Solutions Limited Unit C, Bridgefield Industrial Estate Draycott Road, Breaston Derby. DE72 3DS 01332 870030 01332 870033
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Classification (state the category of danger)

 <input type="checkbox"/> Unstable Explosive	 <input type="checkbox"/> Corrosive	 <input type="checkbox"/> Hazardous to the Aquatic Environment
 <input type="checkbox"/> Flammable	 <input checked="" type="checkbox"/> Harmful (Toxic / Irritant)	 <input type="checkbox"/> Acute Toxicity
 <input type="checkbox"/> Oxidising	 <input type="checkbox"/> Health Hazard	 <input type="checkbox"/> Gas under pressure

Hazard Type

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Gas	Vapour	Mist	Fume	Dust	Liquid	Solid	Other (State)

Route of Exposure

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Inhalation	Skin	Eyes	Ingestion	Other (State)

Workplace Exposure Limits (WELs) please indicate n/a where not applicable

Long-term exposure level (8hrTWA): METHOXY-2-PROPANOL 100 ppm(Sk) 375 mg/m3(Sk) BUTOXYETHANOL 25 ppm (Sk) ACETONE 500 ppm 1210 mg/m3 BUTANE/ISOBUTANE 600 ppm SOLVENT NAPHTHA, LIGHT AROMATIC 25 ppm 50 mg/m3(Sk)	Short-term exposure level (15 mins): 150 ppm(Sk) 560 mg/m3(Sk) 50 ppm(Sk) 1500 ppm 3620 mg/m3 750 ppm
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State the Risks to Health from Identified Hazards

Irritating to eyes. Spray and vapour in the eyes may cause irritation and smarting. Repeated exposure may cause skin dryness or cracking. In high concentrations, vapours are narcotic and may cause headache, fatigue, dizziness and nausea. Arrhythmia, (deviation from normal heart beat) Vapours may cause drowsiness and dizziness.

Control Measures: (e.g. ventilation, training, supervision)

Read and follow manufacturer's recommendations. Avoid inhalation of vapours and spray mists. Keep away from heat, sparks and open flame. Do not spray on a naked flame or any incandescent material. When sprayed on a naked flame or any incandescent material the aerosol vapours can be ignited. Storage Precautions. Extremely flammable. Store at moderate temperatures in dry well-ventilated area. Keep away from heat, sparks and open flame. Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use. For prolonged or repeated skin contact use suitable protective gloves. Wear approved chemical safety glasses / goggles where eye exposure is reasonably probable.



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When using does not eat, drink or smoke. Wash promptly if skin becomes wet or contaminated.

Is health surveillance or monitoring required?

Yes

No

Personal Protective Equipment (state type and standard)

 <input type="checkbox"/>	Dust mask	 <input type="checkbox"/>	Visor
 <input type="checkbox"/>	Respirator	 <input checked="" type="checkbox"/>	Goggles
 <input checked="" type="checkbox"/>	Gloves	 <input type="checkbox"/>	Overalls
 <input type="checkbox"/>	Footwear	 <input type="checkbox"/>	Other

First Aid Measures

Eye contact: Immediately rinse with water. Continue to rinse for at least 15 minutes. Make sure to remove any contact lenses from the eyes before rinsing. Get medical attention promptly if symptoms occur after washing.

Ingestion: Immediately rinse mouth and provide fresh air. Do not induce vomiting. Get medical attention if any discomfort continues.

Inhalation: Move the exposed person to fresh air at once. Perform artificial respiration if breathing has stopped. Keep the affected person warm and at rest. Get prompt medical attention.

Skin contact: Wash skin with soap and water. Get medical attention if any discomfort continues.

Storage

Read and follow manufacturer's recommendations. Keep away from heat, sparks and open flame. Store at moderate temperatures in dry well-ventilated area. Protect from sunlight and do not expose to temperatures exceeding 50°C.

Transport

Environmentally Hazardous Substance/Marine Pollutant.
Proper Shipping Name AEROSOLS
ADR/RID/ADN Class 2, 5F

Fire fighting

Extinguishing Media: Water spray, foam, dry powder or carbon dioxide. Use water spray to reduce vapours. Aerosol cans may explode in a fire. Cool aerosol containers exposed to heat with water spray and remove container, if no risk is involved. Extremely flammable. Forms explosive mixtures with air. May explode in a fire. Vapours are heavier than air and may spread near ground to sources of ignition.

Spillage:

Extinguish all ignition sources. Avoid sparks, flames, heat and smoking. Ventilate. Absorb in vermiculite, dry sand or earth and place into containers. Provide ventilation and confine spill. Do not allow runoff to sewer. Avoid discharge into drains. Personal Precautions ensure suitable personal protection (including respiratory protection) during removal of spillages in a confined area.

Disposal of Substances & Contaminated Containers

Make sure containers are empty before discarding (explosion risk). Do not puncture or incinerate even when empty. Dispose of waste and residues in accordance with local authority requirements.

Is exposure adequately controlled?

Yes

No

Risk Rating Following Control Measures

High

Medium

Low



Title **Hazardous Substance (COSHH) Risk Assessment**

Document Type
Assessment

Revision
-/2013/10/10

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Title **Hazardous Substance (COSHH) Assessment**




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Description of product: <i>(Include name)</i>	Adblue aqueous urea (32.5%) solution Diesel fuel additive
Describe the activity or work process. <i>(Include how long, how often this is carried out, the quantity of substance used, where it is to be used, what it is used for and who by)</i>	To be decanted in to Adblue tank on the side of various machines Top up Adblue tank when refuelling main diesel tank To be used by driver

Identify the persons at risk:	Employees <input checked="" type="checkbox"/> <i>(including trainees)</i>	Contractors <input type="checkbox"/>	Public <input type="checkbox"/>
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Manufacturer name, address and telephone number. <i>(A copy of a current safety data sheet for this substance should be attached to this assessment)</i>	Name: GreenChem Solutions Ltd Address: Midshires House Aylesbury HP19 8HL Tel:0129-678548 Email / Website:
---	---

Classification (state the category of danger)

 <input type="checkbox"/> Unstable Explosive	 <input type="checkbox"/> Corrosive	 <input type="checkbox"/> Hazardous to the Aquatic Environment
 <input type="checkbox"/> Flammable	 <input type="checkbox"/> Harmful (Toxic / Irritant)	 <input type="checkbox"/> Acute Toxicity
 <input type="checkbox"/> Oxidising	 <input type="checkbox"/> Health Hazard	 <input type="checkbox"/> Gas under pressure

Hazard Type

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Gas	Vapour	Mist	Fume	Dust	Liquid	Solid	Other (State)

Route of Exposure

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Inhalation	Skin	Eyes	Ingestion	Other (State)

Workplace Exposure Limits (WELs) please indicate n/a where not applicable

Long-term exposure level (8hrTWA): N/A	Short-term exposure level (15 mins): N/A
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State the Risks to Health from Identified Hazards

Minor irritate

Control Measures: (e.g. ventilation, training, supervision)

Ensure funnels are used when dispensing into recepticle tank to minimise risk of spillage and splashes
Ensure containers come in suitable sizes maxmuim size 20lt with regards to manual handling and ease of pouring into receptacles etc

Is health surveillence or monitoring required?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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Title **Hazardous Substance (COSHH) Assessment**

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Yes	No
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Personal Protective Equipment (state type and standard)

<input type="checkbox"/>		<input type="checkbox"/>	
<input type="checkbox"/>		<input checked="" type="checkbox"/>	
<input checked="" type="checkbox"/>	PVC/Rubber	<input type="checkbox"/>	
<input type="checkbox"/>		<input type="checkbox"/>	

First Aid Measures

Eye contact: Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention if irritation occurs.

Ingestion: If person is conscious Wash out mouth with water. Drink lukewarm water ,do not induce vomiting ,Seek medical care if symptoms occur

Inhalation: Remove victim to fresh air and keep at rest in a position comfortable for breathing.obtain medical care if symptoms occur. In case inhalation of decomposition products in a fire the exposed person may need to be kept under medical srveillance for 48 hours

Skin contact: wash contaminated skin with soap and water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. Wash clothing before reuse. Clean shoes thoroughly before reuse.

Storage

Store in original container .store in a well-ventilated area, away from incompatible materials, and food and drink. Keep container tightly closed and sealed until ready for use. Keep opened containers upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination.

Transport

The product is not covered by the international regulation on the transport of dangerous goods (IMDG, IATA, ADR/RID)

Fire fighting

Urea is non flammable .use fire extinguisher method that is suitable for the fire

Spillage

Stop leak if without risk. Move containers from spill area. If water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Always approach the release from upwind. Prevent entry into sewers, water courses, basements or confined areas.


Disposal of Substances & Contaminated Containers

The drums when empty must be rinsed out and disposed of in the designated bins

Is exposure adequately controlled?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
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Risk Rating Following Control Measures

High <input type="checkbox"/>	Medium <input type="checkbox"/>	Low <input checked="" type="checkbox"/>
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	Title Risk Assessment Pack		
Document Type Work Instruction	Revision -/2015-08-07	Document Number 7.1KF F34	Page 5 of 5


4. KELLER HSEQ POLICY



Health, Safety, Environment and Quality Management System


Document Owner Managing Director NWE	Revision E/2015-10-07	Document Type Policy	Document Number 1-0.2K
Author P Shields	Checked/Approved J De Waele	Document ID KL_PO_1-0.2	Page 1 of 7

Health, Safety, Environment and Quality Policy

	Title Health, Safety, Environment and Quality Policy			
Document Type Procedure	Revision E/2015-10-07	Document ID KL_PO_1-0.2	Procedure Number 1-0.2K	Page 2 of 7

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	Title Health, Safety, Environment and Quality Policy			
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1. Introduction

This policy covers all the work carried out by the operating divisions and group functions of the Keller business unit for North West Europe.

Keller is a specialist contractor providing geotechnical, monitoring and earth retaining structural services to the building and civil engineering industries and the design and manufacture of mixing and pumping equipment for supply worldwide.

The company operates under a certified Integrated Management System (IMS) in accordance with the requirements of BS EN ISO 9001:2008 Quality Management Systems - Requirements, BS EN ISO 14001:2004 Environmental Management Systems – Requirements with Guidance for Use and OHSAS 18001: 2007 Occupational Health, Safety, Environment and Quality Management Systems - Requirements.

The system is detailed in an Integrated Management System (IMS). The Keller IMS (KIMS) is available on the company intranet which acts as the controlling version. KIMS contains procedures and instructions and each detail the responsibilities for ensuring compliance with the System. Regular audits of the instructions and procedures are carried out.

This policy is communicated to all employees and to other persons working for the company and is made available to other external interested parties and is posted on appropriate Keller websites.

2. Policy Statement

Keller aims not only to satisfy, but to also exceed its customers' expectations by providing them with a quality service.

Keller shall:

- Develop and maintain an Integrated Management System that will comply with requirements and lead to continual improvement in all areas of our operations by clearly defining aims and objectives to:
 - Train and develop the competency of our people to the standard required for delivery of a first class, quality service to customers while demonstrating our commitment to health, safety and the environment.
 - Ensure confidentiality of information, including that provided by customers.
 - Identify and comply with all relevant legislation and other requirements to which we subscribe.
 - Assess the environmental impact of our key processes, products or services.
 - Ensure careful selection of suppliers, careful use of materials and resources, seek to eliminate or reduce waste and to prevent pollution.
 - Comply fully with Keller Group Plc. "Think Safe" minimum standards by providing a safe, healthy and sustainable working environment for all our people with a commitment to providing a workplace that is free of injury and ill health.
 - Develop a health and safety awareness culture throughout the organisation by encouraging good leadership.



Title **Health, Safety, Environment and Quality Policy**

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- Ensure the health and safety of sub-contractors and other persons who may be affected by our activities.
- Conduct our activities responsibly and in a manner that will protect our staff, the public and the environment.
- Ensure that all employees are aware of their statutory duties and take reasonable care of themselves, others and the environment.

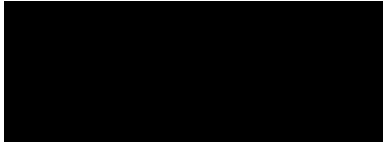
Keller will achieve these aims, and meet its business objectives, through the development of an Integrated Management System, internal communication, supervision, and the on-going training and development of all our personnel.

The management team is committed to ensuring that employees co-operate to ensure all workplaces are safe for those that work there, or could be affected by our activities and do not compromise the operational safety of our customer sites, the workforce and general public.

Clear objectives, relating to performance, shall be set, as part of the Business Plan, to implement this policy and demonstrate our commitment to continual improvement.

This policy and associated procedures shall be formally reviewed annually or as a result of changes in legislation, scope or performance.


Signed



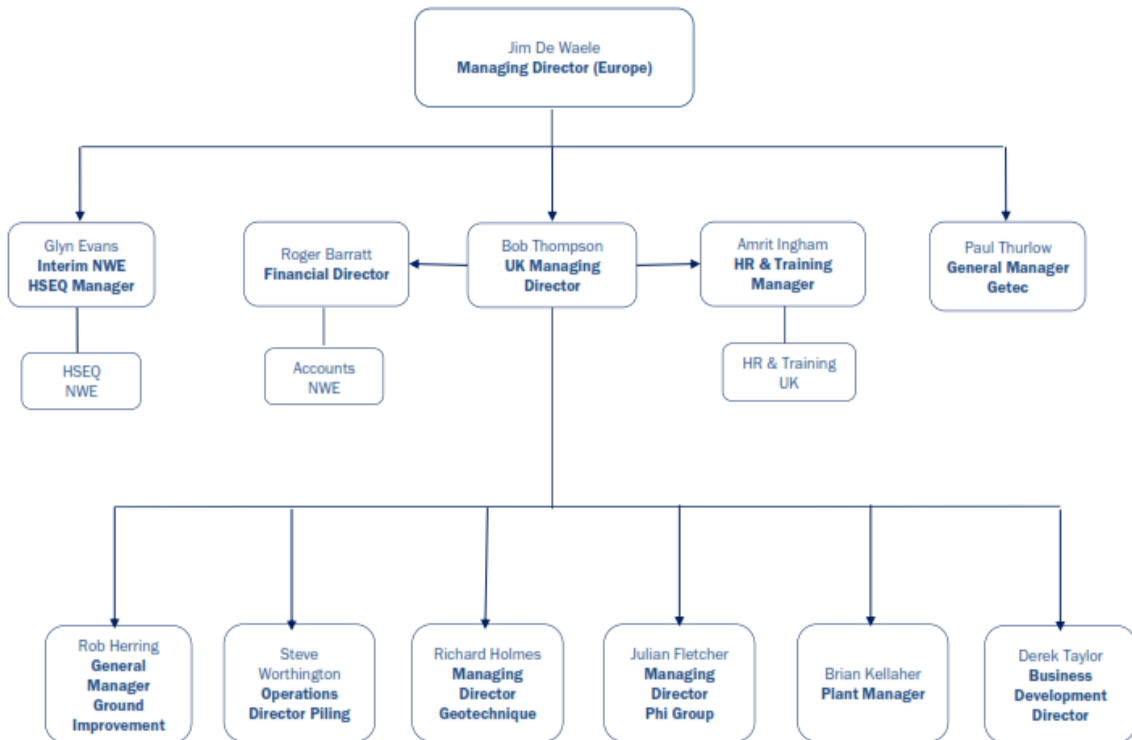
J De Waele

Managing Director Keller Europe

07th October 2015

	Title Health, Safety, Environment and Quality Policy			
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3. Organisation Keller North West Europe



4. Responsibility for Health, Safety, Environment and Quality

4.1 Managing Director Europe

The Managing Director Europe is ultimately responsible for Health, Safety, Environment and Quality throughout Keller NWE and has in turn formerly appointed each of the Divisional Managing Directors and Executive Directors to be the Directors responsible for Health, Safety, Environment and Quality within their area of control. In order to ensure that the Managing Directors and Executive Directors are fully conversant with their responsibilities, the Business Unit Manager NWE has outlined their responsibilities as an integral part of this policy document: -

4.2 Divisional Managing Directors, Executives and Functional Leads

As the manager responsible for Health, Safety, Environment and Quality, each Managing Director, Executive and Functional Lead is responsible for ensuring that the Keller Integrated Management Systems and associated control measures are effectively implemented throughout their area of control. As an integral part of their overall responsibilities, the Managing Directors, Executives and Functional Leads are responsible for:

- Ownership of their Health, Safety, Environment and Quality Objectives;
- Leading and maintaining the divisional and functional management structures in order to manage business risk;
- Ensuring that Keller standards are maintained;



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- Ensuring the identification of all hazards and risks associated with their operations and for ensuring that suitable risk assessments are developed and implemented to effectively manage and mitigate the risks;
- Ensuring that their operations are conducted in accordance with current legislative requirements;
- Ensuring that their staff, operatives and contractors are suitably qualified and that suitable training and competency records are maintained;
- Ensuring adequate resources are available to meet risk control obligations;
- Ensuring that roles and responsibilities are communicated to their managers, staff and contractors.

4.3 Health, Safety, Environment and Quality Manager – (Appointed Competent Person)

The Executive Committee has appointed the Health, Safety, Environmental and Quality (HSEQ) Manager to be responsible for: -

- The development, implementation, monitoring and control of all Health, Safety, Environment and Quality Policies and procedures used throughout the Company including:-
 - The development and implementation of the Health, Safety, Environment and Quality Objectives;
 - The provision of guidance and assistance in relation to the development of their own operational procedures to ensure that they have developed and implemented effective management systems;
 - Implementation of audit and review of compliance with corporate and business unit policies and procedures;
 - Providing reports to the Executive Committee in relation to areas of underperformance and good practice and to highlight areas of risk to ensure that senior management are provided with a true picture of how well Health, Safety, Environment and Quality is being managed throughout the business.

The Health, Safety, Environment and Quality Manager reports directly to the Managing Director Europe and operates independently of the operational management teams. Thus effectively enabling the position to: -

- Present advice independently and effectively to the business;
- Present an unbiased, assured view of each division and functional Health, Safety, Environment and Quality compliance;

The Health Safety Environment and Quality manager is in turn assisted in the execution of his role by the employment of Competent Health, Safety, Environment and Quality Personnel these include:-

- HSEQ Advisers
- HSEQ Coordinators

Divisional Safety Representatives are appointed to assist in the delivery and promotion of Safe behaviours.



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4.4 HSEQ Advisers

HSEQ Advisers are responsible for: -

- Championing KIMS and Rolling out Keller HSEQ policies and procedures;
- Facilitating the development of operational procedures and risk control measures to implement compliance with Keller and legislative requirements;
- Actively promoting and coaching Health, Safety, Environment and Quality;
- Communication and coordination with the Divisional Safety Representatives
- Assisting each division and function to develop, implement and communicate the local Health, Safety, Environment and Quality systems;
- The day to day monitoring of compliance with Health, Safety, Environment and Quality requirements, and for providing feedback and recommendations to managers in relation to their Health, Safety, Environment and Quality performance;
- Incident and non-conformance investigation and reporting;
- The provision of guidance and advice on all HSEQ matters;
- Liaison with the enforcing authorities, customers HSEQ personnel, occupational health providers, fire service, police and insurance companies as the need arises.

4.5 Employees / Contractors Employees

As a minimum, all employees and contractors are responsible for ensuring that Health, Safety, Environment and Quality systems are followed and applied and that the Health and Safety of others and the protection of the environment are made is their number one priority.

All employees and contractors' employees shall take suitable and effective action to avoid acts and conditions that ultimately give rise to accidents, incidents and poor quality.

Every employee has the responsibility to stop any element of work or operation, if they feel unsafe or consider that others might be at risk.

5. Change Record

Revision	Changes	Author
- /2012-11-01	Initial issue	P Shields
A/2012-12-13	Updated Organisation Chart	P Shields
B/2013-11-01	Annual Policy Review, update Organisation Chart	P Shields
C/2014-06-01	Updated NWE Organisation Chart & minor responsibility updates	P Shields
D/2015-03-02	Updated Organisation Chart and minor amendments to responsibilities	P Shields
E/2015-10-07	Updated Organisation Chart	S Sedgley

-End of Document-