FIRE PROTECTION

It is the expectation of Sonic Drilling Ltd. that every reasonable effort shall be taken to prevent or minimize the risk of fire while conducting construction activities on Sonic Drilling Ltd. projects. The safety of all persons, property, environment and equipment is of utmost importance and shall have the highest priority during any construction phase.

This program encompasses emergency response protocols, guidelines and requirements pertaining to emergency response and fire safety and includes specific guidelines pertaining to hot work performed inside and outside Sonic Drilling Ltd. projects. Requirements under the program shall vary depending on the location, duration and potential hazards identified with a specific task or activity. Hot work may only be undertaken with the express written consent of Sonic Drilling Ltd., and shall be subject to compliance with components of the program. Effective implementation of this program shall ensure that hazards associated with hot work are minimized to the fullest extent.

This program is supplemental to Sonic Drilling Ltd. Site Specific Safety Program and includes specific information pertaining to fire safety measures during the construction phase(s) undertaken on our projects.

In addition to that mentioned within, all construction activities must be conducted in compliance with the rules, regulations, codes and/or bylaws of the authority having jurisdiction, including relative rules and regulations specified within the WorkSafeBC OHS Regulation regarding emergency response, fire protection and public safety.

An Emergency Procedure containing this information shall be posted on the site safety bulletin board.

Responsibilities

Construction Manager – is responsible to provide the workplace all necessary resources required to carry out the objectives of the fire safety plan and procedures noted herein.

Project Superintendent – is responsible to monitor the effectiveness of the fire safety plan, emergency response procedures and ensure all workers on the project comply strictly with the requirements and procedures notes within this plan.

Site Safety Officer – is responsible to conduct day to day inspections of the workplace to ensure practices and procedures regarding context noted herein are being followed. He/she is also responsible to schedule and/or conduct training regarding safe work practices associated with controlling fire hazards ad suppressing fires, including conducting periodic practice drills to check the effectiveness of the plan and procedures on site. During the project orientation to new workers, visitors etc. the components of the fire safety plan and emergency response plan will be reviewed to ensure fire safety and emergency response awareness is clearly understood by all on site.
Worker – is responsible to comply strictly with the requirements noted within this plan, including conducting tasks in a safe manner as can be reasonably expected to eliminate the potential for fire or injury to occur. Any hazards or observations noted by any worker regarding the threat of fire, explosion or personal injury must be forwarded to their respective supervisor, the Project Superintendent, and/or the Site Safety Officer without delay.

Instructions for Fighting Fire

The best means of fighting fires is to prevent them. Workers are responsible for doing everything they can to prevent fires. Smoking is permitted only in designated smoking areas. Workers must know the locations and types of fire extinguishers in their work area. There are four general classes of fires, and each requires a particular type of extinguishing agent.

- **CLASS "A" FIRES** occur in materials such as rags, paper, wood and trash.
- **CLASS "B" FIRES** arise from the vapour-air mixtures found with flammable liquids such as gasoline, oil, grease, paints and thinners.
- **CLASS "C" FIRES** are electrical fires, or fires occurring in or near electrical equipment, thereby presenting the additional hazard of electrical shock.
- **CLASS "D" FIRES** involve combustible metals (e.g.: sodium or magnesium).

Never attempt to fight any fire where

- The fire is spreading at a rapid pace.
- The fire could block your escape route.
- You are alone.
- Heavy smoke or toxic gases are present.
- An explosion has or may occur due to the nature of the products you are attempting to extinguish (example – propane, gas, oily rags and paint).

Before fighting a fire

- Notify the site of the incident occurring by sounding the alarm.
- Call the fire department. DIAL 911.
- At your discretion, decide if the fire is safe to fight (is it spreading).
- Ensure no hazards to yourself.
- Have an escape route at your back – behind you!
Using a multi purpose dry chemical fire extinguisher (i.e. ABC)

Remember the word – PASS

Pull the pin;
Aim low, pointing the extinguisher nozzle at the base of the fire;
Squeeze the handle…..This releases the dry chemical;
Sweep from side to side.

Hot Work Requirement

Sonic Drilling Ltd. requires that any person performing hot work must keep a fire extinguisher nearby the work area for quick deployment.

Fire Watch

Where required, a designated fire monitor will conduct regular inspections of areas where hot work has been completed.

Fire Safety Plans

A hazard assessment review of the project must be conducted in order to develop a Project Specific Fire Safety Plan, which shall include:

1. An architectural drawing (or equivalent) defining the boundaries of the project area;
2. The location of active fire hydrants within 100 metres of the perimeter of the project;
3. The primary and secondary egress routes from any hoarded area, buildings or structures;
4. The location of first aid facilities, telephones and portable fire extinguishers within the project area;
5. The location of any flammable and/or hazardous material storage areas, along with locations of Material Safety Data Sheets for said materials;
6. Emergency contact information (names and numbers) in the event of an emergency situation arising.
Safe Work Practices / Procedures / Instruction

Fire Fighting Equipment

The amount and type of fire fighting equipment will vary from one construction site to another. The minimum types and amount of equipment in all cases shall be:

1. At least one fire extinguisher shall be located on each floor of buildings under construction;
2. The housing for the fire extinguishers must be painted with fluorescent paint and marked “FIRE EXTINGUISHER”;
3. In all cases, the fire fighting equipment shall only be used for its manufactured purpose and shall not be moved without authorization with the exception of an emergency situation arising.

Control Measures

- All “Hot Work” operations must be accompanied with a fire extinguisher positioned nearby in the event of a fire occurring.
- No worker is to leave a work area in which “Hot Work” has taken place until it can be proven that the materials cut or heated are cooled down to the point where they pose no potential threat of fire.
- No “Hot Work” activities will commence above or next to areas known to contain construction debris or materials that are combustible.
- Fuel containers such as those containing gasoline or diesel fuel will be kept sealed and stored in an area away from open spark and/or flame. Signage must be posted noting “Combustible Fuel Stored Here” and make mention of “NO SMOKING”. Fuel containers must not be stored inside of building under construction. A separate storage shed should be constructed and placed at least 30 ft from any building, if possible.
- Compressed fuel containers, such as propane bottles must be stored upright and secured in a designated area away from potential heat or ignition sources.
- No materials or debris should be allowed to accumulate for long periods of time where it can or may become a potential fire hazard. Debris must be disposed of in a timely manner.
- Oily rags must be kept in sealed containers and identified as containing such items.
- Materials and/or debris must be stored or disposed of appropriately to reflect the effort put forth to maintain a clean workplace.
- Access/egress routes must remain clear of any/or all debris or obstructions during the entire course of the project.
- WHIMIS products must be contained properly and have with them the appropriate and current MSDS. Products found to be on site without the MSDS will be removed immediately.
- Smoking will not be permitted within any site office or trailer.
- All contractors on this project will be required to supply their own fire suppression systems as required to control fire hazards as specified within this plan.