



## PCBU / EMPLOYER / COMPANY DETAILS

Name: Dark Knight Engineering / DKE Group

Address: 9 Wenban Place, Wetherill Park NSW 2164

ABN: 77626194992

Phone:

Approved by:

Date:

Works Manager:

Mobile:

## PROJECT DETAILS

Name:

Address:

## CLIENT / PRINCIPAL CONTRACTOR DETAILS

Name:

Date provided to PC:

Contact:

Phone:

## WORK ACTIVITY

Control and clean-up of spills and leaks of chemicals that create an environmental hazard.

## SCOPE OF WORK COVERED BY THIS SAFE WORK METHOD STATEMENT

The Environmental Controls – Chemical Hazards outlines the main hazards and risks associated with the control and clean-up of chemicals that present an environmental hazard due to spill, leak or uncontrolled releases, including risks to persons, flora and vegetation, land-based fauna and aquatic species, and the environment at large.

The SWMS provides details of the health and safety precautions (including protective clothing and PPE) and emergency response procedures required to control risks to the environment created by chemical hazards.

## GENERAL INSTRUCTIONS FOR SAFE WORK METHOD STATEMENTS

**A safe work method statement (SWMS) must be prepared for any and all high risk construction work to be undertaken prior to the work commencing.** All high risk construction work must be carried out in accordance with this SWMS.

This SWMS must be kept and be available for inspection until the high risk construction work to which this SWMS relates is completed. If the SWMS is revised, all versions should be kept.

If a notifiable incident occurs in relation to the high risk construction work in this SWMS, the SWMS must be kept for at least 2 years from the date of the notifiable incident.

The PCBU or employer must ensure, so far as is reasonably practicable, that the information, training and instruction is provided in a way that is readily understandable by any person to whom it is provided.

## SITE SPECIFIC CONSIDERATIONS

**NOTE: This is a generic SWMS.** A generic SWMS may be prepared and used for high risk construction work activities that are carried out on a regular basis; however, the generic SWMS must be reviewed by the person carrying out the work to take into account the hazards and risks for the specific workplace and amend the SWMS as necessary for the site where the work is to be carried out, and complete details such as names and qualifications of workers who will carry out the work. All amendments to the SWMS must conform to regulatory requirements and be recorded on the SWMS. Workers and their health and safety representatives (if any) should be consulted before the generic SWMS is first made available to them and all workers instructed in the SWMS by site-specific inductions or toolbox talks. Details of consultation with workers and instruction in the SWMS must be recorded on the SWMS for that project or site. All workers are required to sign-off on the SWMS before the work is commenced.

## WHAT MEASURES ARE IN PLACE TO ENSURE COMPLIANCE WITH THIS SWMS?

Supervision		Inspections		Site audit	
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## PERSON RESPONSIBLE FOR MONITORING COMPLIANCE WITH THIS SWMS

Name		Date Received	
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## HOW WILL SWMS CONTROL MEASURES BE REVIEWED?

Compliance with regulations & CoPs?		Fit for purpose & adequate for task?	
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## PERSON RESPONSIBLE FOR REVIEW OF SWMS CONTROL MEASURES

Name		Date Received	
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## HOW WILL CHANGES TO THIS SWMS BE MADE?

JSA (on site – approval required)		Revision (revised SWMS re-issued)	
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## HOW WILL CHANGES TO THIS SWMS BE COMMUNICATED TO WORKERS?

SWMS induction		Pre-start meeting		Toolbox talk	
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## HIGH RISK CONSTRUCTION WORK ACTIVITIES (CHECK ANY THAT ARE APPLICABLE TO WORK COVERED BY THIS SWMS)

<input type="checkbox"/>	A risk of a person falling more than 2 metres (or 3 metres in SA)	<input type="checkbox"/>	Demolition of a load-bearing structure	<input type="checkbox"/>	Work on a telecommunications tower
<input type="checkbox"/>	Work in or near a shaft or trench with an excavated depth over 1.5m; or in a tunnel	<input type="checkbox"/>	Temporary load-bearing support structures	<input type="checkbox"/>	Work on or near pressurised gas distribution mains or piping
<input type="checkbox"/>	Work in an area at a workplace in which there is any movement of powered mobile plant	<input type="checkbox"/>	Work involving the use of explosives	<input type="checkbox"/>	Work on or near chemical, fuel or refrigerant lines
<input type="checkbox"/>	The disturbance of or likely disturbance of asbestos	<input type="checkbox"/>	Tilt-up or precast concrete	<input type="checkbox"/>	Work in an area in which there are artificial extremes of temperature
<input type="checkbox"/>	Work on or near energised electrical installations or services	<input type="checkbox"/>	Work on, in or adjacent to a road, railway, shipping lane or other traffic corridor used by traffic other than pedestrians	<input type="checkbox"/>	Work on, under or near water or other liquid that involves a risk of drowning
<input checked="" type="checkbox"/>	Work carried out in or near a confined space	<input type="checkbox"/>	Work in an area that may have a contaminated or flammable atmosphere	<input type="checkbox"/>	Diving work

## RISK CONTROL

## Actions to be taken to control risks

Hierarchy of risk controls (in order of preference)	<i>How will risk controls be implemented?</i>
1 Elimination (most effective)	Eliminate the hazard and the associated risk
2 Substitution	Substitute the hazard with something safer
3 Isolation	Isolate the hazard from people (e.g., barrier, wall)
4 Engineering means	Physical controls including guards, mechanical devices
5 Administrative controls	Work methods or procedures to minimise exposure
6 PPE (least effective)	Provide protective clothing and equipment to workers

## What measures are in place to ensure compliance with this SWMS?

## Check

*Check all measures used to ensure compliance with this SWMS*

Responsible person appointed to monitor compliance with SWMS by workers	
Site-specific inductions; pre-start meetings and toolbox talks with workers	
SWMS provided to and discussed with workers and signed off	
Ongoing workplace supervision by competent personnel	
Monitoring of work methods and review of SWMS where necessary	
SWMS control measures revised if work methods or risks change	

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PERMITS, ISOLATIONS AND AUTHORISATIONS REQUIRED	

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## SAFETY EQUIPMENT REQUIRED

Barricading, traffic control devices	Signage	Fall prevention (safety harness, lanyard)	Traffic control	Other (specify below):

## PERSONAL PROTECTIVE CLOTHING AND EQUIPMENT (PPE)

Required PPE is highlighted in red with green check. Optional PPE is highlighted in blue. Ensure all workers have required PPE before any work requiring the PPE has commenced.



## WORKER INSTRUCTION &amp; SIGN OFF

All workers must sign below before commencing work covered by this SWMS: I have been consulted, instructed in and fully understand the content of this SWMS

Worker's name	Signature	Date	Worker's name	Signature	Date

## REVIEWS

Review No.	01	02	03	04	05	06
Name						
Signature						
Date						

Job activity	Hazards and associated risks	How will the hazards and the risks be controlled?
Inductions and training	Untrained workers	<p>All persons working on a construction site must hold a General Construction Induction (GCI) card.</p> <p>Carry out site-specific inductions for all workers.</p> <p>All workers must be competent in the tasks carried out.</p> <p>Vehicles, plant and equipment must only be operated by licensed or competent persons.</p>
Hazardous chemicals	Hazardous exposure	<p>A current Safety Data Sheet must be available for all hazardous chemicals stored, handled or used in a workplace. All hazardous chemicals will be documented in a maintained hazardous chemical register.</p> <p>Instruct all workers in the hazards of the chemicals that they will be using, and the health and safety precautions to be followed in the handling and use (including disposal and spill and leak procedures) of the chemical.</p> <p>Provide adequate storage for PPE to ensure that it remains clean and ready for use when required.</p> <p>Any hazardous chemical exposure that may result in significant health risk will be managed by health monitoring of the worker(s). Health monitoring records will be retained for a minimum of 30 years after the record has been made.</p>
Emergency planning	Scope of emergency plan	<p>The chemical emergency plan should address the following factors:</p> <ul style="list-style-type: none"> <li>• the size and location of the workplace</li> <li>• the nature and severity of the chemical hazards</li> <li>• the nature of the work being carried out, and</li> <li>• the number of workers and other persons at the workplace.</li> </ul> <p>The emergency plan must take into account the proximity and nature of neighbouring premises (including details of occupants who may be placed at greater risk in the event of an emergency).</p>

Job activity	Hazards and associated risks	How will the hazards and the risks be controlled?
	Content of emergency plan	<p>The emergency plan must contain procedures that provide for:</p> <ul style="list-style-type: none"> <li>• an effective response to an emergency</li> <li>• evacuation procedures</li> <li>• notification of emergency services</li> <li>• notification of neighbouring premises</li> <li>• medical treatment and assistance, and</li> <li>• workplace communications.</li> </ul>
Emergency planning	Impacts on neighbouring premises	<p>Containment of spills, leaks and residue from fire-fighting, clean-up, etc., should be provided to minimise impacts on neighbouring premises.</p> <p>The effects of gas or vapour spread must be considered and include the potential areas that may be affected by the plume.</p>
Storage of chemicals	Spill or leak; fire	<p>Keep chemicals securely stored on a cool dry area and protected from accidental spillage or fire.</p> <p>Ensure good ventilation in areas where volatile chemicals are stored. Post safety signs prohibiting smoking, and requiring use of eye and hand protection (as minimum) where chemicals are stored and handled.</p> <p>Provide suitable spill control and clean up equipment (including PPE) for clean-up of any spill or leak of stored chemicals.</p>
Transport	Spill or leak	<p>Observe all precautions for transport of chemicals provided on SDS and product information sheets.</p> <p>Always transport chemicals in original containers where possible. Ensure that all containers of chemicals are correctly labelled with the name of the chemical, risk labels and safety phrases and instructions.</p> <p>Provide suitable spill control and clean up equipment (including PPE) for clean-up of any spill or leak during transport.</p>
Handling and use of chemicals	Hazardous exposure	<p>Observe all precautions for handling and use provided on SDS and product information sheets.</p> <p>Ensure good ventilation in areas where chemicals are mixed and used. Avoid contact with skin and eyes. Wear eye, hand and body protection when handling and mixing chemicals.</p> <p>Provide suitable spill control and clean up equipment (including PPE) for clean-up of any spill or leak during handling and use of chemicals.</p>

Job activity	Hazards and associated risks	How will the hazards and the risks be controlled?
Off-site considerations	Hazardous exposure	<p>Spray chemicals so as to not cause spray drift on to non-target species or affect neighbouring premises. Always spray chemicals in calm conditions where possible. Avoid spraying chemicals in wet, windy or hot conditions.</p> <p>Prevent entry of persons and animals into areas where chemicals are being used or sprayed.</p>
Spill and leak	Management of spill or leak	<p>Spill and leak management practices must:</p> <ul style="list-style-type: none"> <li>• minimise the risk of spills,</li> <li>• contain and clean up any spill or leak immediately, and</li> <li>• prevent any spill or leak entering a sewer, drain or waterway, or to contaminate soil, or to affect flora and fauna.</li> </ul>
	Procedures for spill or leak	<p>All spills or leak of chemicals (other than minor quantities) must be reported to workplace management to enable the emergency response plan to be implemented if necessary.</p> <ol style="list-style-type: none"> <li>1. Identify the chemical involved and carry out a risk assessment based on the hazard potential of the chemical and the quantity involved</li> <li>2. Contain the spill or leak ONLY if it is safe to do so. Do not attempt to contain a spill or leak if there is a danger to unprotected persons.</li> <li>3. Wear protective clothing and PPE as specified in the SDS.</li> <li>4. Stop or arrest flow at source if possible.</li> <li>5. Contain spill or leak to the smallest possible area as possible.</li> <li>6. Cover or dam drains to prevent entry of chemical into sewers, drains or waterways. Contact environmental authority IMMEDIATELY if chemical spill or leak enters the environment.</li> <li>7. Contact emergency services if required.</li> <li>8. Recover as much of the spilled or leaked material (including any material used to absorb or prevent spread if chemical) and place into suitable sealable containers. Label all containers with the name of the recovered chemical.</li> <li>9. Clean up the remainder of the spill or leak in accordance with methods recommended in the SDS. Place waste from clean up in labelled containers for disposal.</li> <li>10. Transport sealed containers of waste material to an approved chemical waste disposal facility.</li> </ol>
Fire	Hazardous exposure	<p>Hazardous by-products will be generated by chemicals in the event of a fire either due to combustion or heating. Persons attending the fire must be provided with appropriate protective clothing and respiratory protection. Evacuate all persons who may be affected by smoke to emergency evacuation points in a safe location.</p>

Job activity	Hazards and associated risks	How will the hazards and the risks be controlled?
	Explosion risk	<p>Evacuate all personnel from areas likely to be affected by an explosion where flammable materials are involved in a fire.</p> <p>Evacuation points should be selected to ensure that persons will be safe from any potential explosion. Alternative evacuation points should be identified to take spread of smoke, etc., due to wind direction into account.</p>
	Control of run-off	<p>Ensure that adequate supply of water for general fire-fighting is available. Cover or dam drains to prevent entry of contaminated run-off from firefighting enters into sewers, drains or waterways. Contact environmental authority IMMEDIATELY if contaminated run-off enters the environment.</p>
Natural events	Storm	<p>Chemical storages should be designed and located to minimise risk of damage from storms, cyclones, etc., and to protect packages of stored chemicals from water damage.</p>
	Flood	<p>Chemical storages should be located above flood heights where practicable to prevent loss due to flood water or inundation.</p>
	Earthquake	<p>Chemical storages (including racking and shelving) should be designed to prevent loss of chemicals in the event of ground tremor or earthquake.</p>
Disposal	Environmental risk	<p>All surplus, waste or used chemicals should be disposed of at an approved chemical waste disposal facility. Chemicals should be correctly labelled to identify their contents (original containers or packages should be re-used where possible).</p> <p>Ensure that all containers are correctly sealed before transport. (Transport of dangerous goods above specified minimum quantities will be subject to regulatory requirements).</p>



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