

A satellite-style world map showing the continents in green and brown, set against a dark blue background of the oceans. The map is centered on the Atlantic Ocean.

Standard Operating Procedure for Hazardous Substances

Issued by: Global Operations Manager	Variations, which may have regional or locational significance, are contained in SOP Documents as specific appendices.		
HSEC	Pages 1 of 18	Issue No. 002 Date May 2003	Global SOP BHPB Exploration



Standard Operating Procedure for Hazardous Substances

Standard Operating Procedure for Hazardous Substances

<p>1. DEFINITION AND INTRODUCTION</p> <p>Australia, Canada, UK, USA and many other countries have extensive legislation to control the use, storage and disposal of hazardous substances. BHP Billiton supports and adheres to these legislative requirements. Federal legislation mandates that employees have a "right to know" about any hazardous substances that he or she is working with or near. Everyone must be made aware of all hazardous substances at each work site and campsite, worldwide.</p>	<p>Project: <input style="width: 100%;" type="text"/></p> <p>Location: <input style="width: 100%;" type="text"/></p> <p>Date: <input style="width: 100%;" type="text"/></p> <p>Reviewer: <input style="width: 100%;" type="text"/></p> <p style="text-align: center;">Comments</p>
<p>To ensure the health and safety of personnel, and protection of the environment by:</p>	<input type="checkbox"/>
<ul style="list-style-type: none"> ▪ managing the safe storage, handling, use and disposal of hazardous materials; 	<input type="checkbox"/>
<ul style="list-style-type: none"> ▪ provision and maintenance of appropriate information and safety equipment; 	<input type="checkbox"/>
<ul style="list-style-type: none"> ▪ appropriate training and assessment of persons using or being exposed to hazardous materials; 	<input type="checkbox"/>
<ul style="list-style-type: none"> ▪ developing safe and effective work practices; and 	<input type="checkbox"/>
<ul style="list-style-type: none"> ▪ complying with all applicable laws, regulations and standards. 	<input type="checkbox"/>
<p>All camp and work sites must establish an inventory procedure to identify the types and quantities of hazardous substances kept on-site. Hazardous substances include toxic chemicals, flammable liquids, fuels, compressed gases, explosives, corrosives, acids, caustics, degreasing agent, and paints. Before using a hazardous substance, always try to substitute a non-hazardous or less hazardous product to use in its place.</p>	<input type="checkbox"/>



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2. PLANNING	Comments
Planning is crucial when handling Hazardous Substances. Employees must ensure:	
<ul style="list-style-type: none"> ▪ The type and quantity of material/s required for a particular application/task must be determined. 	<input type="checkbox"/>
<ul style="list-style-type: none"> ▪ Whether these materials are hazardous by checking the Material Safety Data Sheets (MSDS). 	<input type="checkbox"/>
<ul style="list-style-type: none"> ▪ A survey of hazardous materials must be completed and a register of the materials must be maintained. (See appendix 1 “Hazardous Materials Survey and Register”). 	<input type="checkbox"/>
<ul style="list-style-type: none"> ▪ A Risk Assessment including a Job Safety Analysis is carried out and a Safe Work Practice developed prior to use. 	<input type="checkbox"/>
<ul style="list-style-type: none"> ▪ Relevant MSDS sheet is available to all personnel likely to come in contact with hazardous materials. 	<input type="checkbox"/>
<ul style="list-style-type: none"> ▪ They have evaluated what impact the material will have on the environment prior to purchase and use. 	<input type="checkbox"/>
<ul style="list-style-type: none"> ▪ Employer product information sheets can be produced to complement any MSDS 	<input type="checkbox"/>
2.1 Emergency Response Plan	Comments
The use of any Hazardous substance must be incorporated into local and regional emergency response plans	
<ul style="list-style-type: none"> ▪ Reliable communication must be available to assist any emergency response or seek advice pertaining to hazardous materials. 	<input type="checkbox"/>
<ul style="list-style-type: none"> ▪ Copies of the local Project and Regional Emergency Plan must be available. 	<input type="checkbox"/>



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<ul style="list-style-type: none"> Emergency Plan must be formulated for any area where hazardous materials are to be stored, used, transported or disposed of. This plan must include all contingencies, including an action plan for spillage control. 	<input type="checkbox"/>
<p>An emergency manifest (see Appendix 3 attached) should be prepared and provided for all identified hazardous materials. This manifest should be stored in an agreed place, or where emergency services can locate it easily.</p>	<input type="checkbox"/>

<h3>3. PURCHASING</h3>	<h3>Comments</h3>
<p>Wherever possible, acquire products for which the history and application is known. If possible, safer alternative materials should be purchased and used. A new or updated MSDS must be obtained when materials are purchased. If no product MSDS is available then an external specialist must determine the MSDS information.</p>	<input type="checkbox"/>

<h3>4. STORAGE HANDLING AND TRANSPORT</h3>	<h3>Comments</h3>
<p>All hazardous substances must be stored and transported following local, state and federal guidelines. If no guidelines exist then industry best practise or USA, UK, or AUS minimum standard should be used for all storage and transport.</p>	<input type="checkbox"/>
<h4>4.1 Storage</h4>	<h3>Comments</h3>
<ul style="list-style-type: none"> Isolate all flammable materials (e.g. diesel, gasoline, paints, solvents, degreasers, oils or gas cylinders). Store them away from the drill rig, kitchen area, office tent, sleeping tents, etc., in cleared, designated and separated areas, as required by local and BHP Billiton regulations. Ideally, they should be stored at least 100 metres from camp structures. 	<input type="checkbox"/>



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<ul style="list-style-type: none"> ▪ Storage areas for hazardous materials must provide protection from weather and direct sunlight, when required. Refer to the MSDS for the requirements of individual substances. 	<input type="checkbox"/>
<ul style="list-style-type: none"> ▪ Whenever possible, store flammable liquids outdoors or in an isolated structure (e.g., tent) designated for their storage. Follow BHP Billiton guidelines for any indoor storage of flammable liquids (e.g., special fire rated cabinets, fire wall construction). 	<input type="checkbox"/>
<ul style="list-style-type: none"> ▪ Ensure that the quantities and types of materials stored together are compatible. Avoid storing incompatible materials together (e.g., store acids and bases separately, store empty and full gas cylinders separately, store oxidisers separately). 	<input type="checkbox"/>
<ul style="list-style-type: none"> ▪ Use proper and secure storage containers that are appropriate for the materials. 	<input type="checkbox"/>
<ul style="list-style-type: none"> ▪ Where required, create appropriate bunding (dyking) to contain any possible spills. Have the appropriate spill containment kits on-site. 	<input type="checkbox"/>
<ul style="list-style-type: none"> ▪ No smoking, open flames or spark-producing devices are permitted wherever combustibles are stored. 	<input type="checkbox"/>
<ul style="list-style-type: none"> ▪ For all hazardous wastes – 	
<ul style="list-style-type: none"> a. Identify, classify, and label all hazardous waste in accordance with BHP Billiton requirements. Establish waste disposal systems for hazardous materials and their containers. Minimise waste and recycle whenever possible. Use licensed facilities for recycling and disposal. 	<input type="checkbox"/>
<ul style="list-style-type: none"> b. Treat waste oil and oily waste as flammable chemicals. Do not store them with dangerous goods of incompatible classes, in particular, oxidisers. 	<input type="checkbox"/>
<ul style="list-style-type: none"> ▪ Keep accurate records of the use of chemicals and hazardous materials. 	<input type="checkbox"/>



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<ul style="list-style-type: none"> ▪ Clearly label all hazardous substances. Use durable placards and labels to identify materials and their hazardous characteristics. Ensure they are in all appropriate languages for the camp or work site. 	<input type="checkbox"/>
4.2 Transport	Comments
<p>Any hazardous material that is transported must be done under legal requirements such as US Transport of Dangerous Goods (TDG) where applicable. As a minimum, the following should be followed:</p>	
<ul style="list-style-type: none"> ▪ Appropriately equipped vehicles should be used for transport. 	<input type="checkbox"/>
<ul style="list-style-type: none"> ▪ Ensure materials are properly secured and contained to reduce the risk of leakage, spillage, contamination or reaction. 	<input type="checkbox"/>
<ul style="list-style-type: none"> ▪ Ensure proper packaging and labelling of products. 	<input type="checkbox"/>
<ul style="list-style-type: none"> ▪ Prepare and carry a hazardous materials manifest and/or Emergency Procedure Guide. 	<input type="checkbox"/>
<ul style="list-style-type: none"> ▪ Personnel must be instructed in the Emergency Plan for the transport of the hazardous material. 	<input type="checkbox"/>
<ul style="list-style-type: none"> ▪ The driver of a vehicle carrying hazardous materials must have a current dangerous goods license if required by legislation. 	<input type="checkbox"/>
<ul style="list-style-type: none"> ▪ Never transport flammable materials (e.g., fuels, gas cylinders) within a vehicle; transport them safely in the back of a pickup or trayback vehicle. 	<input type="checkbox"/>



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5. ENVIRONMENT	Comments
The following procedures should be followed to protect the environment:	
<ul style="list-style-type: none"> ▪ Remedy any effects immediately. Identify and control contaminated sites. 	<input type="checkbox"/>
<ul style="list-style-type: none"> ▪ Understand the environment and know the effects of poorly managed hazardous materials. 	<input type="checkbox"/>
<ul style="list-style-type: none"> ▪ Measure effects or changes to the environment (surveys before, during and after use). 	<input type="checkbox"/>
<ul style="list-style-type: none"> ▪ Have the necessary spill kits on-site and ensure employees are trained to use them correctly. 	<input type="checkbox"/>

6. USE OF HAZARDOUS SUBSTANCES	Comments
Chemicals can enter your body through:	
a. Breathing (inhalation),	<input type="checkbox"/>
b. Contact such as skin or eyes,	<input type="checkbox"/>
c. Swallowing (ingestion), and	<input type="checkbox"/>
d. Direct blood contact (injection)	<input type="checkbox"/>
<ul style="list-style-type: none"> ▪ Wear appropriate PPE (e.g., gloves, boots, approved chemical goggles, respirator) as indicated on MSDS chemical warning labels. 	<input type="checkbox"/>
<ul style="list-style-type: none"> ▪ Handle all chemicals with care so they do not splash or contact your skin. 	<input type="checkbox"/>
<ul style="list-style-type: none"> ▪ Do not breathe chemical fumes or swallow chemicals. 	<input type="checkbox"/>



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<ul style="list-style-type: none"> ▪ Do not smoke around the chemicals. 	<input type="checkbox"/>
<ul style="list-style-type: none"> ▪ Label storage containers and those used to temporarily hold chemicals. Never leave chemicals, etc., in an unmarked container. Someone might spill it or misidentify it when you are absent. 	<input type="checkbox"/>
All employees must be trained to understand the risks of their exposure to hazardous substances. Employees must know:	
<ul style="list-style-type: none"> ▪ The product category symbols for hazardous substances. 	<input type="checkbox"/>
<ul style="list-style-type: none"> ▪ The location of and how to use Material Safety Data Sheets (MSDS). 	<input type="checkbox"/>
<ul style="list-style-type: none"> ▪ What substances are, or are likely to be, present in their work place. 	<input type="checkbox"/>
<ul style="list-style-type: none"> ▪ Handling precautions to take with on-site hazardous substances. 	<input type="checkbox"/>
<ul style="list-style-type: none"> ▪ Emergency response procedures as outlined in the MSDS for the substances in their work place. 	<input type="checkbox"/>
<ul style="list-style-type: none"> ▪ Decanting must not be done from one container to another unless the container is properly labelled and of the correct type to carry the material. 	<input type="checkbox"/>

7. MSDS (MATERIAL SAFETY DATA SHEET)	Comments
<p>By law, manufacturers and suppliers must provide an MSDS with hazardous substances they supply. An MSDS may be a single page or several pages in length, depending on the nature of the substance. While the MSDS present important information, they may or may not, be clearly written. You need to read an MSDS carefully to find the health effects, PPE, first aid or emergency procedures, etc., within it.</p>	

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<ul style="list-style-type: none"> An MSDS may always be obtained in English. Try to obtain MSDS in the languages of the camp employees. 	<input type="checkbox"/>
<ul style="list-style-type: none"> Keep all MSDS in an easily accessible central location. They must be accessible to all employees and arranged in an organised system. Keep a copy of the MSDS with the product. 	<input type="checkbox"/>
<ul style="list-style-type: none"> Consult the product MSDS for guidance in use of the correct PPE for the product. 	<input type="checkbox"/>
<ul style="list-style-type: none"> Should an accident occur involving a hazardous substance(s), take the MSDS to the hospital with the victim. Then the medical staff will know what substance(s) they are dealing with. 	<input type="checkbox"/>
MSDS describe important information about the product. Information includes:	
<ul style="list-style-type: none"> The name of the chemical product, including common names for the substance. 	<input type="checkbox"/>
<ul style="list-style-type: none"> The CAS and PIN numbers of the chemical. These are unique product identification numbers for the specific chemical compound under two different classification systems. 	<input type="checkbox"/>
<ul style="list-style-type: none"> Hazardous ingredients – this includes the specific chemical identity, chemical ingredients and concentrations of components of the substance. 	<input type="checkbox"/>
<ul style="list-style-type: none"> Preparation information – this includes the date of preparation and the identification and address of the supplier of the substance so they may be contacted 24 hours a day in case of emergency. 	<input type="checkbox"/>
<ul style="list-style-type: none"> Physical and chemical properties of the substance. 	<input type="checkbox"/>
<ul style="list-style-type: none"> Fire and explosion hazard – fire fighting measures, conditions of flammability, details of dangerous break-down products that might be generated by burning. 	<input type="checkbox"/>
<ul style="list-style-type: none"> Reactivity information – stability, products with which it is incompatible, etc. 	<input type="checkbox"/>



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<ul style="list-style-type: none"> ▪ Toxicological properties – route of entry into the body, exposure limits, effects of exposure, carcinogenic characteristics, known acute and chronic health effects. 	<input type="checkbox"/>
<ul style="list-style-type: none"> ▪ Preventative measures – PPE (Personal Protection Equipment), handling and storage requirements, shipping information, disposal requirements, spill control procedures. 	<input type="checkbox"/>
<ul style="list-style-type: none"> ▪ Hazards of the chemical and related health information, environmental hazards, etc. 	<input type="checkbox"/>
The MSDS may contain specific first aid measures, emergency and first aid measures, etc., and the classification of the chemical – toxic, carcinogenic, flammable, corrosive properties, etc.	<input type="checkbox"/>

8. PRESURISED GASES	Comments
Hazards arise from the flammable and toxic properties of a gas, plus the fact that the gas is stored under pressure in special cylinders. Precautions include:	
<ul style="list-style-type: none"> ▪ Use a compressed gas solely for its authorised purpose. 	<input type="checkbox"/>
<ul style="list-style-type: none"> ▪ Use the correct equipment with a particular compressed gas. Do not substitute equipment designed for use with a different compressed gas. All connections must be in good condition. Never use mismatched components with threads that do not fit exactly. Use red hoses for acetylene and combustible gases. 	<input type="checkbox"/>
<ul style="list-style-type: none"> ▪ Maintain gas cylinders upright and securely attach them in that position (while in use or in storage). Always protect cylinders and connections from heat sources (including direct sunlight) and weather (including rain, ice, blowing snow or sand). Keep cylinders dry to help prevent corrosion. 	<input type="checkbox"/>
<ul style="list-style-type: none"> ▪ When in use, place cylinders on a solid base and secure them so they cannot tip over. Place protecting collars on cylinders. 	<input type="checkbox"/>
<ul style="list-style-type: none"> ▪ Isolate oxygen cylinders from other gas cylinders. 	<input type="checkbox"/>



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<ul style="list-style-type: none"> ▪ Avoid mechanical shocks (e.g., dents) to cylinders at all times. Be especially careful in very cold climates as the steel may become brittle. 	<input type="checkbox"/>
<ul style="list-style-type: none"> ▪ Transporting gas cylinders – place them upright in the back of pickup trucks – never inside the cab. Carefully secure all tanks so they cannot shift while underway. Take care not to damage the valves and connections during transport. Load and unload cylinders with the engine stopped. Vehicles that transport gas cylinders should be equipped with an electrically conductive strip for grounding (earthing) static electricity, and exhaust pipes should have a flame control device. Use the correct installation methods, the correct tools and the proper fittings (regulators, hoses, etc.) when you connect propane cylinders to fuel lines. 	<input type="checkbox"/>
<ul style="list-style-type: none"> a. Secure the propane cylinder upright against the outside wall of the building, tent or drill shack, etc. 	<input type="checkbox"/>
<ul style="list-style-type: none"> b. Connect the feed hose (from the stove, refrigerator, torch, etc.) to the regulator of the cylinder. 	<input type="checkbox"/>
<ul style="list-style-type: none"> c. Open the shut-off valve on the propane cylinder. 	<input type="checkbox"/>
<ul style="list-style-type: none"> d. Use soapy water to check for leaks at the joints and fittings. Never use a flame to check for leaks. 	<input type="checkbox"/>
<ul style="list-style-type: none"> e. Turn the shut-off valve a quarter turn to light the pilot light of the heater, stove, refrigerator or the torch, etc. 	<input type="checkbox"/>
<ul style="list-style-type: none"> ▪ Ensure that emergency shut-off valves are correctly installed (fitted) and that they work properly. 	<input type="checkbox"/>
<p>Propane (liquefied petroleum gas – LPG)</p>	<p>Comments</p>
<p>Propane gas is compressed into liquid and stored in special cylinders. Handle propane tanks carefully. In addition to the general procedures above, follow these precautions:</p>	



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<ul style="list-style-type: none"> ▪ The pressure of the propane varies with the temperature of the liquid propane, not with the amount of propane in the cylinder. Never heat up a propane tank to try to increase the flow of gas from the tank by using a torch, etc. 	<input type="checkbox"/>
<ul style="list-style-type: none"> ▪ Shield propane tanks from radiant or blower heat sources, and shield hoses from excessive heat and traffic. 	<input type="checkbox"/>
<ul style="list-style-type: none"> ▪ Store full and empty gas cylinders separately outdoors. Never store propane tanks inside living or working quarters. As propane gas is heavier than air, it will accumulate in low areas. It is essential to have good ventilation around all equipment that burns propane, as even a small leak may allow enough gas to accumulate in a confined space to cause an explosion. 	<input type="checkbox"/>
<ul style="list-style-type: none"> ▪ Propane tanks have a limited life span. Do not use corroded or rusty tanks or those with expired dates. 	<input type="checkbox"/>
<ul style="list-style-type: none"> ▪ Propane tiger torches are useful to heat drilling equipment in very cold weather. Use them carefully. 	<input type="checkbox"/>
<p>Acetylene</p>	<p>Comments</p>
<ul style="list-style-type: none"> ▪ Follow manufacturer's instructions for the use, maintenance and storage of acetylene gas and welding equipment. 	<input type="checkbox"/>
<ul style="list-style-type: none"> ▪ Secure acetylene cylinders in an upright position when in use, being stored or in transit. All hoses must be fitted with proper flashback protectors. 	<input type="checkbox"/>
<ul style="list-style-type: none"> ▪ Shield acetylene cylinders and do not allow them to become warm or hot. Acetylene may decompose upon heating and eventually cause the cylinder to explode. 	<input type="checkbox"/>



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9. PPE (PERSONAL PROTECTIVE EQUIPMENT)	Comments
PPE must be selected:	
<ul style="list-style-type: none"> ▪ After all other control measures have been evaluated. (Use Hierarchy of Control during Risk Assessment). 	<input type="checkbox"/>
<ul style="list-style-type: none"> ▪ In accordance with the personal protection information in the relevant MSDS. 	<input type="checkbox"/>
<ul style="list-style-type: none"> ▪ As indicated by supervisor or the appropriate safe work practice. 	<input type="checkbox"/>
PPE must be used and maintained accordingly (as per instructions).	<input type="checkbox"/>

10. DISPOSAL	Comments
As part of planning process disposal should be thought of as part of process required.	
<ul style="list-style-type: none"> ▪ Determine if there is a licensed disposal facility in the local area. 	<input type="checkbox"/>
<ul style="list-style-type: none"> ▪ All treatment, recycling or disposal of hazardous materials must be done at this licenced facility. 	<input type="checkbox"/>
<ul style="list-style-type: none"> ▪ Assess environment risks (e.g. drainage system) before disposal. 	<input type="checkbox"/>
<ul style="list-style-type: none"> ▪ Assess the consequences of hazardous materials mixing as a result of disposal. 	<input type="checkbox"/>
<ul style="list-style-type: none"> ▪ Use appropriate containers for materials (chemicals, batteries, syringes, etc) during disposal. 	<input type="checkbox"/>

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11. SPECIFIC HAZARDOUS SUBSTANCES	Comments
Silica Dust	
Drilling, blasting, crushing and sawing rock produces dust high in silica content that is harmful to lungs. Exposure to respirable silica dust may cause silicosis, a deadly lung disease. While it usually takes years to develop, silicosis may develop after only a few months if exposure is high enough.	<input type="checkbox"/>
Silica dust is also implicated as a source of lung cancer. Seek guidance from the HSEC Advisor if there is a possibility that silica dust may pose a health problem at the camp.	<input type="checkbox"/>
<ul style="list-style-type: none"> ▪ Core saws should always contain a water-misting device when cutting core to reduce the amount of silica dust that becomes airborne (use PPE). 	<input type="checkbox"/>
<ul style="list-style-type: none"> ▪ Freshly fractured silica dust is more reactive than old dust. Therefore, cutting core, sawing rocks and drilling procedures produce highly reactive silica dust. This means that your lungs are at greater risk when you engage in these tasks than when you are exposed to old silica dust. 	<input type="checkbox"/>
<ul style="list-style-type: none"> ▪ As you breathe more frequently (hyperventilate) at high altitudes, your exposure to silica and other airborne contaminants and gases may increase over that which would occur at lower elevations. 	<input type="checkbox"/>
<ul style="list-style-type: none"> ▪ Temperature changes, relative humidity and air density affects the accuracy of detection equipment. Therefore, calibrate the portable detection and sampling equipment at the sampling site rather than at sea level, especially at high altitude work sites. 	<input type="checkbox"/>
<ul style="list-style-type: none"> ▪ It is advisable to reduce exposure limits to silica dust from the threshold limit values (TLVs) in situations where exposure exceeds an 8-hour workday and a 40-hour workweek. This is a common occurrence in many field camps. 	<input type="checkbox"/>



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12. DRILLING ADDITIVES	Comments
Contractors may use chemical drilling fluid additives to alter the physical properties of drilling mud. Most of these are highly alkaline and can cause skin burns and eye injury. Potassium chloride, potassium hydroxide and soda ash are used to raise pH levels. Sodium chloride (common salt) is commonly used as a weighting agent to increase fluid density, to aid in drilling water sensitive clays and shales and as an anti-freeze in very cold regions. Calcium chloride, which is exothermic, is used to prepare low solids, high-density drilling mud for use in permafrost. Sodium bicarbonate is used to lower pH and to treat cement contamination. Follow the MSDS directions for handling drilling additives. Stand upwind when they are being used to avoid breathing the particles.	<input type="checkbox"/>
Zinc Zap	
"Zinc Zap" is a solution of two chemicals (potassium ferrocyanide and oxalic acid + N, N-diethylaniline). BHP Billiton Minerals Exploration prohibits the use of Zinc Zap at its drill sites due to its harmful properties.	<input type="checkbox"/>
Hydrofluoric Acid (HF) HIGHLY DANGEROUS.	
BHP Billiton Minerals Exploration recommends that staff use other products than Hydrofluoric Acid (HF) when another appropriate product can be used for the same purpose.	<input type="checkbox"/>
Caustic Soda (NaOH)	
BHP Billiton Minerals Exploration prohibits the use of caustic soda (NaOH) at its drill sites. There are less hazardous chemicals available for raising the pH of drilling fluids.	<input type="checkbox"/>



Standard Operating Procedure for Hazardous Materials – Appendix 1

Example of HAZARDOUS MATERIALS SURVEY AND REGISTER

BHP Contact (name) **Emergency Phone No.**

BHP Storage Location (Address) **State/Prov**

Material/Substance - The common and chemical name that will clearly identify the material. This may include the product number, brand or local name, etc.

Where it is used - This will be an indication of where the material will be normally found or used in the work place.

Quantity held - This should be the approximate quantity normally held in the area. If this varies significantly then this should also be indicated.

How purchased - List the type and size of container that the material is in when it is delivered to the workplace.

Supplier - List the name of the supplier of the material and their address.

Purpose/Use - What is the material intended for or actually used for? If the material is used for more than one purposes then these should be listed.

Potential hazards & control - Assess for hazards associated with the intended and actual use, and list control measures required to reduce the hazard.

MSDS and United Nations number - Record numbers for quick reference to MSDS or in for use in the event of an emergency.

Hazchem code and dangerous goods class - Useful information in the event of an emergency to supply to emergency services.

Material/Substance	Where used / located?	Quantity (L or Kg)	How purchased (type and size)	Supplier (name & address)	Purpose or use	Hazards and Control	MSDS and UN number	Hazchem code/Class
Hydrochloric acid	used outside stored in shed	4 Litres	black plastic bottles 500ml	AJAXCHEM	cleaning mineral testing	fumes/corrosive ventilation/PPE	2028J UN 1789	2R Group II
Liquid Propane Gas (LPG)	caravans & camps stored in shed	13 kg	9kg bottle 2kg bottle	CIG Gas Pty Ltd St Leonards, NSW	cooking	asphyxia, fire, cold, burns/PPE tests ventilation	062 UN 1075	2WE Class 2.1
Shell Ultra Unleaded Petrol	field camps stored in shed	40 Litres	20L jerry can	Shell Co Aust 1 Spring st, Melb	fuel for motors	dermatitis, fume & fire/vent PPE	1302 UN 1203	3(Y)E Class 3.1

Name Position Signed Date



Standard Operating Procedure for Hazardous Materials – Appendix 2

EMERGENCY PROCEDURE GUIDE GROUP TEXT CARD

NAME	UN No	HAZCHEM
TRADE NAME		

EMERGENCY CONTACTS

POLICE OR FIRE BRIGADE: DIAL 000 - If ineffective Dial 1100 (exchange)

Organisation	Location	Telephone	Ask for

HAZARDS

Fire	
Health	
Other	

EMERGENCY PROCEDURES

<i>If This Happens</i>	<i>Do This</i>
For All Emergencies	
Vehicle/Truck	
<i>If This Happens</i>	<i>Do This</i>
Spills or Leaks	
Fire <small>(If fire is confined to a vehicle only, refer to vehicle fire EPG)</small>	

FIRST AID

Inhaled	
Eyes	
Skin	
Swallowed	
Burns	



Standard Operating Procedure for Hazardous Materials – Appendix 3

HAZARDOUS MATERIALS EMERGENCY MANIFEST

COMPANY NAME

EMERGENCY CONTACT Name**Phone (24hrs)**

ADDRESS

.....

Phone

Fax

EMERGENCY SERVICE MANIFEST				Location	
.....					
.....					
Category of hazardous material and generic description	Packaging group	Product name	UN Number	Max quantity	Location within store
	<i>PG I</i>				
	<i>PG II & III</i>				
Total quantity					

EMERGENCY SERVICE MANIFEST				Location	
.....					
.....					
Category of hazardous material and generic description	Packaging group	Product name	UN Number	Max quantity	Location within store
	<i>PG I</i>				
	<i>PG II & III</i>				
Total quantity					

Plan of storage area: