SAFE WORK PRACTICES

The following Safe Work Practices (SWP) have been developed for general knowledge on the topic. Safe work practices are generally written methods outlining how to perform a task with minimum risk to people, equipment, materials, environment, and processes. Further information regarding a breakdown of tasks and hazards are located in the Job Hazard Analysis (JHA) / Safe Work Procedures section.

The following SWP's have been developed:

1. Backing Up
2. General Work Requirements
3. H_2S - Hydrogen Sulphide
4. Lifting and Handling Loads
5. Office Safety
6. Slips, Trips, and Falls
7. Use of Portable Fire Extinguishers
8. Working in Adverse Weather Conditions
9. Working on Wellsites
10. WHMIS

***The safety information in this program does not take precedence over any applicable legislation.*

Backing Up

Backing up a vehicle is a manoeuvre that must always be done with extreme caution. Due to limited vision out of the back windows or around long truck beds and equipment bodies, drivers may not see other vehicles, obstacles, or even coworkers and pedestrians when they are driving their vehicles backward.

Go Forward

Do not backup unless you have to. Some good tips include:

- Park so you can leave by driving forward. Most sites have a turn around so that traffic moves in the forward motion only.
- If you are unloading, try to use drive by methods instead of backing up.

Backing Up

- Prior to moving walk around your vehicle looking for hazards existing behind or beside the vehicle. Get out and check frequently in congested areas.
- Pick out some landmarks that you will be able to see in your mirrors.
- Stay well clear of other vehicles, machinery, and pedestrians, objects in the mirrors are closer than they appear.
- Where necessary use someone to guide you when backing up. Follow only the directions of one spotter, and STOP immediately if you lose site of the spotter or if anyone yells STOP.

General Work Requirements

It is the responsibility of Wellsite Geologists to ensure a safe work area for all workers. The following requirements are intended for all area of operations:

Housekeeping
All floors must be kept clean and free from materials or equipment that could cause workers to slip or trip. Any chemicals, bodily fluids, or toxins must not be left out when not in use.

All floors, platforms, walkways, ramps and stairs available for use by workers must be maintained in a state of good repair and kept clean and free from materials or equipment that could cause workers to slip or trip. If areas are converted to storage and taken out of service as part of the general work area all reasonable means for preventing entry or use must be taken.

This must be maintained daily as part of the job you are working on.

Vehicle Traffic Control
When working outside the office you are required to wear Nomex coveralls with reflective strips around the arms, legs, and back to be visible. When our work is being done on or around public roads you must use/rent signs warning oncoming traffic that you are working ahead.

If the vehicle you are driving breaks down pull off the road as far as you can, then ensure you turn on your four-way flashers so that you are visible.

Tire Servicing
Wellsite Geologists employees are not qualified to inspect, disassemble and reassemble a tire or tire and wheel assembly. This service must be performed by professionals and NO employees are allowed to perform this task.

Compressed Air
Compressed air must not be directed towards a worker for the purpose of cleaning clothing or personal protective equipment or for any other purpose if the use of compressed air may cause dispersion into the air of contaminants that may be harmful to workers. Compressed air or steam must not be used for blowing dust, chips, or other substances from equipment, materials, and structures if any person could be exposed to the jet, or to the material it expels or propels. Cleaning objects, machinery, bench tops, clothing and other things with compressed air is dangerous. Injuries can be caused by the air jet and by particles made airborne.

Compressed air is extremely forceful. Depending on its pressure, compressed air can dislodge particles. These particles are a danger since they can enter your eyes or abrade skin. The possible damage would depend on the size, weight, shape, composition, and speed of the particles. There have also been reports of hearing damage caused by the pressure of compressed air and by its sound.

Compressed air itself is also a serious hazard. On rare occasions, some of the compressed air can enter the blood stream through a break in the skin or through a body opening. An air bubble in the blood stream is known medically as an embolism, a dangerous medical condition in which a blood vessel is blocked, in this case, by an air bubble. An embolism of an artery can cause coma, paralysis, or death depending upon its size, duration, and location. While air embolisms are usually associated with incorrect diving procedures, they are possible with compressed air due to high pressures. While this seems improbable, the consequences of even a small quantity of air or other gas in the blood can quickly be fatal.

Unfortunately, horseplay has been a cause of some serious workplace accidents caused by individuals not aware of the hazards of compressed air, or proper work procedures.

A brush or a vacuum cleaner should be used instead of compressed air for cleaning purposes.

Lighting
At Wellsite Geologists, worksite lighting that is sufficient to protect the health and safety of workers and suitable for the work to be done at the worksite must be provided. If it cannot be provided work must cease.

Contaminated Areas
No worker is permitted to eat or drink anywhere at a workplace that is, or may be, contaminated by a hazardous substance.

Access to Work Areas
There must be a safe way of entering and leaving each place where work is performed. Exits must be clearly marked and be free and clear of any obstacles. All work areas should have two points of access/egress to ensure a safe way to exit in an emergency. Prior to the onset of work workers are informed of all access/egress points; if an escape route is or may become hazardous all workers are instructed not to use this route.

Restricted Areas

Locked doors must secure hazardous areas that are not intended to be accessible to workers or equivalent means of security, and a conspicuous sign must be posted at or near the area clearly indicating that it is not to be used.

Smoking

No worker is allowed to smoke in an enclosed place of employment, worksite or work-related area except in an area designated for smoking.

Hydrogen Sulphide (H_2S)

When H_2S is present or has a potential presence, all OH&S regulations, as well as H_2S training procedures must be strictly adhered to.

Hydrogen Sulphide, commonly called H_2S (Sour Gas), is highly poisonous gas and is a killer in high concentration. H_2S can be found near sour wells, sewers, plant sites, sour tanks, and any well being drilled (unknown H_2S content). A properly maintained H_2S meter must be worn at any site where H_2S is known to exist or may potentially be encountered. If you do not know if you are going into a sour area be prepared...wear an H_2S meter and ensure contact is maintained on a regular basis with someone who can help in an emergency. Emergency contacts can include fellow workers in the area, and client operators, if these are not available ensure regular contact with the Wellsite Geologists office. If you are working alone make sure your contact is aware that you are in a sour area.

The following is discussed in this procedure: exposure to H_2S, the conditions under which a worker will be required or permitted to work, including the frequency, quantity and duration of exposure to H_2S, and the steps that the employer will take to ensure that no worker's personal exposure exceeds the ceiling limit and 8 hour OEL.

Hydrogen Sulphide properties are:

Colour	-Colourless
Odor	-A smell similar to rotten eggs
Density	-Heavier than air (1.189)
Explosive	-Mixed with the right proportion of air of oxygen, H_2S is explosive (40%-46%)
Flammability	-H_2S will ignite at 260^{0}C and burn readily with a blue flame, producing Sulphur Dioxide, another unpleasant gas that will irritate the eyes and lungs.
Solubility	-H_2S can be dissolved in fluids. If the fluid's temperature increases or becomes agitated, H_2S will be released.
Boiling Point	-Is -60^{0}C, so we would likely find H_2S as a gas instead of a liquid.

Occupational Exposure Limit (OEL)

When the potential for worker exposure to H_2S is identified during the hazard assessment, Wellsite Geologists will ensure:

- that a worker's exposure to the H_2S is kept as low as reasonably achievable.
- a walkthrough survey is conducted to assess the potential for overexposure taking into account inhalation, and
- reassessment is conducted when there is a change in work conditions which may increase the exposure, such as a change in production rate, process or equipment. If the walkthrough survey reveals that a worker may be at risk of

overexposure to H_2S, Wellsite Geologists will ensure that air sampling is conducted to assess the potential for overexposure.

However, when the amount of H_2S in the environment is 10 ppm or less, the worker can function for eight (8) hours without significant side effects. This is called the Occupational Exposure Limit (OEL). Atmospheric testing results will be assessed before a worker is exposed.

Ceiling Limit
When the amount of H_2S in the environment is 15 ppm (Alberta) / 10 ppm (British Columbia) or higher, an appropriate breathing apparatus must be worn if the work has to be done in that area. This is called Ceiling Limit.

The following are limits you should be aware of:

10 ppm	.001% Occupational Exposure Limit (OEL) for 8 hours
100 ppm	.01% will kill the sense of smell within 3 to 15 minutes
200 ppm	.02% loss of smell rapidly and will burn the eyes and throat
500 ppm	.05% loss of reasoning and balance; breathing will stop within 15 minutes or less
700 ppm	.07% unconscious very quickly, breathing will stop, and the result will be death if not rescued promptly
1,000 ppm	.1% unconsciousness immediately results; will have permanent brain damage or death, if not rescued promptly
10,000 ppm	1% may result in death at once, if not rescued promptly

When you encounter H_2S or suspect the presence of H_2S:

1. **EVACUATE**
   Get to a safe area immediately.
   Move upwind if release is downwind of you.
   Move crosswind if release is upwind of you.
   Move to higher ground if possible.

2. **ALARM**
   Call for help "Man Down", sound bell, horn, whistle or call for help by radio.

3. **ASSESS**
   Do a head count. Consider other hazards.

4. **PROTECT**
   Put on breathing apparatus before attempting rescue.

5. **RESCUE**
   Remove victim to a safe area.

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6. **REVIVE**
   Apply CPR if necessary.

7. **MEDICAL AID**
   Arrange transport of casualty to medical aid. Provide information to Emergency Medical Services (EMS).

The following precautions should be strictly observed when H_2S is known to be or suspected of being present as part of the normal working environment:

- Maximum care should be taken to prevent the escape of Hydrogen Sulphide into air surrounding any work area.
- Adequate ventilation should be provided.
- Before entering any area suspected of containing Hydrogen Sulphide, determine whether or not the gas is present, ongoing monitoring is required. All workers are required to wear a personal monitor.
- Never enter an area suspected of Hydrogen Sulphide without proper protective breathing apparatus and employing the "Buddy System".

Where it is not reasonably practicable to reduce a worker's personal exposure to Hydrogen Sulphide below 10ppm over an 8 hour workday Wellsite Geologists will provide an approved respiratory protective device. All workers will be required to use the respiratory protection. All employees, who are to work in areas where Hydrogen Sulphide gas may be encountered, must review the comprehensive instructions as to the dangers of the gas and how to properly use the breathing apparatus. The use of personal protective equipment as the primary means to control exposure is permitted only when:

- substitution, or engineering or administrative controls are not practicable, or
- additional protection is required because engineering or administrative controls are insufficient to reduce exposure below the applicable exposure limits, or
- the exposure results from temporary or emergency conditions only.

Wellsite Geologists requires that all personnel working in H_2S or H_2S potential areas have a current H_2S Alive (or equivalent) training course (renewed every **three years**). This training includes clear information on the possible effects on worker health and safety, and any precautions required to protect the health and safety of the worker. The supervisor and the worker are trained in and follow all above emergency procedures.

Lifting and Handling Loads

Safe lifting is important to ensure the protection of the health and safety of every employee. Every feasible effort shall be made to provide a work environment that allows workers to maintain a healthy back. Wellsite Geologists recognizes this and expects all workers to follow these procedures. This shall be accomplished by implementing acceptable engineering controls and work practice controls, where applicable.

Training

All Wellsite Geologists workers who may be exposed to the possibility of musculoskeletal injury (MSI) receive training in this policy including the following specific measures to eliminate or reduce the possibility of MSI:

(a) Identification of factors that could lead to a musculoskeletal injury,

(b) The early signs and symptoms of musculoskeletal injury and their potential health effects, and

(c) Preventive measures including, where applicable:

- Safe methods of manually lifting, adapting, holding, or carrying of loads.
- The use of altered work procedures,
- The use of mechanical aids, and
- Personal protective equipment.

Following these general safe practices will help all employees protect their back while lifting:

- A hazard assessment must be performed before a worker manually lifts, lowers, pushes, pulls, carries, handles or transports a load that could injure the worker.
- Wherever possible, pack shipments so all containers are less than 20 kg.
- Size up or test a load before attempting to lift to see if you can handle it. Never attempt to lift an oversized or awkward load alone.
- Reduce oversized or awkward loads by splitting into smaller loads.
- Use suitable mechanical equipment (dolly, crane, etc) to reduce the load.
- Make sure the route or path that you intend to take is clear.
- Use extreme caution when carrying items across uneven terrain, or up or down stairs.

Keep your back straight. Bend at your knees as far as you can and still be able to return to an upright position. Initiate the lift and come to an upright position with your leg and buttock muscles. Tighten your abdominal muscles to help brace your back as you lift. Keep the object close to your body. Keep your head higher than your shoulders. Grip with your whole hand – not just your fingers.

If an injury occurs

If a worker reports what the worker believes to be work related symptoms of a musculoskeletal injury, Wellsite Geologists must promptly review the activities of that worker, and of other workers doing similar tasks, to identify work-related causes of the symptoms, if any, and take corrective measures to avoid further injuries if the causes of the symptoms are work related.

Office Safety

Injuries and incidents in the office are just as painful and costly as those in the field. The office is to be kept safe and tidy. Know the escape route to take in a fire and contact the fire department for assistance by dialling 911 after you have evacuated the premise.

Working Alone or at Night

- Ensure the door is locked at all times.
- Do not let anybody in, unless you know him or her.
- Prior to leaving, look outside for suspicious looking people.

Housekeeping

All floors must be kept clean and free from materials or equipment that could cause workers to slip or trip. This must be maintained daily as part of the job you are working on.

Filing and Storage Cabinets

To prevent cabinets from tipping over:

- Bolt cabinets together side by side or to support walls.
- Do not overload the top shelves when using filing and storage cabinets.
- Open drawers one at a time so as not to unbalance the cabinet.
- Close the drawers when they are not being used.
- Use the handles for closing the drawers to prevent fingers from being pinched.

Paper Cutters and Shredders

After using the paper cutters, close the blade. Be very careful when using the paper shredder not to catch jewellery, ties, clothing or long hair in the blades.

Wastepaper Baskets

Never use a wastepaper basket as an ashtray as this could easily start a fire. When disposing of glass or sharp-edged cans in the wastepaper basket, place them first in a paper bag and mark the contents clearly.

Electrical Cords

- To avoid a fire hazard, ensure that all electrical cords are in good condition and are not overloaded, have any worn cords repaired or replaced immediately.
- To avoid a tripping hazard, do not run any electrical or telephone cords across aisles or walkways. Ensure cords do not create tripping hazards around desks.

- Never pull a cord from the wall socket by yanking on the cord; pull the plug instead.

Floors, Aisles and Stairs

There are many possible ways to slip and trip in an office. To prevent tripping and slipping:

- Keep floors, aisles and stairs free of debris and storage boxes. Pick up debris.
- Do not obstruct your view while walking around by reading or carrying oversized loads.
- Wipe up spills immediately.
- Watch for slippery surfaces.
- Report and correct unsafe conditions.
- Hold the handrail when using the stairs.

Ladders

When using a ladder:

- If the ladder is a stepladder, ensure that it is fully spread open on a level surface before beginning to climb.
- Do not stand on either of the top two steps of the ladder.
- Do not reach to the side when on the ladder; instead, get down and move the ladder.
- Never paint a wooden ladder.

Flammable Materials

- Never use flammable cleaning fluids, such as gasoline, varsol or naphtha in an office.
- Keep any flammable materials in approved containers that are labelled.
- Never leave the containers uncapped.

Fans

- Use only fans with wire mesh safety guards that completely cover the fan blades.
- Never remove the guards.

Improper Storage of Heavy Items

Large stacks of materials and/or heavy articles can pose a great safety risk to employees if they fall or are knocked over. Heavy items should always be stored close to the floor, and care should be taken never to exceed the safe load capacity of shelving or storage units.

Running
Avoid running in the office.

Space Heaters
Portable space heaters can pose a major fire hazard if used improperly. Space heaters in the workplace should always be approved for use by the CSA, never placed near combustible materials, and have a tip-over switch to ensure they will turn off automatically if knocked over. Space heaters should also never be used with an extension cord.

- Only plug one space heater in each circuit to avoid blowing a fuse.
- Turn off space heaters before leaving, even if you will be back in a short while.

Smoking

- All offices are non-smoking areas.
- Smoking is only permitted outside, away from the door.

Fire Precautions

- Ensure that you know that the fire extinguisher covers all types of fires (ABC) and is kept in the kitchen.
- Ensure that the extinguisher is properly maintained.

Slips, Trips, and Falls

EnForm has put together a *Guide to Safe Work...Slips, Trips, and Falls (Revised October 2005);* information from this guide is referenced throughout this practice. In Canada, about 60,000 workers are injured on the job from slips, trips, and falls every year. This accounts for 15 percent of the lost-time injuries accepted by Workers' Compensation Boards (WCBs) across the country. Besides being a huge financial loss, these injuries can cause people pain and suffering, and much too often, even death.

Toolbox Talks

We raise awareness of slips, trips, and falls in toolbox talks throughout the year. Topics of discussion include:

- Personal Protective Equipment: Footwear, use, care, and maintenance and Fall protection
- Mental and Physical Conditions
- Housekeeping: standards and expectations
- Slipping – tripping – falling: Causes and Prevention

Causes of Slips, Trips and Falls

Bumps and bruises, sprains and strains, tears and broken bones—these are all injuries you can get from slips, trips, and falls. But some more serious injuries can occur as well, such as head injuries and impalement.

Causes	Prevention
Slips	
Slips happen when you don't have enough traction or friction between your boots and what you're walking on. Surfaces can vary, so expect a slippery or loose surface only a few strides away. Watch **for substances on surfaces that can make them slippery** such as • Frost or snow • Visible or black ice • Freshly waxed flooring • Oil or spills of any kind • Water or wetness, such as wet mud • Smooth, cold surfaces (eg, cold metal stairs) **Look out for loose items on top of surfaces**—these can cause slipping hazards (e.g., loose, unanchored mats that can slide out from under you, and small-diameter gravel). Other factors that can cause slips are **poor lighting and lack of attention to hazards**.	Take your time and pay attention to where you are and where you are going. • Be aware of **lighting issues** such as poor light, blind spots, or shadows that hide objects. Also, schedule outdoor work during daylight hours. • Create **temporary or permanent additional traction** by spreading sawdust to absorb liquids and provide traction, or by coating floors with paint embedded with sand. • **Replace floors, or use mats, pressure-sensitive abrasive strips, abrasive-filled paint-on coating, or metal or synthetic decking.** But remember that even this high-tech flooring still requires good footwear and good housekeeping for safety. • If needed, wear **overshoes for better traction**—especially over gripless dress shoes. • **Shorten your stride** to suit walking surfaces and tasks. • **Point your feet outward slightly** for extra balance. • Make **wide turns at corners**. • Keep **one free hand** (a "hand for yourself") when you're using stairs, ladders, or ramps.

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Causes	Prevention
Trips	
Trips occur when your foot hits something in your way so that you lose your balance and fall. Watch for **uneven surfaces** such as • Wrinkled rugs or carpet • Frozen vehicle ruts • Uneven steps, thresholds, or slopes Look out for **things in your path** such as • Materials, tools, or clutter on the ground or floor • Uncovered cables • Low cabinet drawers left open • Narrow or short steps As with slips, there are some general factors that contribute to trips: **lack of attention**, **poor lighting**, and any **obstructions that limit your line of vision**.	Take your time and pay attention to where you are and where you are going. • Be aware of **lighting issues** such as poor light, blind spots, or shadows that hide objects. Also, schedule outdoor work during daylight hours. • Make sure anything you're carrying, pushing, or moving doesn't stop you from being able to **see tripping hazards**. • Use the engineered devices that help you keep your balance, such as **handrails** on stairs. • Ensure good Housekeeping. • **Point your feet outward slightly** for extra balance. • Keep **one free hand** (a "hand for yourself") when you're using stairs, ladders, or ramps.
Falls	
Since **falls from low elevations** or walking can cause serious injury and even death, **falls from higher elevations** can clearly be much more serious. The following situations may cause you to fall—whether it's a short distance while walking, or from relatively low elevations, or from higher up: • **Jumping** from a platform to the ground or **climbing** from equipment to the ground • **Falling off** the side or edge of an area of construction or through a wall opening • Stepping into a **floor hole** you didn't see • **Falling off**, or along with, an improvised stepping stool you're using for added reach • Unbalancing a ladder by **leaning** off it instead of getting down and moving it (These reaches are the source of most falls from short heights.)	Take your time and pay attention to where you are and where you are going. • Be aware of **lighting issues** such as poor light, blind spots, or shadows that hide objects. Also, schedule outdoor work during daylight hours. • Use the engineered devices that help you keep your balance, such as properly maintained and used **ladders and ramps**. • Use barriers such as **guardrails**, and warning devices such as **flagging tape**, for unprotected/ open sides, edges, wall openings, and floor holes. • Remember the importance of using **three-point contact** when you're getting in and out of vehicles and equipment, or climbing ladders. **How do you prevent falls from higher up?** You'll need to learn about freefall limits, clear fall paths, and total fall distance. You'll also need to select appropriate personal protective equipment (PPE) and use it properly.

Mental and Physical Condition

Mental impairment can be from fatigue, drinking alcohol or taking drugs—either illegal drugs or some over-the-counter medications. Mental impairment increases the likelihood that you will slip, trip, or fall. If your mental condition is impaired, your ability to notice and react to hazards is reduced. And any loss of mental focus, such as daydreaming about your new pay raise or what you're going to do next weekend, also takes your mind from your task.

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If you're in good physical condition, you will have quicker reflexes and limber, toned muscles to help you keep or recover your balance. And if you fall, being in good condition will help you recover faster. This becomes even more important when you get older because, as you age, your ability to recover from an injury slows down. If you're an office worker, this still applies. Working in one place for long periods may reduce your ability to respond to a slip, trip, or fall and add to the severity of injuries. Basic stretching for mobility and flexibility can help protect you from injury.

Housekeeping

Poor housekeeping can cause injuries such as trips over loose objects; slips on greasy, wet, or dirty surfaces; impacts against projecting objects; and cuts or punctures on nails, wire, or steel strapping that is sticking out. Worksite housekeeping includes keeping work areas neat and orderly, maintaining unobstructed halls and floors, and removing waste from work areas. It should be an ongoing operation. The follow must be done regularly:

- Mop or sweep debris from floors.
- Remove walkway obstacles and clutter.
- Secure mats, rugs, and carpets that do not lie flat.
- Regularly inspect, clean, and repair all tools and take any damaged or worn tools out of service.
- Close file cabinet or storage drawers.
- Cover cables that cross walkways.
- Clean up any spills immediately.
- Mark spills and wet areas including just-cleaned floors.
- Keep working areas and walkways well lit.
- Replace burnt-out lights and faulty switches.

Use of Portable Fire Extinguishers

The purpose of this practice is to protect workers from injuries associated with IMPROPER use of fire extinguishers.

Portable fire extinguishers must be installed, inspected and maintained on a regular basis to ensure proper operation in an emergency. Wellsite Geologists is required to ensure proper selection of equipment with regards to the work hazards and regulations.

Training

Supervisors are responsible to facilitate and/or provide proper instruction to their workers. The training must address the following worker responsibilities:

1. Ensure you are fully trained with operation and maintenance of fire extinguishers.
2. Check Cylinder.
3. Inspect cartridge puncture cap.
4. Weigh cartridge.
5. With cartridge removed, check action of puncture lever.
6. Check hose and nozzle for obstruction.
7. Check date of manufacture.
8. Check level and condition of powder.
9. Check fill-cap threads and gasket.
10. Attach visual seal.
11. Check Pressure Gauge.

Procedure

As soon as a fire is discovered:

- Sound the alarm and start to evacuate.
- Call the fire department.

These are important steps for everyone's safety, even if you feel the fire can be brought under control by using an extinguisher.

If you decide the fire is manageable…

- Test that the extinguisher works before you approach the fire.
- Protect yourself at all times.
- Take care. Speed is essential but it is more important to be cautious.
- Keep your back to the exit at all times and stand 2 to 2.4m (6 to 8 ft.) away from the fire.
- Follow the 4-step P-A-S-S procedure:
    1. Pull the pin (release the lock latch or press the punch lever).

2. Aim the nozzle at the base of the fire.
3. Squeeze or press the trigger.
4. Sweep the extinguisher from side to side.

If the fire does not go out immediately or the extinguisher appears to be getting empty, leave the area at once. Back out with the lever squeezed and the nozzle pointed at your feet. This will help protect you until you are out of the area.

Working In Adverse Weather Conditions

Temperature extremes, snow, ice, and remote locations all represent significant hazards to workers. These hazards increase when personnel are working alone.

Pre-planning can help to reduce the potential for an injury or other incident. The following should be considered prior to embarking on any travel.

- All vehicles will be equipped with a basic survival kit including blanket, matches, flares (optional), cell phone, extra clothes, water, granola bars, nuts, etc.
- Dress appropriately – ensure you have warm boots, layer clothes, closed toed shoes, etc.
- Follow all working alone procedures if you are working alone.
- Even when not working alone, advise a colleague or supervisor of destination, route, and expected time of return.
- Carry out communication checks before departure and periodically throughout the day.

If weather conditions are such that they make travel hazardous, you will not be required to place yourself at risk. Should this situation arise, notify your supervisor and do not leave home or stop at a nearby hotel.

Electrical Storms

When an electrical storm approaches, remove yourself from construction equipment until the storm has passed. Mobile equipment is grounded and can attract lightning. Before leaving the equipment, remember to shut it down first.

Look for shelter in a building or car; if there is neither nearby and the storm is moving too quickly for you to avoid it, move away from equipment and trees, drop to your knees and bend forward putting your hands on your knees. Do not lie flat on the ground.

Working on Wellsites

There are a range of hazards that may be encounter on a wellsite. Take care to assess the site for hazards before beginning work. Some of these hazards are:

- ***The wellhead may be in an enclosure***. If circumstances require entry into an enclosure be aware that the enclosure can have an explosive mixture built up inside of it from a venting meter or from a leak. Open the building and allow it to ventilate. Test the atmosphere with a gas meter before entering as a sour gas or a sweet gas build-up may exist in the enclosure. Either type is very dangerous. See the H_2S Safe Work Practice for sour gas safety. Sweet gas can build up an explosive atmosphere in the building that only requires a spark to ignite it. A high concentration of sweet gas can purge out the oxygen in the enclosure and this can have fatal consequences for anyone entering the building. A person entering such an atmosphere can fall immediately unconscious, and die in minutes as a result of low oxygen.
- ***The enclosure around a well is sometimes heated***. Such a situation may lead to the enclosure being inhabited by rattlesnakes in cold weather.
- When working on well sites take care to keep your vehicle away from wellhead and piping to avoid damage to that equipment. Ensure a spotter is used at all times while moving around the wellsite.
- Surface casing vents, or any other valves are not to be opened, unless by operator or within your permitted scope of work.
- Well sites, especially oil sites, have moving equipment. Avoid the area around this moving equipment.
- Avoid the exhaust pipe and area around the exhaust pipe.
- Often the ground surface is uneven due to ruts, gullies, animal tracks, slumping, etc. Take care not to trip, roll your ankles, or fall.
- No smoking on a wellsite.
- Report to the Operator any faulty equipment, odours, leaks, etc.

Workplace Hazardous Materials Information System (WHMIS)

The purpose of the WHMIS policy is to protect and educate employees and contractors. It is essential that all Wellsite Geologists workers read, understand, and comply with safe work practices and procedures for WHMIS.

All controlled products (as classified in the classes of Schedule II to the Hazardous Products Act) that are used, stored, handled or manufactured at a work site are done so in accordance with WHMIS. Workers who work with or in proximity to a controlled product have access to all hazard information received from the supplier concerning that controlled product as well as any further hazard information Wellsite Geologists is aware or ought to be aware concerning the use, storage and handling of that product. Wellsite Geologists may store a controlled product in the workplace while actively seeking information required by WHMIS regulations.

The WHMIS program, including the instructional component, is reviewed at least annually, but more frequently if required by a change in work conditions or available hazard information.

Training

WHMIS training, as it pertains to the workplace, is provided to all Wellsite Geologists workers who work with or in proximity to a controlled product. A worker who works with a controlled product is any worker who stores, handles, uses or disposes of a controlled product or who immediately supervises another worker performing these duties. “In proximity” is the area in which the worker’s health and safety could be at risk during storage, handling, use or disposal of the product, maintenance operations or in an emergency situation such as a spill or fire.

All training records are kept in a secure filing cabinet.

Wellsite Geologists WHMIS Training includes:

- The rights and responsibilities of Wellsite Geologists and its workers;
- The product identifier;
- The content required to be on a supplier label and a work site label and the purpose and significance of the information on the label;
- The content required to be on a material safety data sheet including all hazard information and the purpose and significance of the information on the material safety data sheet (MSDS);
- Previous exposure investigation results, if applicable;
- Procedures for safely storing, using and handling controlled products;
- The procedures to be followed in case of an emergency involving the controlled product;
- And the significance of this information.

***The safety information in this program does not take precedence over any applicable legislation.*

Inventory of Hazardous Substances
Wellsite Geologists will keep and maintain a record of all hazardous substances that are used, produced, handled, or stored at the workplace.

Substitution with Safer Products
No person shall use a hazardous substance in a workplace where it is reasonably practicable to substitute that substance for a non-hazardous substance. If a product is available that is less hazardous that substance will be used.

Material Safety Data Sheet (MSDS)
A material safety data sheet (MSDS) must be prepared for a controlled product produced or made at a work site and obtained for all commercial products used at a work site. The MSDS's must be in a form that is easy to handle and be readily available at a work site (including mobile work sites) to workers who may be exposed to a controlled product and to the joint work site health and safety committee.

Wellsite Geologists ensures that the most recent material safety data sheet for controlled products are kept at the work site where the product is being used. All MSDS must be the most up to date copy available, in English & French (where required) and no more than 3 years old.

Supplier Label or Work Site Label
A controlled product or its container at a work site must have a supplier label or a work site label on it.

Supplier Label Requirements
If a supplier label is not attached to a controlled product then the Wellsite Geologists employee is not to use the material until the supplier gives you an MSDS and a supplier label.

A supplier label must appear on all controlled products received at Wellsite Geologists and contain the following information:

- Product identifier - name of product;
- Supplier identifier - name of company that sold it;
- A statement that an MSDS is available;
- Hazard symbols the pictures of the classification(s);
- Risk phrases - words that describe the main hazards of the product;
- Precautionary measures (how to work with the product safely), and first aid measures (what to do in an emergency);
- All text in English and French;
- WHMIS hatched border.

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Worksite Label Requirements
A worksite label must appear on all controlled products produced in a workplace or transferred (decanted) to other containers. Worksite labels may appear in placard form on controlled products received in bulk from a supplier.

These are the minimum requirements for workplace labels:

- Product identifier (product name), as it appears on the MSDS;
- Information for the safe handling of the product;
- Statement that the MSDS is available;
- May contain the WHMIS hazard symbols or other pictograms.

A supplier label must not be removed, modified or altered on a container in which a controlled product is received from a supplier if any amount of the controlled product remains in the container. If the supplier label on a controlled product or its container is illegible or is removed or detached, Wellsite Geologists will immediately replace the label with another supplier label or a work site label.

Airborne Hazardous Substances
Workers will be kept free from an airborne exposure to a concentration of any chemical agent in excess of the value for that chemical agent adopted by the American Conference of Governmental Industrial Hygienists, in its publication entitled Threshold Limit Values and Biological Exposure Indices, dated 1994-1995 (or current version) (with the exception of grain dust in excess of 10 mg/m3 or chrysotile asbestos in excess of one fibre per cubic centimetre).

Where applicable, based on the seriousness of any exposure to a hazardous substance exists, the use of automated warning and detection systems will be utilized.

Pipes and Reaction Vessels
Pipes and reaction vessels will be marked using colour coding, or placards.

Transferring of a Controlled Product
When transferring a controlled product you must ensure that a workplace label is placed on the new container.

When a controlled material is poured into a container that is going to be used immediately, no label is required.

Required labels for decanted products do not apply to a controlled product at a work site if the controlled product is contained or transferred in a piping system that includes valves, a reaction vessel, or a tank car, tank truck, ore car, conveyor belt or similar conveyance.

Hazardous Waste

If a controlled product is a hazardous waste generated at the work site, Wellsite Geologists ensures that it is stored and handled safely using a combination of any means of identification (labels or signs) and instruction of workers on the safe handling of the hazardous waste. This waste will be sent to an approved facility for disposal.

The workers must be informed by a sign and by training if fugitive emissions are present. The signage shall indicate the precautions to be taken in handling them and in case of exposure to them.

Bring Controlled Products onto site Owned by Others

Prior to bringing Controlled Products onto sites of our Clients we will give them a chance to review and approve the selection of the Product. If our Client does not approve the controlled product we will need to find an approved substitute product (at our expense).

WHMIS Symbols

	Class A - Compressed Gas	Contents under high pressure. Cylinder may explode or burst when heated, dropped or damaged.
	Class B - Flammable and Combustible Material	May catch fire when exposed to heat, spark or flame. May burst into flames.
	Class C - Oxidizing Material	May cause fire or explosion when in contact with wood, fuels or other combustible material.
	Class D, Division 1 Poisonous and Infectious Material: Immediate and serious toxic effects	Poisonous substance. A single exposure may be fatal or cause serious or permanent damage to health.
	Class D, Division 2 Poisonous and Infectious Material: Other toxic effects	Poisonous substance. May cause irritation. Repeated exposure may cause cancer, birth defects, or other permanent damage.
	Class D, Division 3 Poisonous and Infectious Material: Biohazardous infectious materials	May cause disease or serious illness. Drastic exposures may result in death.
	Class E - Corrosive Material	Can cause burns to eyes, skin or respiratory system.
	Class F - Dangerously Reactive Material	May react violently causing explosion, fire or release of toxic gases, when exposed to light, heat, vibration or extreme temperatures.

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