

Procedures for Hazardous Wellsite Jobs

Before commencing work on any jobsite, Chinook Consulting Services Subcontractors should request a dated Hazardous Assessment Document from the Client's Consultant.

This document will provide you with jobsite hazards that are pertinent to that jobsite.

This document should be updated on a regular basis or as situations change.

At any time that you identify a hazard that is not included on the Hazard Assessment, you may approach the Client's Consultant and have the list updated.

Setting up Gas Detector:

This is the heaviest procedure that will be performed therefore it runs the highest risk of injury due to the fore mentioned safety factors:

- No contractor will set up a gas detector or collect their own samples if the guard rails around the catwalk have not been installed.
- No Contractor shall set up a gas detector in an area with more than 15ppm of H₂S.
- All contractors will use save lifting procedures, bending the knees, keeping the back straight while you lift with your legs.
- Unpack detector and computer making sure that all components are included.
- Take gas trap and computer analyzer unit (if using wireless unit) over to rig, being careful to keep a free hand for handrails.
- Install gas trap on the shaker box, making sure to install it so that the exit port will be above the shaker box water line. Most gas traps have a lever clamp that will hold the trap in place if not, secure the trap so that it is installed safely with no hazard of it falling or slipping.
- Install the analyzer on a guard rail where it will be out of the way of normal rig operations.
- Make sure that all poly line and extension cords run under the catwalk or along the back side of a rail. Tape all poly line and extension cords up so as not to create a tripping hazard.
- If using a conventional gas trap that has poly line that extends the lease to the well site trailer, install poly line next. The poly line may need to be suspended over the lease, if this is the case the line must be marked with flagging tape so that large trucks and other construction equipment will notice it as an aerial hazard.
- At no time should a contractor get him/herself in a situation where a safety belt and lanyard are necessary. At this time the contractor should get a qualified member of the drilling crew to suspend any line for him/her.
- Before plugging any equipment into any rig outlet, check with the rig crew as to which outlet should be used.
- Set up computer unit inside shack, no additional safety precautions apply.

Working with H2S

At no time should a Chinook Consulting Services Contractor work directly in an area where H2S has been confirmed. No Chinook Consulting Services Contractor should work or enter any environment that has a H2S concentration of 15ppm or greater.

Walking on lease, Rig Move:

Rig moves are probably the most dangerous time, more rig crew members are injured on rig moves than at any other time. There's lots of activity and heavy equipment being moved around. For the most part common sense should govern you, it is a good policy if possible to be off location or stay in your trailer during a rig move. While walking on location at any time, make yourself be seen. There should be reflective stripes on your coveralls.

Workplace Violence

Violence means the threatened, attempted or actual conduct of a person that causes or is likely to cause physical injury. Violence whether acted upon or by any Chinook Consulting Services subcontractor will not be tolerated.

Acts of violence can take the form of physical contact. Abuse in any form erodes the mutual trust and confidence that are essential to (this employer's) operational effectiveness.

Acts of violence destroy individual dignity, lower morale, engender fear.

And break down work unit cohesiveness.

Acts of violence may occur as a single event or may involve a continuing series of incidents.

Violence can victimize both men and women and may be directed by or towards (this organization's) workers, contractors, visitors and members of the public.

If any Contractor is acted upon in a threatening manner, action should be taken:

- The victim should make his or her feelings known to the offending person, directly or with the assistance of a third party. The offending person needs to be made aware that his or her actions are considered offensive
- Report the incident to the Chinook Consulting Services office
- Report the incident to the Client's representative
- Consult health professional of your choice if you experience any injury or adverse symptom.
- Complete an incident report and send it to the office as soon as possible after the incident, noting the date, time and nature of the offence.
- Any and all incidents reported will be followed through on and investigated if deemed necessary. No action shall be taken against an individual for making a complaint unless the complaint is made maliciously or without reasonable and probable grounds.
- No employee, contractor or other individual affiliated with this organization shall subject any other person to violence.

Working Alone Safely

Under normal circumstances, no Chinook Consulting Services subcontractor should find themselves working on a well site alone. If for any reason a subcontractor should find themselves on a location alone, the subcontractor should inform the office immediately of the situation.

The only other time when a Chinook Consulting Services subcontractor will be working alone is while driving.

All contractors should call/email the office when leaving home to go to a location. They should then again make contact with the office once arriving on location or stopping for the night. All contractors leaving the public road system and entering onto a private road system (i.e. logging road or radio controlled road), should be equipped with a two way radio.

There is not a foreseeable circumstance that would have a contractor on a well site alone, but in the event that this would occur the contractor should call the office immediately and report their alone status. Contact should be maintained with the office on a four hour schedule until the “alone” status is resolved. When working alone, the subcontractor should have an operating cell phone and stay in contact with the Chinook Consulting Services office.

The subcontractor should never endanger them selves by attending to any part of the drilling operation when alone and should carry their cell phone on their person at all times.

Never venture to isolated spots on location. When on or around the rig, inform the driller of your whereabouts. When leaving location for any reason, inform the client’s representative.

Hazard Identification and Control

Hazard Identification

Hazard identification is a necessary step to insure subcontractor safety, all worksite hazards must be identified and proper precautions taken. Before work commences these hazards must be identified, documented and necessary controls put in place.

A Hazard Assessment form should be obtained from the Client's representative when you arrive on location, this form will layout all hazards involved with the job.

Most jobsite hazards will have been identified by the operator; it is the responsibility of the subcontractor to talk with the Prime Contractor's representative about these hazards.

Every subcontractor has the responsibility to access and document hazard specific to his/her own responsibilities within the operation.

It is the responsibility of the subcontractor to attend at least one safety meeting per day and to attend the safety meeting of any new service company, e.g. loggers, cementers, directional companies.

Hazard inspection should include physical hazards, work practices and vehicle inspections.

Examples of physical hazards are:

- Slipping and tripping hazards
- Presence of dangerous gases
- Faulty or missing emergency equipment
- Improper or missing signs
- Faulty machinery, cables, tie-downs, etc.
- Poor housekeeping
- Confined spaces
- Inadequate or missing personal protective equipment
- Blocked exits
- Overhead hazards
- Electrical hazards
- Difficult terrain for vehicular or personal movement
- Flammable, corrosive or explosive materials
- Supply material safety data sheets for any chemicals or hazardous materials that the subcontractor brings on site
- Missing material safety data sheets
- Workplace violence
- Working alone

Examples of work practices to inspect are:

- Know and follow standard work procedures
- Properly use tools and equipment
- Correctly use personal protective and other safety equipment
- Know emergency response procedures
- Properly supervise and direct workers and visitors under your supervision

Examples of equipment and vehicle inspections are:

- Daily inspection by operators to monitor wear and tear (visual circle check)
- Fluid levels, belts, hoses, and electrical connections should be checked
- All subcontractor vehicles must be equipped with a roadside emergency kit which should contain the following, a first-aid kit, blanket, tow rope, flash light, seasonally relevant equipment (i.e. water, candles, warm clothing). All items are expected to be clean and maintained to ensure readiness.

Scheduled Inspections

All contractors should perform these inspections on a regular basis. They should be performed upon arriving on site and then on a regular weekly basis thereafter. You must keep records of your inspections and the actions taken. If problems are life threatening, they should be corrected immediately and workers and company representative should be informed of the situation. Any time a new hazard or dangerous situation arises a new Hazard Assessment should be completed.

Hazard Reporting

Contractors and subcontractors should notify the appropriate supervisor of any hazard they notice on the worksite. Hazard reports can be given verbally or in writing, see hazard report form. Your hazard report should include:

- A description of the hazard and its location
- The risks it presents
- Control measures needed and interim actions taken

All hazards should be immediately investigated and controlled. Written hazard reports should be submitted to this office and will be kept on file. If reported hazard are ignored by a Client's representative, a report to this office should be made immediately by the most efficient means, i.e. email, phone or fax.

Emergency Control

In the event of an emergency, only workers competent in correcting the condition and no others should be exposed to the hazard. Every reasonable effort must be made to control the hazard while the condition is being corrected.

HAZARDOUS JOB INVENTORY (As Performed by Subcontractors)

This is a break down of all the responsibilities of a wellsite geologist. In breaking down the responsibilities this way, it is our hope to identify areas of potential safety concern. Some of these concerns are minor and are best dealt with using common sense and are not meant to insult the reader's intelligence. Some may identify safety concerns not previously thought of and this is the point to this exercise. *Rating = 1 being most dangerous, 5 is least dangerous

*Rating	Job	Safety concern	Control
2	Setting up gas detector	Heavy equipment Maneuvering stairs while carrying a load Slip / Trip / Fall, Strains, Sprains	Procedure required Proceed to Procedures for Hazardous jobs
3	Sample collecting	Slip / Trip / Fall Heavy lifting	Handrails Limit bucket weight
1	H2S	Possibly fatal if inhaled Headache	Procedure required Proceed to Procedures for Hazardous jobs
4	Sample preparation & Invert drilling fluid	Skin abrasions & lacerations Nocuous odor	Use of sample washing unit Use of ventilation fans PPE: Rubber gloves
4	Chemical mixing	Chemical splatter and spills Chemical burns	Ventilation PPE: Safety glasses, rubber gloves
3	Driving	Accidents Hazardous road and weather conditions Off road driving conditions Potential harm from others	Communication protocol required Vehicle safety standards
4	Walking on lease	Rig moves Heavy equipment Other drivers In climate conditions, i.e. mud, snow	Stay out of harms way during rig moves. Wear proper safety footwear for weather Be seen: reflective stripes on coveralls
5	Disposal of unused sample	Heavy Sprains & strains Slip / Trip / Fall	Limit weight to carry Use handrails near garbage disposal units
4	Workplace violence	Personal injury	Use procedures if exposed
5	Working alone	Accidents Illness Emergency	Working alone is discouraged Regular check ins are required