



# **SITE EMERGENCY PLAN**

## **CLOVERDOWN'S GRAVEL PIT**

**VERNICE PTY LTD**

ABN: 69 008 763 460

**HAZARDS THAT MAY CAUSE AN EMERGENCY**

**MEANS OF AVOIDING HAZARDS**

**EMERGENCY RESPONSE**

**EMERGENCY PREPAREDNESS**

## **1.0 HAZARDS THAT MAY CAUSE AN EMERGENCY**

### **1.1 Serious Injury to Person/s on-site - arising from;**

- Vehicle Collision
- Vehicle / Machinery Rollover
- Entrapment by moving parts of machinery
- Collapse of excavated face
- Fall from height
- Bushfire within vegetation on-site or nearby
- Exposure to excessive dust or noise
- Bee Stings
- Diabetes
- Sun/Heat Exposure
- Vehicle Fire
- Lightning Storms
- Tyre Explosion

## **2.0 MEANS OF AVOIDING HAZARDS**

See **Table 1: Assessment of Hazards and Management of Risk**

## **3.0 EMERGENCY RESPONSE**

See **Table 2: Emergency Response Actions**

## **4.0 EMERGENCY PREPAREDNESS**

### **4.1 First Aid Equipment:**

Main First Aid kit is wall mounted in Site Supervisor's office.

Mobile First Aid kits are also fitted within the work vehicles of both the Registered Manager and the Site Supervisor. Also in the loader.

Medical / First Aid Assistance Notice:

Notice is wall mounted in site office – see copy overleaf.

## Medical / First Aid Assistance

### 1) Emergency Service:

Phone: 000

### 2) Nearest Hospital: (18 minutes from Site)

Northam Hospital - Robinson Street, Northam

Phone: (08) 9690 1300

### 3) Nearest Medical Centre: (14 minutes from Site)

Toodyay Medical Centre - 81 Stirling Terrace, Toodyay

Phone: (08) 9574 2223

### 4) First Aid Personnel:

Stephen Ferguson – Site Supervisor/Director (0429 040 362)

Michael Ferguson – Director (0417 182 636)

Elizabeth Ferguson – Vernice HR Manager (0427 742 030)

Max Weir – Quarry Manager (0400 195 508)

**4.2 Fire Protection**

Fire extinguishers are fitted in the registered manager and deputy manager’s cars. If there is a bush fire or vehicle/equipment fire see table below for emergency procedure.

**4.3 Diabetes**

A Vernice employee has diabetes. Knowing what to do in a medical emergency is important. The employee carries an EpiPen in his lunch bag. If the employee is having a seizure or drops too low. Administer the EpiPen in the top leg. Call the ambulance if needed. Otherwise, call your supervisor to arrange the employee to be taken to hospital.

**4.4 Emergency Numbers**

Stephen Ferguson (Site Manager/Director)	0429 040 362
Liz Ferguson (HR/Office Manager)	0427 742 030
Michael Ferguson (Director)	0417 182 636
Toodyay Police	131 444
Toodyay Medical Centre	(08) 9574 2223
Toodyay Volunteer Fire and Rescue	(08) 9574 2620
Ambulance	000



TABLE 1: ASSESSMENT OF HAZARDS AND MANAGEMENT OF RISK

HAZARD	RISK	COMMENT / PREVENTION
<b>Serious Personal Injury on-site</b>		<b>Registered Manager promotes a ‘safety culture’ through staff induction and staff meetings that emphasise awareness of hazards, and first aid equipment and procedures.</b>
<b>Vehicle Collision</b>	<b>Low</b>	<p>Maintain site access procedures for all visitors;</p> <ol style="list-style-type: none"> <li>1. Stop at entry gate off Clackline-Toodyay Road .</li> <li>2. Site Supervisor contacted on Channel 35</li> <li>3. Visitor permitted entry either with escort, or with instructions to the required destination – as deemed appropriate by Site Supervisor.</li> <li>4. Fill out Visitor Book at Site Supervisor’s office – Loader</li> </ol> <p>Encourage regular CB communication between the on-site employee and Vernice office to facilitate awareness of vehicle / machinery activity.</p>
<b>Vehicle / Machinery Rollover</b>	<b>Low</b>	<p><u>Comment:</u> Floor of excavation area is flat to very gently inclined to enable ease of machinery movement. Excavated areas are bounded by windrows.</p> <p>Signage of speed limit for trucks (40 km/hr) within property. Establish and maintain windrows adjacent to steep slopes or pit edges.</p>
<b>Entrapment by moving parts of machinery</b>	<b>Low</b>	<p>Placement of guarding over exposed moving parts deemed hazardous.</p> <p>Install warning signs where necessary.</p>



<b>Collapse of excavated face</b>	<b>Low</b>	<p><u>Comment:</u> Employee predominantly operates within enclosed cab machines</p> <p>Maintain pit face heights at low levels or form terraces.</p> <p>Promote a culture of risk awareness within the site.</p>
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HAZARD	RISK	COMMENT / PREVENTION
<b>Fall from height</b>	<b>Low</b>	<p>Placement of guard rails where 'at height' work is deemed hazardous.</p> <p>Where practical, modify plant and machinery, or operating procedures to avoid the need for 'at height' work.</p>
<b>Bushfire</b>	<b>Low</b>	<p><u>Comment:</u> Although adjacent to vegetated land, internally the site provides extensive open areas away from vegetation. A mobile water tanker with a pressure pump is available for fire suppression.</p> <p>Adhere to Shire of Toodyay fire management requirements for rural properties and maintain fire-fighting water tanker and associated pump in a ready to use condition.</p> <p>Maintain emergency assembly area (muster point) in cleared open space free of vegetation and machinery, and with good access and egress points.</p> <p>During summer months, promote employee awareness of the need for vigilance of warning signs of an approaching fire and when potential fire risk is identified maintain awareness through local ABC radio broadcasts.</p> <p>Site supervisor to be aware of potential fire risk alerts via SMS messages issued by Fire control authorities through the Shire of Toodyay to registered community members / premises (including Vernice office).</p>
<b>Exposure to excessive dust or noise</b>	<b>Low</b>	<p><u>Comment:</u> The vehicles/equipment at the pit are fitted with original equipment muffler systems and employee works within enclosed cabs. Personal protective clothing and equipment (PPE), including dust masks, are provided at no cost.</p>
<b>Bee Stings</b>	<b>Low</b>	<p>Scrape the sting, if the sting is still in your skin.</p>



<b>Diabetes</b>	<b>Low</b>	Seek medical advice. All individuals should provide Vernice with an action plan. Epi pens must always be carried on their persons.
<b>Sun/Heat Exposure</b>	<b>Low</b>	The site is susceptible to extreme weather conditions. More often heat. Keep hydrated and cool during the extreme heat and ensure you follow the SunSmart rules – Slip, Slop, Slap, Seek, Slide. To prevent skin cancer, make sure you cover up and wear long sleeved shirt and long pants, hat, sunscreen and stay in the shade where possible. In extreme heat conditions, exposure must be kept minimal and carefully controlled. A well-planned work schedule that effectively mitigates the associated risks is vital. Air conditioners in machinery plant used. Protect eye from UV light and the suns rays with sunglasses or face shield. Wide brim hat when working outdoors and constantly monitoring temperatures, humidity and other workers physical response to environmental conditions. Rescheduling of tasks is encouraged, perform these tasks in the cooler part of the day.
<b>Snake Bites</b>	<b>Low</b>	<p>Bites mainly occur when the snake is disturbed or otherwise provoked. The safest way of preventing being bitten is by avoiding snakes altogether.</p> <ul style="list-style-type: none"><li>• Snakes like to hide where they can't be seen, which includes holes in the ground, rock crevices, fallen logs or long grass.</li><li>• Use a torch if walking at night as many snakes are active after dark.</li><li>• Thick clothing like jeans and boots offer an extra layer of protection against bites.</li><li>• Almost 1 in 5 snakebites happen when people provoke the snake. If you see a snake, give it space to move away, or go around it.</li><li>• Snakes can't hear very well, but can sense vibrations in the ground. When walking in the bush, make noise and stomp your feet to scare off any nearby snakes.</li></ul>
<b>Vehicle/Plant Fire</b>	<b>Med</b>	Common causes of fixed plant and mobile equipment fires are; Electrical - Modifications to electrical circuits not complying with good engineering practices or standards (e.g. no fuse or circuit breaker



		<p>fitted to the circuit). Worn-through insulation and/or harnesses, looseness of components. Battery leads, starter motor, alternator, solenoids.</p> <p>Mechanical and Fixed Plant - Delayed maintenance, e.g. a defective conveyor idler bearing was found but it was decided to continue operations and replace the idler on the planned maintenance day. Before this occurred the idler and other associated equipment caught fire causing significant damage.</p> <p>Preventative Action – good housekeeping practices (clean up after yourself, rags, solvents, waste oil and grease must be cleaned up and put away). Clean components after replacing burst fuel lines, hydraulic and coolant hoses, these can cause fires when the engine components heat up.</p> <p>Refuelling practices – maintain the fuel stations and the fuel areas on the machines.</p> <p>Undergo routine and regular maintenance of plant and vehicles.</p> <p>Observe operating specifications set out by OEMs.</p> <p>Assess fire risks carefully so that hazards are not missed.</p> <p>Maintain the fire extinguishers and report any out of date ones.</p> <p>Continuous Improvement initiative – invest in fire suppression systems to provide early detection and warning to the driver allowing them to safely evacuate while also suppressing the fire to help minimise damage to the vehicle or plant.</p>
<p><b>Lightning Storm</b></p>	<p><b>Low</b></p>	<p>We cannot prevent a lightning storm from happening, however, we can mitigate the actions to reduce the risk of lightning storms.</p> <p>Recognising imminent lightning activity - SOUND: If thunder is heard, lightning strikes are occurring. Thunder intensity is a very approximate guide to the strike distance. Very loud thunder implies a strike is in close proximity.</p> <p>VISUAL: If you see lightning</p>



		<p>VISUAL and SOUND (Flash/ Bang method): If a lightning flash is seen, a thunder interval of less than 30 seconds indicates that lightning is occurring within approximately 10km.</p> <p>The approximate distance of lightning can be determined by remembering that for every 3 seconds counted between seeing a flash and hearing thunder will equal 1 kilometre. i.e. • 30 Second Flash to thunder 10 kms • 15 Second Flash to thunder 5 kms • 6 Second Flash to thunder 2 kms.</p>
<p><b>Tyre Explosion</b></p>	<p><b>Med</b></p>	<p><a href="http://www.dmp.wa.gov.au/Documents/Safety/MSH_G_TyreSafetyEarthMovingMachineryWAMines.pdf">http://www.dmp.wa.gov.au/Documents/Safety/MSH_G_TyreSafetyEarthMovingMachineryWAMines.pdf</a></p> <p>Contacts with power lines is of serious concern and all persons involved should be aware of the following:</p> <p>Electric shock may be suffered. Fallen power lines can remain alive, energise the vehicle oTyre explosions can be devastating, with fragments being projected up to 200m. Brief contact with power lines can cause one or more tyres to explode immediately, or possibly hours later. Fire may be initiated.</p> <p><b>Prevention</b> - Avoid the erection of power lines in mobile equipment operating areas and minimise road crossings.</p> <p>Ensure overhead line clearances and height indicator requirements specified in Australian Standard AS3007.5 are met.</p> <p>Install 'tray raised' alarms and/or interlocks which restrict vehicle motion if a tray is not fully lowered. Consult the vehicle manufacturer.</p> <p>Tyres correctly filled with nitrogen will minimise the risk of explosions. Strict controls and standards are essential for this to be effective.</p> <p>Mobile equipment personnel need to be fully aware of the hazards associated with power line contacts and their duties and responsibilities should such occur.</p>

**TABLE 2: EMERGENCY RESPONSE ACTIONS**

HAZARD	ACTION
<p><b>Serious Injury to Person/s on-site</b></p>	<p><b>MEDICAL RESPONSE:</b></p> <p>Regular two- way radio call-ups are made between Site Supervisor and nearby Vernice Office (3.5 km away within Lot 3 Clackline –Toodyay Road).</p> <p>In the event of a no-response, Vernice Office (Elizabeth Ferguson - HR Manager and First Aid trained) advises Registered Site Manager and proceeds directly to the Clackline-Toodyay Road “Stormville” Sand Pit to investigate.</p> <p>First Aid trained HR Manager accesses First Aid kit and administers to injured person.</p> <ul style="list-style-type: none"> <li>• Main First Aid Kit is mounted to wall within Site Supervisor’s Office</li> <li>• Mobile First Aid kits are also fitted to the work vehicles of both the Site Supervisor and the Registered Site Manager.</li> </ul> <p>Vernice HR Manager or Registered Site Manager contacts;</p> <ul style="list-style-type: none"> <li>• Emergency Services 000 - for ambulance if needed, or</li> <li>• Toodyay Medical Centre or Northam Hospital for verbal assistance or to advice of impending arrival of injured person.</li> </ul> <p>Note: ‘Medical / First Aid Assistance’ Notice is mounted on Site Supervisor’s Office Wall.</p> <p>Vernice HR Manager or Registered Site Manager accompanies injured employee to Medical Centre or Hospital.</p>

HAZARD	ACTION
<b>Vehicle Collision, Machinery Rollover, or Entrapment by moving parts.</b>	<p>'Turn off' vehicle /machine.</p> <p>Start <b>Medical Response</b> – see above</p>
<b>Collapse of excavated face</b>	<p>Free injured person using best available means.</p> <p>Start <b>Medical Response</b> – see above</p>
<b>Fall from height</b>	<p>Start <b>Medical Response</b> – see above</p>
<b>Bushfire</b>	<p>Start <b>Fire Response</b></p> <p>- using on-site fire-fighting equipment and machinery. Seek outside fire-fighting assistance if necessary; Emergency Services 000</p> <p>Proceed to muster point near entry gate if and when considered appropriate.</p>
<b>Exposure to excessive dust or noise</b>	<p>Start <b>Medical Response</b> – see above</p>
<b>Bee Stings</b>	<p>If person is allergic, identified by medical bracelet) ring 000 and notify site supervisor/manager. If not allergic, If the <b>stinger</b> remains in your skin, <b>remove</b> it by scraping over it with your fingernail or a piece of gauze. Never use tweezers to <b>remove</b> a <b>stinger</b>, as squeezing it can cause more <b>venom</b> to release into your skin. Wash the <b>sting</b> with soap and water. Apply a cold pack to reduce swelling.</p>

HAZARD	ACTION
<p><b>Diabetes</b></p>	<p>Diabetes can become serious in the short term if blood sugar levels become either too high or too low. The following information details what to do in an emergency.</p> <p>This covers <a href="#">low blood sugar</a> (hypoglycemia), very high blood sugar (diabetic ketoacidosis) and what to do if you are left without your diabetes medication and/or supplies.</p> <p>Hypoglycemia can become dangerous if it is not treated quickly, particularly if it is a result of an <a href="#">insulin overdose</a>. <a href="#">Severe hypoglycemia</a> is generally recognised as hypoglycemia involving:</p> <p>The <a href="#">warning signs</a> of hypoglycemia include: confusion, dizziness, and nausea, feeling hungry, feeling shaky, nervous, irritable or anxious, sweating, chills, and pale, clammy skin, rapid heartbeat, weakness and <a href="#">tiredness</a>, tingling in the mouth area, <a href="#">headaches</a>, seizures, <a href="#">coma</a> or loss of consciousness.</p> <p>Hyperglycemia early warning signs; increased thirst, the need to urinate more frequently, headaches, blurry vision and fatigue.</p> <p>Hypoglycemia can often be treated at home but if someone is unable to take sugar or does not show signs of improvement after taking sugar, other options will be needed such as a glucagon injection or an ambulance.</p> <p>If you have glucagon, check it is in date, and follow the instructions in the glucagon kit carefully. If you are unsure about using the kit, and nobody is present who is, call for an ambulance.</p>
<p><b>Sun/Heat</b></p>	<p>Heat stroke can kill or cause damage to the <a href="#">brain</a> and other internal organs. Although heat stroke mainly affects people over age 50, it also takes a toll on healthy young athletes.</p> <p>Heat <a href="#">stroke</a> often occurs as a progression from milder heat-related illnesses such as <a href="#">heat cramps</a>, heat syncope (<a href="#">fainting</a>), and <a href="#">heat exhaustion</a>. But it can strike even if you have no previous signs of heat injury.</p> <p>The hallmark symptom of heat stroke is a core body temperature above 104 degrees Fahrenheit. But fainting may be the first sign.</p> <p>Other symptoms may include:</p>

- Throbbing [headache](#)
- [Dizziness](#) and light-headedness
- Lack of [sweating](#) despite the heat
- Red, hot, and [dry skin](#)
- Muscle [weakness](#) or [cramps](#)
- [Nausea and vomiting](#)
- Rapid heartbeat, which may be either strong or weak
- Rapid, shallow breathing
- Behavioral changes such as confusion, disorientation, or staggering
- Seizures
- Unconsciousness

If you suspect that someone has a heat stroke, immediately call 000 or transport the person to a hospital. Any delay seeking medical help can be fatal.

While waiting for the paramedics to arrive, initiate [first aid](#). Move the person to an air-conditioned environment -- or at least a cool, shady area -- and remove any unnecessary clothing.

If possible, take the person's core body temperature and initiate first aid to cool it to around 38 degrees celcius. (If no thermometers are available, don't hesitate to initiate first aid.)

Try these cooling strategies:

- Fan air over the patient while wetting his or her [skin](#) with water from a sponge or garden hose.
- Apply ice packs to the patient's armpits, groin, neck, and back. Because these areas are rich with [blood](#) vessels close to the skin, cooling them may reduce body temperature.
- Immerse the patient in a shower or tub of cool water.
- If the person is young and heathy and suffered heat stroke while [exercising](#) vigorously -- what's known as exertional heat stroke -- you can use an ice bath to help cool the body.

**Do not use ice for older patients, young children, patients with chronic illness, or anyone whose heat stroke occurred without vigorous [exercise](#). Doing so can be dangerous.**

## Snake Bites

The best treatment for a snakebite is first aid followed by anti-venom. **Call 000 or 112 as soon as possible.**

	<p><i>Snakebite first aid is simple, effective and could save a life. Always carry a first aid kit and/or bandages when out in the bush.</i></p> <p><b>1. Apply a pressure bandage</b></p> <ul style="list-style-type: none"> <li>• Wrap a bandage from below, upwards and over the bite site.</li> <li>• Extend it as high as possible (e.g. all the way to the groin).</li> <li>• Keep the limb still (e.g. don't remove trousers).</li> <li>• Use the same tightness as for a sprained ankle.</li> <li>• Use a T shirt or other clothing if you have no bandages.</li> <li>• Mark the area of the bite on the bandage.</li> </ul> <p><b>2. Immobilise the bitten area</b></p> <ul style="list-style-type: none"> <li>• Apply a splint if possible.</li> <li>• Joints to both sides of the bite should be immobilised.</li> </ul> <p><b>3. Call for help</b></p> <ul style="list-style-type: none"> <li>• Dial 000, or 112 if you're in a remote area with poor mobile coverage.</li> <li>• Monitor symptoms.</li> </ul>
<b>Vehicle/Plant Fire</b>	<ul style="list-style-type: none"> <li>• Turn off the ignition, place the vehicle/plant in park and engage handbrake.</li> <li>• Evacuate the vehicle, shut the doors and keep the area clear for a safe distance.</li> <li>• Call 000 and then notify the Quarry Manager (Stephen Ferguson) or Michael Ferguson (Director).</li> <li>• If you have a fire extinguisher, and you feel confident;</li> <li>• Fire under Bonnet – Release the bonnet catch only, do not lift the bonnet up (this could cause the fire to flare-up). Discharge the contents of the extinguisher through the bonnet gap.</li> <li>• Fire in Cabin – discharge the contents of the extinguisher into the cabin directly on the fire and close the door.</li> <li>• LPG Powered – turn off the main supply valve, attempt to extinguish the fire with extreme caution.</li> <li>• Avoid breathing in smoke at all costs.</li> </ul>

	<ul style="list-style-type: none"> <li>Once the fire has been extinguished – remove battery leads from terminals, if safe to do so. Do not drive the vehicle until it has been checked by a qualified auto electrician or qualified mechanic.</li> </ul>
<b>Lightning Storm</b>	<p>If you are working with someone – alert them and communicate regularly. If you are onsite alone, call your supervisor (Quarry manager) and communicate to them the situation regularly.</p> <p>If storm is within 10-18kms: Notify Quarry Manager and other supervisors, determine the nearest safe location. DO NOT refuel.</p> <p>If storm is within 10kms: DO NOT work outside. Evacuate safely and notify the supervisor/Quarry Manager.</p> <p>Precautions to be taken if working outdoors during a thunderstorm include:</p> <ul style="list-style-type: none"> <li>Seek shelter immediately in an enclosed car or substantial building;</li> <li>Never shelter under trees because your body is a better conductor of electricity than the tree;</li> <li>Avoid touching, handling and proximity to any metallic objects that may become part of the discharge path, for example towers, the metal parts of vehicles or mobile plant, power lines, pipes and rails;</li> <li>Do not handle, umbrellas, or any other metal objects and stay clear of sheet metal, wire fences, and so on.</li> <li>If caught in the open, crouch down with your feet together. Do not lie down – the idea is to be as low as possible, but with minimal contact with the ground.</li> <li><a href="https://www.commerce.wa.gov.au/worksafe/lightning">https://www.commerce.wa.gov.au/worksafe/lightning</a></li> </ul>
<b>Tyre Explosion</b>	<p>Remain clear of fallen power lines and any affected vehicle. Isolate the electricity supply and alert the fire crew.</p> <p>The driver of any vehicle in contact with a power line should remain in the vehicle and attempt to summon assistance. If assistance is unavailable, the driver should attempt to free the vehicle by manoeuvres and/or driving away.</p> <p>Immediately, but carefully, the vehicle should be driven to a clear area where it can be left and the driver evacuated. Driver rescue may be affected using a similar vehicle which should approach from the front to allow the driver to step across.</p>



Do not approach within 300m of the vehicle for 24 hours or attempt to deflate the tyres – “FLAT TYRES CAN STILL EXPLODE”

Following the 24-hour stand-down period, all tyres will require internal inspection by competent persons. Seek advice from the tyre manufacturer.

