



# SAFETY MANUAL

## EMERGENCY CONTACT INFORMATION

FOR EMERGENCY CALL <b><u>911</u></b>	
Natural Gas (ATCO)	1-800-511-3447
Electrical (Enmax)	403-514-6100
Municipal Water	311
<b>OH&amp;S</b>	<b>1-866-415-8690</b>
Poison Control Centre	1-800-332-1414
<b>Rocky Mountain Solar Co. Office</b>	
Jared MacGowan	587-899-2279
Ryan Cornforth	403-999-3622
<b>Non-Emergency</b>	
Police	403-266-1234
Non-Emergency Help Information	211

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## COMPANY HEALTH AND SAFETY POLICY

Rocky Mountain Solar Co. (RMSC) is a construction contracting company proudly providing construction & maintenance services in the Alberta Solar industry. All personnel at RMSC (including our contractors) are committed to providing and maintaining a health and safety system that protects our workers, others who enter our property, and the general public. This includes physical, psychological, and social well-being of all those who come in contact with an RMSC site.

Management, supervisors, and employees at every level (including contractors) are responsible and accountable for the company's Health and Safety performance, and must meet or exceed applicable OHS Act, regulations, or Code of practice. All Employees have the Right to know, Right to participate, and Right to refuse dangerous work.

At Rocky Mountain Solar Co. we strive to:

- Prevent injury & ill-health by continually improving OH&S management and in turn, continually improving our OH&S performance.
- Protect and maintain the physical and psychological health as well as social well-being of our employees and our contractors.
- Provide a healthy and safe work environment free of discrimination, harassment, or violence of any kind.
- Work together in a spirit of cooperation and consult with our employees and contractors on OH&S matters.
- Communicate this policy and the Safety Management System which it heralds to all persons working under the control of Rocky Mountain Solar Co.
- Set & review OH&S objectives yearly
- Implement this policy and the Safety Management System which it heralds evenly on all sites and throughout Rocky Mountain Solar Co.
- Post this policy in all RMSC business locations to ensure that it is available to all employees & interested parties.
- Review this policy at least annually to ensure that it maintains relevance to our operations and adheres to all applicable legislations & standards

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Ryan Cornforth, President, Rocky Mountain Solar Co.

# ASSIGNMENT OF RESPONSIBILITY AND ACCOUNTABILITY FOR SAFETY

## Management

Management has the responsibility to ensure the health and safety of all its employees, visitors, contractors and the general public in the vicinity of the work site. Management will take the steps necessary for developing, training on and enforcing sound safety policies and procedures. This basic responsibility will include, but will not be limited to the following:

- Review and follow all applicable legislation.
- Provide leadership for a safe workplace.
- Issuance of Non-Compliance Reports to contractors/vendors.
- Ensure all policies and procedures are communicated clearly to employees and contractors.
- Report serious incidents to the legislated authorities and clients as required.
- Ensure that required training is available to employees and/or contractors.
- Establish goals for safety, including safety policies.
- Take action as required to remove or alleviate unsafe conditions.
- Ensure personal protective equipment (PPE) is available.
- Participate in conducting safety inspections.
- Review all incident investigation reports to ensure they are serving their intended purpose and follow-up is complete.
- Review safety meeting reports to ensure that meaningful talks and information is being provided to employees and/or contractors.
- Review monthly and quarterly safety statistics to assess the effectiveness of the current safety program activities.
- Evaluate safety performance of supervisors.
- Set a good example.

## Project Managers and Superintendents

The Superintendent and Project Managers are responsible for ensuring the effective application of safety policies and procedures in the workplace. This basic responsibility will include, but will not be limited to the following:

- Review and follow all applicable legislation.

- Providing leadership for a safer workplace for employees and/or contractors.
- Ensure all policies and procedures are communicated clearly to employees and/or contractors.
- Knowing the company's safety policy and responsibilities.
- Ensuring that all equipment and facilities are properly maintained.
- Enforcing both company and governmental Safety legislation.
- Ensuring that work practices and working conditions are frequently monitored.
- Ensuring the execution of prompt corrective action in order to rectify unsafe work and conditions.
- Coordinating and leading schedule site-inspections.
- Reviewing all Incident reports to ensure that Incident cases are being properly identified and that the appropriate and respective corrective action is being taken.
- Issuing safety topics and information to supervisors/foreman for review at crew meetings.
- Setting a good example.

## Foreman and Workers/All Employees

It is the responsibility of every worker to take reasonable care to protect the safety and health of themselves, fellow employees, and Rocky Mountain Solar Co. contractors using the required protective clothing and equipment; following the work procedures in which they have been instructed. Workers, being trained to safely perform assigned duties, must notify Rocky Mountain Solar Co. as well as the supervisor of any absence or defect in any equipment or protective device whatsoever that has the potential of endangering themselves and/or other employee/contractor.

This basic responsibility will include, but will not be limited to the following.

- Knowing and complying with site specific and standard job safety procedures and practices.
- Knowing and complying with all safety rules and regulations.
- Completing required documentation (e.g. fall equipment inspections, logbooks, etc.)
- Ensuring all PPE is maintained and utilized in good working condition.
- Maintaining good safety and housekeeping within the work area.
- Immediately correcting unsafe conditions or acts and/or reporting unsafe conditions to supervisor.
- Promptly reporting all incidents and injuries.
- Cooperating in incident investigations to help prevent recurrence.
- Ensure that work sites are kept free of hazards that could cause slips, trips, or falls

- Taking initiative not to work on site while ability to work is impaired.
- Make safety suggestions.
- Set a good example.

## Contractors

It is the responsibility of all Contractors to take reasonable care to protect the safety and health of themselves, RMSC employees, and any other RMSC contractors by using the required protective clothing and equipment and following the work procedures in which they have been instructed. Contractors, being trained to safely perform assigned duties, must notify Rocky Mountain Solar Co. as well as their supervisor of any absence or defect in any equipment or protective device whatsoever that has the potential of endangering themselves and/or other employee/contractor.

This basic responsibility will include, but will not be limited to the following.

- Knowing and complying with site specific and standard job safety procedures and practices.
- Knowing and complying with all safety rules and regulations.
- Completing required documentation (e.g. fall equipment inspections, logbooks, etc.)
- Ensuring all PPE is maintained and utilized in good working condition.
- Maintaining good safety and housekeeping within the work area.
- Immediately correcting unsafe conditions or acts and/or reporting unsafe conditions to supervisor.
- Promptly reporting all incidents and injuries.
- Cooperating in incident investigations to help prevent recurrence.
- Taking initiative not to work on site while ability to work is impaired.
- Make safety suggestions.
- Set a good example.

If a contractor/vendor is found in violation of these policies or procedures a Non-Compliance Report (NCR) will be issued to the contractor by Rocky Mountain Solar Co. management:

Step 1: Rocky Mountain Solar Co. management issues Non-Compliance Report to the violating contractor.

Step 2: Rocky Mountain Solar Co. & the violating contractor will review the NCR (alongside the contractor) within 24-hours to ensure the non-compliance is not repeated and safety is maintained.

Step 3: During this review a corrective action will be agreed upon and recommended by both parties.

Step 4: A follow up meeting will be scheduled within 3 months of the incident to ensure all corrective actions have been follow.

## Visitors & Guests

It is the responsibility our visitors and guests to take reasonable care to protect the safety and health of themselves and other stakeholders. Employees of Rocky Mountain Solar Co. must supervise any visitor or guest and ensure proper care is being taken where necessary (including wearing of protection, PPE, etc.).

This basic responsibility will include, but will not be limited to the following.

- Following and complying with site specific and standard job safety procedures and practices.
- Following and complying with all safety rules and regulations.
- Completing required documentation (e.g. logbooks, etc.)
- Cooperating in incident investigations to help prevent recurrence.
- Taking initiative not to visit site while ability to work is impaired.

## HAZARD ASSESSMENT POLICY

The hazard assessment program is designed to make **ALL** employees and management aware of the risks that arise or could arise at each jobsite or the Rocky Mountain Solar Co. office. The hazard assessment program also ranks the identified hazards by severity and by probability and provides corrective or preventative measures to control those hazards. All employees are responsible for providing their respective supervisor with up-to-date hazard assessment sheet, which is to be submitted on a daily basis.

This Hazard Assessment Policy process is **not** site specific, and applies to all situations including: conducting activities at the office and/or worksites not owned by RMSC including; temporary/mobile sites, and/or when a new activity has been temporarily introduced at the worksite/office.

The success of this program requires the complete and active participation by all company members in these main areas:

- Review of the Rocky Mountain Solar Co. Master Hazard Assessment document to familiarize workers with the hazards and controls related to daily tasks performed.
- Employee training in the identification and control of hazards to be able to recognize unsafe conditions, whether existing or potential.
- Worksite/office hazards, whether existing or potential, must be assessed and documented on the sheets provided before work begins.
- The documents must be dated, named, and retained then used in a responsible fashion to either eliminate or prevent the hazards that are identified.
- Hazard assessments and their findings are to be discussed at the next tool box meeting.

Formal Hazard assessments must be completed:

- When new operations, work processes, equipment, materials or products are introduced.

- When operations work-related processes or equipment is modified.
- When site-specific hazard assessments, inspections, or investigations identify a previously unrecognized hazard
- Reviewed annually

Field-level Hazard assessment must be completed daily prior to beginning work or when changes are introduced.

These assessments follow a step-by-step process that looks closely at the overall operations of a company to prevent work related injuries. They are used to identify hazards, measure risk and implement and monitor effective controls. Once complete the company will have recorders of detailed assessments that identify hazards, risks and controls for all tasks within the company.

These records will require regular review and maintenance.

- Formal Hazard Assessment | FORM 1
- Formal Hazard Assessment | FORM 2

#### SITE-SPECIFIC HAZARD ASSESSMENTS

Also known as field-level hazard assessments, they are performed before works starts at a site, and at sites where conditions change, or non-routine work is added. Site-Specific hazard assessments identify and control unexpected hazards that cannot be anticipated in the formal hazard assessment system. These hazards are specific to a work location and are often changing.

All employees are responsible for the safety of themselves and anyone else that may be in contact with the hazards present at the jobsite, including subcontractors and all site visitors. For this reason all reasonable action must be taken to eliminate any hazard. If a hazard cannot be totally eliminated then it must be controlled in the best way possible through either engineering, PPE, administrative policies or any combination of the three.

**The safety information in this policy does not take precedent over Occupational Health and Safety (OH&S) Act and Regulations.**

## HAZARD CONTROL

The most preferred method of controlling risk is to **eliminate the hazard altogether**. In most cases, elimination is not feasible and when possible, substitution is the best approach to hazard mitigation. When possible, RMSC employees are trained to substitute less hazardous agents in place of their more hazardous counterparts. This also applies to conditions and activities. Examples include substituting toluene for benzene, non-lead-based paints for lead-based ones, or SawStop table saws for existing traditional table saws.

Hazard control methods are reviewed during all safety meetings and site orientations. Identification of possible risks are to be discussed and documented during these meetings. During orientation employees are educated to include this as a part of their initial assessments.

(Note: RMSC Fall Protection Plan is detailed in the Safe Work Practices section.)

## Engineering Controls

Engineering controls consist of a variety of methods for minimizing hazards, including process control, enclosure and isolation, and ventilation.

### Process Controls

Process controls involve changing the way that a job activity is performed in order to reduce risk. Examples of this include using wet methods when drilling or grinding or using temperature controls to minimize vapor generation.

Enclosure and isolation are targeted at keeping the chemical in and the researcher out, or visa versa. Glove boxes are a good example of enclosure and isolation. Interlock systems for lasers and machinery are other good examples of isolating processes.

The most common method for ventilation in research laboratories is localized exhaust systems. Fume hoods, snorkels, and other ventilation systems are discussed at length in the Laboratory Equipment and Engineering Controls section of this site.

### Administrative Controls

Administrative controls are controls which alter the way work is performed. They may consists of policies, training, standard operating procedures/guidelines, personal hygiene practices, work scheduling, etc. These controls are meant to minimize the exposure to the hazard and should only be used when the exposure cannot be completely mitigated through elimination/substitution or engineering controls.

### Personal Protective Equipment (PPE)

PPE should always be used as a last line of defense and is an acceptable control method when engineering or administrative controls cannot provide sufficient protection. PPE may also be used on a temporary basis while engineering controls are being developed. See the standalone PPE section of this site for more information.

### Training

All RMSC employees are trained an educated in the process of eliminating or migrating hazards in all situations. Following the hierarchy detailed above, Hazards will be specifically dealt with in the safest and most effective matter in order to stabilize the site and maximize safety for all employees, contractors and visitors (if applicable).

## SAFE WORK PRACTICES

Safe work practices are general written guidelines for how to perform a task with the minimum risk to people, equipment, materials, environment, and process.

## Safe Work Practice – Asbestos Identified

Friable Asbestos is asbestos that can easily be changed into dust, whereas non-friable cannot easily be changed into dusty material.

1. If in the course of work, asbestos is identified, the Safety Department must be immediately informed as well as the client, of the possible presence of asbestos.
2. Work will cease in the area until the asbestos is removed or encapsulated or the material in question is determined to be something other than asbestos.
3. Fully authorized contractors must do the removal and disposal of asbestos. This Is the Law.
4. There are strong penalties for doing this type of work without proper certification. It is a general assumption that asbestos will be present in older buildings that are being renovated or upgraded.
5. Clients must also be advised of the policy with respect to asbestos. Occupational Health and Safety regulations state that customers must notify the contractor if they suspect, or are aware of any toxic materials that may be encountered in the course of work.
6. Policy shall be followed in all instances regardless of the type of project. Any questions or concerns should be referred to the Safety Department.

## Safe Work Practice – General Equipment

1. Always beware of the danger of contact with overhead hazards such as power lines.
2. Inspect equipment and components before use; never use damaged or defective equipment.
3. Make sure supporting surfaces, whether indoors or outdoors, are suitable for the type, weight and operating requirements of the equipment.
4. Do not exceed safe working loads/limits.
5. When mounting, using or dismounting from access equipment, always maintain a three-point contact (two hands / one foot or two feet / one hand).
6. Keep boots free of mud, snow, grease or other slippery materials.
7. When working from access equipment, avoid over-reaching. Keep your center of gravity within the support provided by the equipment.
8. Make sure tools and material are secure and will not fall.
9. Wherever possible avoid working under or over other personnel.
10. Keep fire extinguishers at the top and bottom of the equipment whenever there is a fire hazard.
11. Avoid blocking doorways, blind entrances or traffic routes.
12. Wherever possible, use signs and barriers to warn others of work overhead.
13. Always refer to manufacturer's specifications and relevant Occupational Health and Safety Regulations for

safe operating practices.

## Safe Work Practice – Working in Hot Weather

1. Allow Sufficient acclimatization period before full work load
2. Shorten time and use frequent rest breaks
3. Rest in cool, air conditioned areas where possible
4. Drink cool water or electrolyte replenishing fluids
5. Define emergency procedures. Assign one person trained in first aid teach work shift. Train workers to recognize symptoms of heat exposure.
6. Wear light colored clothing
7. Slow pace of work where possible

## Safe Work Practice – Working in Cold Weather

A thorough evaluation of the workplace may be necessary to identify tasks and conditions that present a potential cold-related injury/stress hazard. This evaluation should include observations, discussions with workers and supervisors.

1. Task Hazard Assessment is the primary vehicle for evaluating and communicating cold injury conditions on a task-specific basis. Information that can help to determine a cold injury potential and appropriate control measures includes the following:
  - a. How much time is required to perform the work?
  - b. How much time is required for preparation, setup, actual task performance, and any normal breaks?
  - c. Excessive overtime work, piecework, and machine-paced work are additional factors to consider.
2. Clothing
  - a. Dress in layers, (at least 3 to 4) of warm clothing. Synthetic clothing will move body moisture from the core forcing it through the layers, causing it to freeze on the outer layers, still allowing the workers the benefit of staying dry. This will decrease risks of hypothermia.
  - b. Outer layer to break the wind and allow some ventilation
  - c. Middle layer to absorb sweat and retain insulation
  - d. Inner layer should be snug fitting, avoid any cotton products against the skin if the work site allows polypro products should always be your first choice.
3. The body can lose a substantial amount of heat from the head. (30 to 40%)
  - a. Adequately covering the head and / or face.
  - b. Cover your mouth to protect your lungs from extreme cold.
  - c. As feet and hands are equally important, wear good quality gloves (mittens should be used if possible. The worker can use a light glove under the mitt so if they have to do fine work the fingers are never bare & unprotected.
  - d. Wear CSA approved winter work boots. If standing in one place for a long period of time the use of a piece of carpet will provide a barrier between you and the cold.
4. Environmental Conditions

- a. Air temperature, humidity, and wind speed all affect cold-related-injury/stress potential. If available, management may refer to and or use the Environment Canada Computer Program “Wind Chill Calculator”; to assist in evaluating prevailing environmental site conditions.

## CONTROLS TO HELP AVOID COLD-RELATED INJURY/STRESS

As with any hazard, feasible engineering controls should be the primary control measure, followed by administrative (work practice) controls and PPE, in that order.

1. Engineering Controls:
  - a. Use of on-site source of heat (i.e. construction heaters).
  - b. Hoardings, windbreaks etc.
2. Administrative and Work Practice Controls:
  - a. If possible, schedule cold-related work when conditions are at their minimum. Schedule cold work for the warmest part of the day.
  - b. Implement a work warm-up schedule. For Example: working in an unprotected environment with an ambient air temperature of  $-26\text{ C}$  to  $-28\text{ C}$ , exposed to winds of 16 KM/H, but less than 24 KM/H, two warm-up breaks are recommended per 5 hour work period.
3. Special measures may be needed in some circumstances. For example, when work must be done in isolated areas, the “buddy system” or reliable two-way communication system should be used. Some vehicles may need to be equipped with survival gear.

## Safe Work Practice – Workplace Hazardous Materials Information System (WHMIS)

1. Every employee must have working knowledge and readily available access to WHMIS labels, and safety data sheets (SDS). All employees must have WHMIS training.
2. All hazardous products are required to have manufacturer’s labels; if they do not, a workplace label must be installed and reported to your immediate supervisor.
3. Under no circumstances are WHMIS labels to be removed.
4. If any substances are transferred from their original containers a workplace label must be put on the new container.
5. It is the responsibility of every employee to be aware of what material they are working with, and to check the SDS for any new or unfamiliar material. RMSC requires that all job sites have an up-to-date SDS list for all hazardous products. This list will be obtained by the office safety staff and made readily available to all employees.
6. Management WILL provide all foremen with the appropriate SDS for the job being performed.
7. Foremen must have the SDS for the materials being used on their particular job. The SDS will be made available by management. Foremen must make sure that all hazardous materials have the appropriate labels when they arrive on site.
8. When a hazardous product is obtained for use on site it is the responsibility of management to obtain the SDS for that product and to make the SDS readily available to the site foreman. This must be done for ALL hazardous products.
9. Management will provide WHMIS training to all employees. It is the responsibility of each employee to understand the training; **if you don’t know, ASK!**

## Safe Work Practice – Transportation of Controlled Products

1. In the initial planning stages of a project a risk assessment must be performed which includes the identification of environmental concerns such as spills and releases. Proper equipment maintenance, equipment placement and storage facilities planning will greatly reduce the probability and impact of environmental spill incidents.

### **EQUIPMENT MAINTENANCE**

To reduce the risk of equipment fluid leaks RMSC has an equipment maintenance program. Special attention must be given to hoses and tanks containing fluids which may have an adverse effect on the environment.

### **EQUIPMENT AND FUEL STORAGE PLACEMENT**

Careful consideration must be given to the placement of equipment such as generators, light plants and compressors which may have an adverse effect on the environment. Equipment and/or chemicals should be placed so that they are a minimum of 30 meters (100feet) from any water body or wetlands. If this is not practical, secondary containment must be placed under the equipment/chemicals and the equipment/chemicals must be moved away from the water body or wetlands at the end of each work shift. Fueling equipment or fuel storage within 100 feet of a water body or wetlands is to be avoided at all times. Fueling and lubricating stations must be carefully located with a secondary containment structure capable of holding 150% of the volume in the largest tank. A suitable spill kit containing adequate: absorbent pads, spill containment barriers, plastic bags with ties, etc. must be available and clearly marked at each fuel and lubrication station.

All fuel trucks with a storage tank with a capacity of 500 liter or more must have adequate spill kit and be double walled for spill prevention.

### **SPILL CONTAINMENT**

In the event of a spill which could have an adverse effect on the environment the first priority is the protection of people. All persons in the area which could be affected by the spill must be cleared from the incident scene.

If the spill is still flowing from equipment or tanks every effort must be made to stop the stream by shutting off equipment, closing valves, or some other means of stopping the flow.

The spill must be contained to the smallest area possible and not allowed to enter bodies of water or wetlands. This can be done using several processes including but not limited to pumper trucks, adequate spill absorbing products or dirt berms.

### **REPORTING**

After a spill has been contained and there is no risk of further contamination the incident must be reported. Depending on the quantity, location and type of product spilled, various agencies and or stakeholders may need to be notified. Check local environmental legislation and contractual obligations for the correct reporting protocol for the area where the spill occurred.

### **INVESTIGATION**

Begin your investigation as you would any incident by taking photos of the spill area and by taking note of the location so that any evidence that is disturbed by the cleanup process can be preserved in the photos. Determine causes and implement corrective action.

### **REMEDIATION**

Depending on the size, location and type of product spilled specialized spill cleanup contractors may need to be utilized. Remove all contaminated soils, vegetation, or water and any absorbing products that were utilized and immediately dispose of them in an approved fashion such as containment bins, trucked to a hazardous waste collection agency ect as soon as can be reasonably achieved. If onsite temporary storage is required because of quantity, type of material, or availability of disposal processors adequate barriers must be provided to ensure further contamination does not occur. Soil testing may be required to determine if residual contamination is at or below acceptable levels.

## Safe Work Practice – Manual Lifting and Carrying

Back injuries are a major contributor to W.C.B. claims and lost work time. Most lifting accidents are due to improper lifting methods. All manual lifting should be planned and the safe lifting procedure should be followed. All lifting must be noted on the hazard assessment performed before working. The following Safe Work Practice was developed to help protect workers from injuries associated with material lifting and carrying.

It is the responsibility of the supervisor to facilitate and provide proper instructions to the workers on proper lifting techniques.

### **When lifting and carrying any objects:**

1. Always assess the load before lifting. Ensure that you know your own limitations, as well as, the weight, size, and shape of the material you are lifting.
2. The use of power equipment or mechanical lifting devices should always be considered and employed wherever it is practical.
3. Always try to lessen the load (chop asphalt or re-solar membrane in smaller chunks).
4. Obtain assistance when lifting a heavy object. Never over-exert yourself. Ask a fellow worker to help you when a load is too heavy or bulky for one person to carry alone.
5. Ensure a good grip before lifting and employ proper lifting technique.
6. Keep your feet shoulder width apart for balance. Stagger one foot in front of the other when beginning to a lift.
7. **Always lift with your knees and legs, never your back.**
8. Carry objects as close as possible to your body. Avoid reaching out.
9. Keep your back as straight as possible when carrying objects (DO NOT SLOUCH).
10. Face the direction in which the load is to be placed. This will reduce twisting of the body.
11. Never try to catch a heavy object when dropped.
12. Never rush a lift or the task of carrying an item.
13. Workers will all be provided ergonomics training as part of orientation.
14. Watch your footing and ensure the path is clear of tripping hazards.

**The safety information in this policy does not take precedent over Occupational Health & Safety (OH&S) Act and Regulations.**

## SAFE WORK PRACTICE – GARBAGE AND DISPOSAL

Garbage and debris will be produced during many projects. It is important to manage this debris in accordance with this safe work practice and the waste management policy in this manual.

Some important aspects to remember when dealing with garbage and debris:

1. When removing gravel from the solar be sure not to fill the bins above the gravel line marked in each bin. Over filling

- bins with gravel make them too heavy for the bin truck to lift, it can also cause damage to the truck.
2. When removing gravel from the solar do not mix general garbage or metal in with the gravel.
  3. Separate metal from all other garbage and debris for recycling
  4. Do not overfill the disposal bins, the garbage in the bin should be level and below the top of the bin.
  5. **All bins containing debris must be tarped**
  6. All material and equipment being transported in a bin must be secured.

## Safe Work Practice – General Machine Safety

The machine safety policy is designed to protect workers while operating the machinery that is necessary for completion of jobs. Any machine can be potentially dangerous and it is important to always use good judgment when operating one.

It is the responsibility of the supervisor to facilitate and provide proper instructions to workers on for general machine safety.

The company requires that any person operating any machinery on any site follow these rules:

1. Ensure that all clothing is tight fitting.
2. Remove any loose jewelry or articles that dangle.
3. Hair should be kept short or else confined so that it can't become caught in moving parts.
4. A worker may wear a medical bracelet provided it has a breakaway or tear-away band.
5. Machines must always be a safe distance from other people or machines before being used or installed.
6. Machines used to transport workers must be designed by the manufacturer or approved by a certified engineer.
7. Machinery must be prevented from activating unless on command of an employee.
8. Operator must ensure the safety of other people before starting any machine as well as while using a machine.
9. Personal protective equipment (work gloves, fire retardant clothing with long sleeves, work boots and safety glasses where necessary) or any other applicable PPE shall be worn at all times during the use of equipment.

## Safe Work Practice – Powered Mobile Equipment

Various types of powered mobile equipment are used on the worksite; therefore, this safe work practice was created to help prevent injuries and damages from the use of powered mobile equipment.

It is the responsibility of the supervisor to facilitate and provide proper instructions to workers on the proper use of powered mobile equipment.

The company requires any person operating any piece of powered mobile equipment on any site to follow these rules:

1. Workers must not operate powered mobile equipment unless the worker is properly trained to safely operate the equipment, and can demonstrate competency to a competent worker designated by Rocky Mountain Solar Co.
2. In order to operate powered mobile equipment a worker must be familiar with the equipment's operating instructions, and must be authorized by Rocky Mountain Solar Co.
3. Before operating powered mobile equipment, the operator must perform a visual inspection of the equipment and surrounding area to ensure the equipment is in safe working order and that no worker on the site is endangered when the equipment is started up.

4. Regular inspection of powered mobile equipment must be completed in accordance with the manufacturer's specification, and must be performed by a competent worker.
5. If during inspections a piece of powered mobile equipment is deemed potentially hazardous, the powered mobile equipment is to be tagged out and is not to be used until appropriate repairs are made. The repairs must be made as soon as reasonably practicable.
6. Powered mobile equipment is not be left unattended unless the equipment is immobilized by an effective method of securement to prevent unintentional movement.
7. Before leaving the controls of powered mobile equipment, the operator must ensure any elevated or suspended part of the equipment is either landed, or is in a safe position.
8. In the event workers must use powered mobile equipment that is fitted with rollover protection, workers must ensure that the equipment is equipped with appropriate seat belts, and that the seat belts are worn by the operator and all passengers.
9. Personal protective equipment (work gloves, long sleeves, and safety glasses where necessary) shall be worn.

## Safe Work Practices – Hoisting

Lifts involving mechanical assistance must be planned to ensure the proper use of equipment and rigging. The following Safe Work Practice was developed to help protect workers from injuries relating to craning and hoisting.

It is the responsibility of the supervisor to facilitate and provide proper instructions to the workers in regards to tasks involving hoists and cranes.

For any kind of planned load workers must:

1. Ensure proper barricades and warning signs are in place as required.
2. Determine the weight, shape, and size of the load to be lifted.
3. Determine the height and final position of the load to be raised.
4. Determine the center of gravity of the load so proper slings can be used.
5. Ensure that safety inspections of the equipment are performed and job site hazards are identified.
6. Ensure clear communications with the equipment operators are in place, and everyone involved understands the proper hand signals.

**Before operating a hoist, it is important that workers:**

1. Are familiar with all manufacturer's instructions, and have been properly trained to operate the solar hoist.
2. Assemble the solar hoist to the manufacturer's specifications.
3. Inspect the hoist frame to make sure it is secure and in good working order. All bolts and pins should be checked before the hoist is used each day, and periodically throughout the day since they may vibrate loose.
4. Inspect the cable is in proper working order with no weak spots or frays.
5. Ensure the hoist is set up on a flat level surface.
6. Ensure the material being hoisted is directly below the hoist.
7. Ensure proper counter weights are used and secured in place. Do not use material as counterweight. For proper counter weight ratio, consult the OH&S handbook on site.

8. Ensure a safety hook, complete with a safety clasp, is being used (refer to hoisting and rigging legislation if you do not know).
9. Are aware that a hoist cannot be used on a roof with a pitch greater than 2 on 12.
10. Personal protective equipment (work gloves, long sleeves, and safety glasses where necessary) shall be worn.

All cranes or other lifting devices are potential hazards and must be treated as such. Devices must be properly labeled and the labels must be obeyed by all workers at all times. Load capacities and other important info must be legible at all times. When operating any lifting device be sure to:

- Ensure that the device is operated only by someone who is adequately trained.
- Log each lift either electronically or on paper so that they can be tracked and recorded.
- Never operate a lifting device if you could possibly harm yourself or someone else. Be sure that all precautions are taken to ensure everyone's safety.
- Be extremely cautious with suspended loads. They are extremely dangerous and there should never, for any reason, be a person underneath a suspended load, it is the responsibility of both the operator and anyone who is near the device to make sure that the load is neither passed over another workers head, nor walked under while suspended.

## Safe Work Practice – Craning

Crane and rigging safety is of extreme importance. The Critical Lift Permit outlines the criteria of a critical lift and must be completed before any critical lift is attempted. Craning and lifting devices may only be operated by competent personnel.

Hazardous loading of crane booms, which could lead to either overturning the crane or to buckling the boom, can be avoided when crane ratings are understood. Crane ratings should be provided showing its rated capacity. This related capacity can be safely handled if attention is paid to the following points:

1. The safe load depends up on the boom length and the radius. Make sure the length of the boom is known. Remember that radius is measured from the center of the rotation, not from the boom foot pin.
2. The Published load does not include the weight of the hook or material handling devices. Subtract the weight of the equalizer jobs, concrete buckets, or job extension from the rated loads to determine the weight of material that can be safely handled.
3. Ratings are based on operating on firm ground, and in the case of mobile cranes, with the outriggers fully extended. Make sure that the crane is not operating on ground that is too soft or without outriggers that are not properly blocked and extended.
4. Ratings are based on operating on level ground. Operating on grades increases the boom stress. If a load is picked up on the high side of the slope and swings to the low side, the radius will increase and can cause the load to tip. If operating at high boom angles, a swing from the low side to the high side can cause the boom to collapse over the cab.
5. Avoid fast operations. Fast swings cause the load to swing out, thus increase the radius. Rapid hoisting or braking of the load increases the boom stresses and can overload the rigging.

6. Make sure the crane is properly rigged, has the correct counterweight, the proper boom, the right boom mounting position, the gantry properly rigged and has adequate parts of line.
7. Avoid traveling with a heavy load. The boom is subjected to shock and bending stresses if moving over uneven ground and swinging the load creates inertia forces, which can cause collapse of the boom.
8. Do not use a crane with a bent or damaged boom. Booms must be straight and in good repair.
9. If in doubt as to the ability of a machine to lift a load, make sure that a lift is attempted in the most stable position. (I.e. with a truck crane, pick the load up over the rear where stability is greater and then boom up before swinging over the side).
10. A Log Book of maintenance records and inspections completed on the crane is to be maintained for each device.

There are many safety devices available (such as overload indicators, boom back stops and level indicators) but in terms of reducing hazards, there is still a requirement for all crane users to understand load rating and to exercise intelligence, care and common sense.

#### SAMPLE PROBLEM

3/8" Single Chain or Wire Rope, Vendor Specifications 6600 pounds. Lift to be made at a 45° degree angle with double sling. What is the safe working strength of the double chain or wire rope?

#### SOLUTION

[6600lb. + 6600lb. = 13,200lb.] Total working strength of both 3/8" chains or rope sling at 0°. If the sling strength is 13,200 pounds, its strength is reduced by 30% at 45°, then the lift strength is reduced by [13,200 x 0.3] = 3,960 pounds, and the safe working load limit is [13,200 – 3,960] = 9,420 pounds. The safe working strength of a 3/8" double chain or wire rope sling at 45° is 9,420 pounds.

These reductions in safe working load limits are based on NEW wire, rope or chains. Inspect all wire, rope, and chains for safe condition.

#### **MOBILE CRANES – HOISTING**

1. Park picker or crane on firm, level and dry ground if possible.
2. Before starting, make sure brake is on.
3. Avoid work under power lines. If it is necessary to work under power lines, abide by the general safety regulations for working near overhead power lines.
4. Use outrigger pads at all times with picker being level.
5. Know the weight and the distance to travel with hoisting load and machine capacity.
6. Make all personnel aware of hoisting operations, and ensure they are wearing proper safety equipment.
7. Use tag lines whenever possible.
8. Keep load as close to ground as possible.

9. Secure all loads properly on truck or when resting on ground.
10. Do daily visual checks of hoisting line and all rigging equipment.
11. Make sure everyone is aware of proper hand signals. Take directions from one signal person only.
12. Never operate beyond machine capacity.

## Safe Work Practice – Power Tool and Hand Tool Use

Power and hand tools are used by workers on a daily basis, the following Safe Work Practice was created to protect workers from injuries associated with the use of hand and power tools.

All power tools and hand tools must be used and maintained in compliance with the manufacturers' specifications and guidelines. It is the responsibility of management to ensure all maintenance records for power tools are to be kept.

All hand and power tools are only to be operated by competent individuals. It is the responsibility of the supervisor to facilitate and provide proper instructions to workers on protection requirements and training required for the use of power and hand tools.

The workers' responsibilities when using power tools and hand tools are:

1. Follow the manufacturers' specifications and guidelines for proper use and maintenance of tools
2. Tools are to be used for their designed purpose only
3. **Any defective tools are to be removed from service**
4. Consideration for any ergonomic concerns should be taken before selecting to use a particular hand or power tool.
5. Electrical tools must have a three (3) wire cord and plug unless they are double insulated
6. On/off switches must be functional and positioned so the tool operator has access
7. Accessories can only be used if they are designed for the tool specified
8. Any cracked or splintered handles are to be replaced
9. Repairs to tools must be performed by qualified personnel, and repairs must be made before tools are properly stored.
10. All grinder discs, buffers and stones must be used only for designed application and at rated speed
11. Angle grinders must have a functional Original Equipment Manufacturer guard
12. All saw blades must be designed for the material being cut, and must have a functional Original Equipment Manufacturer guard
13. All hammers, wrenches, hatchets etc. are to have all burrs ground from striking area
14. All screw drivers, chisels, crowbars etc. are to have tips properly dressed
15. Cut resistant gloves are recommended while handling or using knives.
16. Personal protective equipment (work gloves, long sleeves, and safety glasses where necessary) shall be worn.
17. **When working at the solar edge all tools must be secured with a tool lanyard.**

## Safe Work Practice – Power Tool and Hand Tool Transportation

Properly transporting power tools, hand tools and other small items is crucial to ensuring personal safety and preventing damage. On a daily basis workers will be handling, transporting and storing power tools hand tools and other small items. Some general guidelines to follow when transporting and storing tools and other small items are:

- When not in use store tools in a tool pouch, tool box, tool bag or job box. This will keep the work area tidy and reduce the chance of trips, slips and falls; it will also reduce the likely hood of tools getting lost or damaged.
- When loading or unloading power tools, hand tools and other small items to and from the solar, transport them securely in a tool belt or pocket, or have them lifted to the solar in a tool box, tool bag or job box. **DO NOT attempt to carry any tools or other small items in your hands up or down a ladder.**
- When transporting power tools, hand tools and other small items in a company vehicle be sure they are safely stored in a tool box, tool bag or job box so they do not get damaged and cannot fall out of the vehicle.

## Safe Work Practice – Working Near High Voltage Electricity

High Voltage electricity is a serious hazard and requires awareness training for any employee working with or near sources of high voltage. The following steps must be adhered to at all times when near high voltage lines:

1. Work may only be performed by qualified workers
2. A hazard assessment must be complete and identify that high voltage is present
3. Before working on high voltage lines or equipment, the equipment must be de-energized and locked out then tested for 0 voltage.
4. In the event a lock-out can not be completed, a properly rated high voltage arc-flash protection suit must be worn at all times.

## Safe Work Practice – Use of Ladders

This policy is designed to ensure the safety of all members of the staff when a portable ladder is needed to reach a certain area. Ladders are an essential part of solar installations but it should be noted that if there is an alternative, safer way of reaching the final destination it should be used instead of a ladder.

In the event of a job that has no other access and a ladder is required it is essential that all employees follow these guidelines in order to ensure their safety:

- All ladders must be CSA certified and regularly inspected every 30 days
- When setting up a ladder at any site the ladder must be on solid, level ground then “walked” in place.
- The proper angle for placement of a ladder is one (1) horizontal degree for every four (4) vertical degrees.
- Before stepping on the ladder ensure that it is stable and secure.
- Workers are prohibited from working off of the top two rungs of any ladder while it is in place.
- Minimum overlap on a ladder extension is one meter unless otherwise specified by the manufacturer.
- Any ladders that are being used near, or to service electrical equipment must be made of nonconductive materials.

- When transporting ladders to and from worksites it is required that they be securely tied down to the vehicle to prevent any movement.
- All ladders must be tied down by the first person to ascend. They must be secure so to prevent slipping or blowing over while not in use. It is imperative that the tie off point be inspected thoroughly to ensure it can withstand a reasonable amount of force.
- Workers must never carry any items in their hands while using a ladder.

### Step Ladders

As is the case with portable ladders step ladders must only be used if there is no safer alternative. Employees using a step ladder must follow these rules:

- Ladder must be CSA certified and regularly inspected every 30 days
- Do not, for any reason use the top two steps of the ladder.
- A step ladder may only be used when it is completely open and the locking parts are in proper locked position.
- Do not over reach while on a step ladder
- When the ladder is open and ready for use, the level of inclination on the front step section should be one horizontal degree for every 6 vertical degrees.
- Ensure that ladders that are being used near electrical equipment are made of non-conductive materials.
- At least 3 point contact will be used at all times. (2 hands and a foot, or 2 feet and a hand) the use of knees or chest to balance on a ladder is not acceptable. Workers must never carry any items in their hands while using a ladder.

## Safe Work Practice – Scaffolds

Scaffolding may be required to assist workers in performing work assignments. This safe work practice was created to protect against injury and damage from the use of scaffolding, and to ensure compliance with the acceptable industry safety standards.

It is the responsibility of the supervisor to facilitate and provide proper instructions to workers, ensure competence of workers working with scaffolding, and ensure compliance with safety standards.

When using scaffolding the subsequent practices must be followed:

1. All scaffolding designed and erected must follow the local government legislation and manufacture's specifications regarding scaffolding safety requirements.
2. Scaffolding built close to pedestrian and vehicular thoroughfares shall be marked and protected with physical barricades to prevent the scaffold from being struck.
3. **Scaffolds shall only be erected, dismantled and altered by competent, trained and experienced workers. No worker at Rocky Mountain Solar Co. shall attempt to erect, dismantle, or alter any scaffolding unless they have received formal training, and have been approved by management to carry out the task.**
4. All scaffolds must be erected, used, maintained and dismantled in accordance with the manufacturer specifications.
5. All scaffolds shall be designed and constructed to support at least four (4) times the load that may be imposed on it. **The load imposed on the scaffold must never exceed the equivalent of one-quarter of the load for which it is designed.**

6. Scaffolds must have the appropriate colour coded tags at each point of entry to indicate the status and condition of the scaffolding.
  - a. A tag with: "Safe for Use" indicates the scaffolding is safe for use
  - b. A yellow tag with: "Caution: Potential or Unusual Hazard" indicates the presence of a potential or unusual hazard
  - c. A tag with: "Not Safe for Use" indicates the scaffolding is not to be used
7. All workers must be aware of, and understand the meaning of each of the colour coded tags on scaffolding.
8. **Workers are not to use scaffolding if it has:**
  - a. A tag
  - b. A or yellow tag that has expired
  - c. No tag at all
9. Inspections of scaffolding, and application of the appropriate colour coded tag shall only be performed by a competent, qualified, and trained individual.

## Safe Work Practice – Compressed and Liquefied Gas Cylinders

Compressed and liquefied gas cylinders represent two broad types of hazards: those associated with the pressure in the cylinder, and those associated with the contents of the cylinder. At Rocky Mountain Solar Co. the most common contents in both compressed and liquefied gas cylinders is propane.

Because propane is invisible and heavier than oxygen, special care and attention must be given to propane and all propane equipment when it is used on a jobsite. Proper adherence to and compliance with OH&S legislation and the following safe work practices are critical for all installations on the jobsite.

It is the responsibility of the supervisor to facilitate and provide proper instructions to workers on protection requirements and training required for the use of compressed and liquefied gas cylinders.

The following are workers responsibilities when using compressed and liquefied gas cylinders:

1. Compressed or liquefied gas containers must be used, handled, stored and transported in accordance with the manufacturer's specifications.
2. A cylinder of compressed flammable gas is not stored in the same room as a cylinder of compressed oxygen.
3. Compressed or liquefied gas cylinders, piping and fittings must be protected from damage during handling, filling, transportation and storage.
4. Compressed or liquefied gas cylinders must be equipped with a valve protection cap if manufactured with a means of attachment.
5. Compressed or liquefied gas cylinders must be secured upright so they cannot fall or roll.
6. Compressed gas equipment are designed to be used with a specific gas, and may only be used with that gas.
7. The cylinder valve must be shut off and pressure in the hose must be released when the cylinder is not in use.
8. Sparks, flames or other sources of ignition are not allowed to come in contact with the cylinders, regulators or hoses of a compressed or liquefied gas system.
9. The use of nylon slings employing a "choker" hold when loading, unloading or lifting propane tanks is the best way to ensure safety and efficiency.

10. Any “lifting lugs” provided on tanks are not to be used; only appropriate slings are to be used and secured on the shell of the tank.
11. All tank valves and regulators must be removed from the tank before transport of any distance can occur.
12. All major equipment being used to transport propane such as trucks, cranes and so on must be equipped with an appropriate fire extinguisher for the size and type of tank being handled.
13. Any movement and re-positioning of propane tanks shall be performed by a competent worker.
14. DO NOT heat tanks to increase flow.
15. Propane bottles are to be kept in upright position when in use.
16. DO NOT hook up or use tanks without proper regulators.
17. The proper ratio of one (1) 20lb. ABC fire extinguisher for each torch in use must be on site at all times.

## Safe Work Practices – Fall Protection

This policy is designed to ensure the safety of any worker who is exposed to a potential fall of 3m (10ft) or greater. To do this the company requires that all employees follow these steps to ensure their safety:

- Fall protection must always be in use when exposed to a potential fall of 3m (10 ft) or greater.
- Before using fall protection employees must be trained in the use of the equipment. It is the responsibility of management to make sure that all employees are adequately trained in this area.
- All basic fall protection equipment will be provided by management in excellent working order and must be CSA approved. It is the responsibility of the workers to ensure that the equipment is kept in good condition and anything that becomes damaged must be reported and replaced immediately.
- The equipment must be inspected before every use to ensure it is in good working order.
- If a piece of equipment has successfully stopped a fall it must be retired. Even if it appears to still be in good shape, any equipment involved in a fall must be removed from service immediately the same way a defective piece would be.
- When using site built wood guardrails employees must ensure that the guardrails are fabricated to the company specifications as outlined in the fall protection plan document.
- When on site, clients may have more stringent policies than those set out in legislation. It is imperative that the more stringent guidelines always be followed.
- Guard rails must be used wherever practical, and where they are not, a travel restraint is required.

## Safe Work Practice – Fall Protection Planning

Falling is a hazard on any solar, but especially roofs that are 10ft or higher. For any solar this height a fall protection plan must be in place. There must be at least one of two fall protection systems in use, either safety railings or safety harnesses. Safety rails must be securely fastened to the building with minimum 3 screws and must not be used for anything other than fall protection. Harnesses must be tied off to a secure point that is approved by a certified engineer. Anyone working within 6 feet of the edge must be tied off at all times, if a rail is being used the person must be sure to exercise extreme caution. Part of the fall protection plan document is a rescue plan. This section must be filled out, and it is important that time be

taken to legitimately consider how a rescue will take place. RMSC owns rescue equipment, if required they can be signed out for any project.

Falling is one of the most preventable accidents in solar installations , it is important to pay attention at all times while on a solar and be sure that the proper fall protection plan is always in use.

## Safe Work Practice – Working in High Pedestrian Traffic Areas

This policy is designed to protect the safety of pedestrians and other non-contractors who may inadvertently be exposed to the hazards of a jobsite. Whenever it is reasonable to do so, work should be halted completely in times known to result in high pedestrian traffic. This includes but is not limited to:

- Lunch hours at schools and public buildings
- Recess time at schools
- Final bell at schools, and the hours of 4:30-5pm at public offices.
- Working over busy sidewalks in City core

It is the responsibility of all RMSC employees to schedule our work in such a way that we limit the exposure of the general public to potential hazards.

When a situation arises that work absolutely must be done in an area of high pedestrian traffic it is imperative that there be an effective barrier system used to section off the working area so that no one can enter. Trucks will be equipped with pylons and caution tape which we should be used on all sites to warn those around that work is being performed. In instances where we are working above high pedestrian traffic areas the barriers must create a safety zone large enough to protect all those below from the potential of falling objects of any kind.

Any worker working at the solar's edge is required to have a lanyard attached to any tool being used. The solar edge is the zone within 6 feet from the edge of the solar.

## Safe Work Practice – Working Alone

Under normal daily activity, Rocky Mountain Solar Co. will do everything reasonably possible to ensure workers do not have to work alone, however if confronted with this situation the following considerations must be addressed

1. A worker **must** have prior approval from company or project management.
2. Performing a non-hazardous task
3. Have 2 way communications readily available to contact assistance if needed.
4. Contact must be made a minimum every hour
5. No dangerous work of any type will be carried out by any individuals working alone on any RMSC site.

Working alone is not permitted without some form of 2-way communication.

## Safe Work Practice – Working with Other Trades

While on site it is common for other trades to be present. This presents a new set of third party hazards that need to be accounted for. When other trades are present they need to be accounted for on the Jobsite Hazard assessment and they should be filling out their own hazard assessment if/when they are subcontracted by RMSC. Hazards should be communicated between trades and all persons should sign hazard assessments regardless if they are under the employment or direction of Rocky Mountain Solar Co. Those hazards should be treated the same as any hazard that presents itself through normal daily solar installations activities. Also see the Subcontractor Policy in this manual for more information.

## SAFE JOB PROCEDURES

Safe job procedures are a series of specific steps developed to guide a worker through a task from start to finish. The following section will outline Rocky Mountain Solar Co.'s safe job procedures for:

### Safe Job Procedure – General Jobsite Safety

1. A harness and safety line is to be worn when appropriate while working within 6 feet of the edge of the building. (see fall protection)
2. Job-sites shall be maintained in a clean and orderly manner. At night, all hand tools shall be put on the solar in a secure job box. Kettle motors shall be locked and propane tanks shall be completely disconnected.
3. All insulation of any type shall be securely covered with a tarp.
4. Any person assigned to any power equipment shall first check the oil to ensure an adequate supply. Also make sure that chain guards are in place.
5. It is each employee's responsibility to ensure that the trucks are kept clean. We ask that our employees show respect for company property.
6. Proper hoist wait is to be used, the safety clips on the hooks are to be in working order, and hoist cables are to be in good shape.
7. No walking or standing on solar parapets is allowed.
8. All ladders must be extended 1 meter above the solar, secure all ladders at the top of the solar.
9. Ensure proper storage and transportation of propane bottles.
10. There is to be no overloading the solar deck (stock piling, materials etc.).
11. Torch Safety ticket is required by anyone who is to operate a torch.

### Safe Job Procedure – Operating Company Vehicles

Company vehicles are used on a daily basis to support workers in their daily activities. This safe work practice was created to ensure that all company owned or leased vehicles are driven and maintained in a consistent manner. This guideline is to be considered as a minimum. All Government or client standards that exceed this guideline will then be considered as a minimum.

### **Worker Certification**

All workers driving Rocky Mountain Solar Co. owned or leased vehicles **must have a valid driver's license**. Management must have a copy of the driver's licence, along with the driver's abstract and signed copy of the Rocky Mountain Solar Co. "Vehicle Use Agreement" before any worker may operate a company vehicle. This will be required annually for insurance purposes.

Before operating any RMSC vehicle the operator must complete an inspection of the vehicle. This must include, but is not limited to: visual tire inspection, windshield integrity, overall vehicle integrity, leaks, spills, seat belts and any other vehicle components deemed essential to operation.

### **Use and Maintenance**

All vehicles must be equipped with the following equipment:

- Seat belts as per manufacturer's design.
- One fire extinguisher of appropriate size and type.
- One OH&S #2 First Aid Kit, one MSDS Binder, and one OH&S Regulation and Code book.

At Rocky Mountain Solar Co. workers may be required to work "out of town". In this case workers may be required to travel and operate a company vehicle for an extended period of time. It is Rocky Mountain Solar Co. policy that during a workers shift they must not:

1. Exceed 12 hours of driving time, or
2. Drive at any time after a driver has been on duty for 12 or more consecutive hours

At Rocky Mountain Solar Co. daily log books are not required, as company commercial vehicle >4500 KG GWR fall under Section 12(1) of the Alberta Drivers' Hours of Service Regulations where by:

1. The driver of a company commercial vehicle >4500 KG GWR does not operate beyond a 160 KM radius from Rocky Mountain Solar Co.'s main yard/terminal.
2. The driver of a company commercial vehicle >4500KG GWR returns to the RMSC main yard/terminal and is released from work within 15 hours of commencement of work.

### **While company vehicles are being used the following rules must be obeyed:**

1. The company vehicles are only operated by employees with authorization from management.
2. All vehicles are to be maintained as per manufacturer's specifications for oil changes, and service work.
3. Trucks must be kept clean at all times, inside and out.
4. Seatbelts are to be worn at all times when the vehicle is in motion.

5. Posted speed limits along with any other traffic laws, are to be obeyed at all times.
6. Any traffic violations must be reported to the office IMMEDIATELY.
7. Distracted driving of any kind is not permitted- this includes any cell phone use, personal grooming. Or anything that could take attention away from the road.
8. No smoking is permitted in company vehicles.
9. Vehicles are to be parked “back in” whenever practicable.
10. Alcohol (including sealed containers) is prohibited in company vehicles.
11. All Loads must be properly secured.
12. A spotter is to be used when backing up if visibility is obstructed.
13. All collisions must be reported to management IMMEDIATELY and an investigation must be performed.
14. No vehicle is to be operated by a person under the influence of any substance including but not limited to: drugs, alcohol, or prescription medications that alter awareness levels. Any time an employee drives a company vehicle their consciousness may not be compromised in any way.
15. Drivers must perform pull-through parking (pulling through a space, so the vehicle is facing outwards in the next space) when available, or backing into a parking space if necessary. This provides the operator an easier exit from the parking area as well as a quick exit in case of an emergency. When backing, it is recommended that a spotter be stationed outside the vehicle to ensure the driver backs safely, whenever practicable.

**When operating a company commercial vehicle >4500 KG GWR the above rules apply in addition to the following:**

1. The driver of the vehicle must ensure any load being transported is contained, immobilized, or secured so that:
  - a. The load cannot leak, spill, blow off, fall from, fall through, or be dislodged from the vehicle.
  - b. The load cannot shift upon, or within the vehicle to an extent which adversely affects the vehicle’s stability or maneuverability.
2. The driver of a company commercial vehicle must perform an inspection of the vehicle daily prior to operating it. The daily trip inspection which is performed, is only valid for 24 hours.
3. The company commercial vehicle may only be operated if no major defects are detected during the daily trip inspection. If any defects are found they must be documented and reported to management IMMEDIATELY so the defect can be repaired.

**Collisions**

A valid insurance card and vehicle registration shall be carried in the vehicle at all times and shall be provided by the company.

In the event you are involved in a collision, follow these instructions:

1. When a collision involves another vehicle, obtain the following information:
  - Driver’s name (and owner’s name if different from the driver)

- Address
  - Telephone number
  - Name of insurance company and policy number
  - VIN, vehicle year, make, model and colour
  - Vehicle license plate number
2. If possible, obtain names, addresses and telephone numbers of any witnesses, including name, badge number, department name and address of any investigating law enforcement agency.
  3. Identify yourself and show your driver's license and insurance identification card. Do not discuss Rocky Mountain Solar Co.'s insurance policy. Do not assume the blame for the collision and, above all, do not agree to any settlement.
  4. Cooperate with the investigating law enforcement officers, answering their questions factually while avoiding commentary beyond that. Do not insist a citation be issued to the other operator. Despite your opinion, the officer may be trying to decide responsibility for the collision and an overly aggressive attitude on your part may result in a decision against you. In a given situation, the officer might ask if you want a citation issued to the other operator. If so, answer in the affirmative and explain this is your company's preference.
  5. Note if there are any injuries reported by anyone involved in the collision.
  6. It is your responsibility to notify the appropriate local agency (police, etc.) of the collision and to file the appropriate written report as required by law, in addition to notifying Rocky Mountain Solar Co. management.
  7. If an adjuster or any other representative from the other driver's insurance company contacts you for a statement (either written or recorded), refer that person to Rocky Mountain Solar Co.'s management.
  8. If it is determined the Rocky Mountain Solar Co. driver is at fault, you will be financially responsible for the first \$1,500 in physical damage.
  9. If you are found to be under the influence of drugs or alcohol at the time of the accident, regardless of whether you are found at fault or not, your employment will be terminated

Rocky Mountain Solar Co. will investigate all potential causes and outcomes of motor vehicle incidents.

## Safe Job Procedure – Rigging

Rocky Mountain Solar Co.'s rigging policy is designed to ensure the safety of employees using machinery for rigging purposes. It is imperative that workers follow these safe work procedures in order to ensure not only their own safety but the safety of anyone who may be in the near vicinity. When using any rigging equipment employees must follow these guidelines and refer to the OH&S handbook for any other questions:

- Rigs must not be subject to overloading, this includes
  - 10% of breaking strength at the weakest point if a person is being raised or lowered
  - 20% of breaking strength at the weakest point in all other situations unless otherwise noted.
  - If workers are unsure of breaking strength they must find out either through management or a professional engineer before use.

- Rigs must be inspected thoroughly prior to each use. They must be in perfect working condition before being used and that condition must be maintained throughout the use through constant monitoring and inspections.
- All rig components must meet ASME Standard B30.09-2006 or B30.20-2006. This includes, but is not limited to:
  - wire rope
  - alloy steel chain
  - synthetic fiber rope
  - below the hook lifting devices
  - slings
  - cable clips
- Any hook in use must be equipped with a safety latch to prevent dislodging.
- Makeshift parts and accessories, for any rigging equipment, are prohibited.
- Any damaged, worn, or otherwise defective components must be immediately removed and replaced before use of the rig continues. All components must be kept up to proper specifications at all times.

## Safe Job Procedure – Working Alone

Employers are required to assess their workplace and take preventative steps that eliminate or minimize the risk to their employees. Under normal daily activity, Rocky Mountain Solar Co. will do everything reasonably possible to ensure workers do not have to work alone, however, if confronted with this situation the following considerations must be addressed:

Determine the physical features of the site that may affect working alone such as:

- No access to communications ( phones , radios, emergencies protocols)
- High hazard work ( working at height, extended periods of time working without breaks)
- Effectiveness of existing safety measure ( is there adequately trained personnel in place)
- Equipment safety ( all equipment must be maintained)
- First aid & emergency equipment available. (do assigned workers have proper training if an emergency occurs )

Requirements:

- Workers will be equipped with a cell phone or two-way radio.
- Workers will be instructed to call a supervisory person every 2 hours.
- Supervision will establish an emergency protocol if workers fail to call.
- Workers working extended hours will have current first aid / C.P.R.
- Personnel will identify on their Field Level Hazard Assessment, the noted requirements prior to any work commencement.
- Within the Hazard column of the Field Level Hazard Assessment form, working alone will be identified as a noted hazards.

WORKING ALONE PROCEDURE

A worker **must** have prior approval from company or project management. Performing a nonhazardous task, example – clerical. Have 2 way communications readily available to contact assistance if needed. Contact must be made a minimum every hour

No dangerous work of any type will be carried out by any Rocky Mountain Solar Co. employees working alone on any Rocky Mountain Solar Co. controlled sites. Dangerous or high risk work would consist of but not be limited to: Confined space entries, Fire and explosion hazards, High Hazard Power tools such as chainsaws, chop saws, etc., Hazardous energy, Electricity.

#### EMPLOYEES WHO TRAVEL ALONE

A potential hazard for any employee that travels alone is the risk of motor vehicle accidents. The following requirements must be considered when embarking on any road trips:

- Safe work procedures: Employees must have full concentration on the road when travelling alone. An employer should allow sufficient rest time for employees who are travelling on long trips.
- Equipment & supplies: Well-maintained vehicles prevent exposing employees to unnecessary risk. Appropriate first aid and emergency supplies must be provided.
- Personnel should be familiar in the use of emergency equipment provided to them.
- Personnel must ensure that all vehicles receive a pre-trip inspection. This will include fluid levels inspections, tire inspections, complete vehicle walk around.
- Personnel travelling in the winter months must ensure that they have ample clothing if they encounter any problems on the road.
- Travel Plan: An employer should consider a procedure appropriate to the hazards to track the whereabouts of their employees. ( travel plan, rough timelines, communications with office)
- Personnel travelling from remote locations should establish a process of checks on each other to ensure no personnel are left stranded on the highway without assistance.

## Safe Job Procedure – Securing Sites for Winds

The foreman must ensure:

- The jobsite is properly secured for the event of severe weather before leaving at the end of the day
- No material is stacked too high

The worker must ensure:

- Follow procedure for tying and weighing material down

Materials required:

- Rope
- Ratchet straps
- Concrete weights
- Tarps
- Cargo netting

Wind Speeds classified (Inland):

Light - (0 to 9 KM/H)

Moderate - (10 to 40 KM/H)

Strong / Windy - (41 to 60 KM/H)  
Very Strong / Gales - (61 to 90 KM/H)  
Very Strong / Storm Force - (over 91 KM/H)  
Hurricane Force - (over 115 KM/H)

Procedure:

- 1) Loose or light tools and material that can be removed from the solar site shall be taken off site at the end of the day or stored in the job box
- 2) Pile tools and materials no less than 6 feet away from solar perimeter
- 3) Where possible use the building structure as a break to shield material from wind
- 4) Place bundles of insulation side by side and secure them to one another with rope or a ratchet strap to better secure and shield insulation. Sheets of insulation and plastic packaging act like sails in the wind and if not properly secure will open and blow away potentially causing property damage or injury to pedestrian traffic
- 5) Place cargo nets over top of loose garbage and insulation piles for full coverage of items that may blow away
- 6) Place appropriate weights along the bottom of the tarps and cargo nets to hold them in place (Fire Extinguisher is NOT appropriate weight)
- 7) Tie rope from one weight to another going across the loose garbage or insulation pile to secure it down
- 8) Secure densdeck/plywood/wood planks by placing a minimum of 2 100lbs weights on top AND tie the pile together using rope or a ratchet strap so they do not separate from one another. For the case of plywood and wood planks use 3-4 inch wood screws to mechanically fasten sheets and boards together. Note that weight alone is not always enough to secure materials
- 9) Secure pallets of solar installations rolls using rope or a ratchet strap by tying the rolls together so they do not fall over and potentially cause property damage

## PERSONAL PROTECTIVE EQUIPMENT POLICY (PPE)

The purpose of this policy is to minimize injuries to employees by the use of Personal Protective Equipment (PPE). It is the policy of this company to have all employees use the proper PPE as follows:

Employees of this company shall wear work grade long trousers, long sleeve shirts, CSA Grade 1 high cut boots, high visibility vests or built in high visibility stripes. These requirements do not apply to employees when they are inside offices, lunch-rooms, or the cabs of vehicles.

All PPE used by this company shall conform to OH&S Legislation and relevant Safety Standards. The company shall supply all other required specialty PPE. The company shall maintain all specialties PPE according to manufacturer's instructions.

**\*The safety information in this policy does not take precedence over applicable government legislation with which all employees should be familiar.**

A worker is responsible for providing

- Clothing needed for protection against the natural elements,
- Appropriate footwear including safety footwear
- Approved basic fall protection equipment including rope lifeline, lanyard with shock absorber, and harness.

Rocky Mountain Solar Co. is responsible for providing, at no cost to the worker, all other items of personal protective equipment required. If the personal protective equipment provided by Rocky Mountain Solar Co. causes allergenic or other adverse health effects, Rocky Mountain Solar Co. will provide appropriate alternate equipment or safe measures.

#### Selection, use and maintenance

Personal protective equipment must:

- Be selected and used in accordance with the manufacturer's instructions and recognized standards, and provide effective protection,
- Not in itself create a hazard to the wearer,
- Be compatible, so that one item of personal protective equipment does not make another item ineffective, and is maintained in good working order and in a sanitary condition.

#### **Personal Protective Equipment Procedure**

Complete a Hazard Assessment to determine what protective equipment is required to perform the job safely. REMEMBER: Personal Protective Equipment (PPE) is the last line of defense in the prevention of injury to workers.

- Engineering Controls example installing guardrails to remove a fall hazard so a worker does not need to wear fall protection equipment
- Administrative Controls developing safe work practices and procedures using a safe work permit system.
- Finally Personal Protective Equipment (PPE).

## Info Sheet for Foot Protection

### **General Information**

Safety footwear is designed to protect against foot hazard in the workplace. Safety footwear protect against compression, puncture injuries, and impact.

Safety footwear is divided into three grades which are indicated by colored tags and symbols.

The tag color tells the amount of resistance the toe will supply to different weights dropped from different heights.

The symbol indicated the strength of the sole. For example, a triangle means puncture – resistance sole able to withstand 135 kg (300 ft. lbs.) of pressure without being punctured by a 5 cm (2 inch) nail. For more information look at Alberta's O.H. & S. Statute and Regulations or CSA Standard "Protective Footwear" Z195-M1981.

In construction, it is recommended that only the green triangle grade (CSA APPROVED) of footwear, which also gives ankle support, be used.

Your choice of protective footwear should always over protect, not under protect.

### **DO**

- Choose footwear according to job hazard and CSA standards
- Lace up boot and tie laces securely; boots don't protect if they are a tripping hazard or fall off

- Use a protective boot dressing to help the boot last longer and provide greater water resistance (wet boots conduct current).
- Choose a high cut boot to provide ankle support (less injuries)..

### **DON'T**

- Wear defective safety footwear (i.e. exposed steel toe caps).
- Under protect your feet or modify safety footwear.

## Info Sheet for Head Protection

### **General Information**

Safety headwear is designed to protect the head from impact from falling objects, bumps and splashes from chemicals or harmful substances, and contact with energized objects and equipment.

In construction, the recommended type of protective headwear is the **Class B Hard Hat** which has the required “dielectric strength”. There are many designs but they all must meet the CSA requirements for Class B Industrial head protection.

Most head protection is made up of two parts;

- The shell (light and rigid to deflect blows).
- The suspension (to absorb and distribute the energy of the blow).

Both parts of the headwear must be compatible and maintained according to manufacturer’s instructions. If attachments are used with headwear, they must be designed specifically for use with the specific headwear used. Bump caps are not considered a helmet. In Alberta they can only be used when the **only hazard** is when a worker might strike his/her head against a **stationary object**.

### **Inspection and Maintenance**

Proper care is required for headgear to perform efficiently. The service is affected by many factors including temperature, chemicals, sunlight and ultraviolet radiation (welding). The usual maintenance for head gear is simply washing with a mild detergent and rinsing thoroughly.

### **DO**

- Replace headgear that is pitted, holed, cracked or brittle.
- Replace headgear that has been subjected to a blow even though damage cannot be seen.
- Remove from service any headgear if its serviceability is in doubt.
- Replace headgear and components accordingly to manufacturer’s instructions

- Consult O.H. & S. or your supplier for Information on headgear.

#### **DON'T**

- Drill, remove peaks, alter the shell or suspension in any way
- Use solvents or paints on the shell (makes shells “break down”)
- Put chin straps over the brims of Class B headgear
- Use any liner that contains metal or conductive material
- Carry anything in the hard hat while wearing the hat.

## Info Sheet for Limb and Body Protection

### **General Information**

Due to the nature of the construction workplace and the number of different hazards, it is not possible to cover specialized limb and body protection in detail. These types of hazards are known as “job exposures” (exposure to fire, temperature extremes, body impact, corrosives, molten metals, cuts from sharp or abrasive materials).

### **PPE in this category would be items such as:**

- Leg, arm, chin, and belly guards
- Specialty hand pads and grips
- Leather aprons and leggings
- Full body suits
- Flame and chemical resistant clothing
- Various types of plastic boot covers, and overshoes

For more information on the specialty PPE you require, check your local O.H.& S. office. With all PPE, following the manufacturer’s instructions on its use, care and cleaning is critical and will help you get the full service life from your PPE.

## Info Sheet for Hand Protection

### **General Information**

PPE for hands include: finger guards, thimbles and cots, hand pads, mitts gloves and barrier creams. Choose hand PPE that will protect against the job hazard. Gloves should fit well and be comfortable. This type of PPE has to protect against chemicals, scrapes, abrasion, heat and cold, punctures, and electrical shocks.

### **Types:**

PPE for hands come in many forms, each designed to protect against certain hazards. Gloves most commonly used in the construction industry are made from leather, cotton, rubber, synthetic rubbers and other man made materials, or combinations of

materials. Vinyl coated or leather gloves are good for providing protection while handling wood or metal objects. When selecting hand PPE, keep the following in mind: Look for anything at the job site that may be a hazard to the hands. If gloves are to be used, select the proper type for the job to be done. Inspect and maintain hand PPE regularly. If in doubt about the selection or need for gloves or hand PPE, consult your safety supplier, MSDS, or local O.H.& S. office.

**DO:**

- Inspect hand PPE for defects before use.
- Wash all chemicals and fluids off gloves before removing them.
- Ensure that gloves fit properly.
- Use the proper hand PPE for the job.
- Follow the manufacturer's instructions on the care and use of the hand PPE you are using.
- Ensure exposed skin is covered (no gaps between the sleeve and the hand PPE).

**DON'T:**

- Wear gloves when working with moving machinery (gloves can get tangled or caught).
- Wear hand PPE with metal parts near electrical equipment.
- Use glove or hand protection that is worn out or defective.

## Info Sheet for Eye and Face Protection

### General Information

This PPE is designed to protect the worker from such hazards as: flying objects and particles, molten metals, splashing liquids, and ultra violet, infra-red and visible radiation (welding).

### Types:

#### Basic Eye Protection:

- Eyecup goggles
- Monoframe goggles
- Spectacles with or without side shields

#### Face Protection:

- Metal mesh face shields for radiant heat or hot and humid conditions.
- Chemical and impact resistant (plastic) face shield.
- Welders shield or helmets with specified cover filter plates and lens

Hardened glass prescription lens or sport glasses ARE NOT an acceptable substitute for proper, required industrial safety eye protection.

Comfort and fit are very important in the selection of safety eyewear. Lens coating, venting or fitting may be needed to prevent fogging or to fit with regular prescription eyeglasses.

Basic eye protection should be worn with face shields. Face shields alone are not enough to fully protect the eye from work hazards. When eye and face protection are required, advice from the O.H. & S. office, MSDS, or your supplier will help in your selection.

For more information, look at Alberta's O.H. & S. statute and regulations, and CSA standard "Industry Eye and Face Protectors"

**DO:**

- Ensure your eye protection fits properly (close to face).
- Clean safety glasses daily, more often if needed.
- Store safety glasses in a safe, clean, dry place when not in use.
- Replace pitted, scratched, bent and poorly fitted PPE (damaged face/eye protection interferes with vision and will not provide the protection it was designed to deliver).

**DON'T:**

- Modify eye/face protection.
- Use eye/face protection which does not have CSA certification (CSA stamp for safety glasses is usually on the frame inside the temple near the hinges of the glasses).

## Info Sheet for Respiratory Protection

### General Information

Respiratory protection falls into two major categories. The first is Air Purifying Respirators (APRs) which are particle (dust), chemical cartridges but no visor plate. The second is Atmosphere Supply Respirators, including self-contained breathing apparatus (SCBA), air line systems and protective suits that completely enclose the worker and incorporate a life support system.

Only APRs will be dealt with by our company. The second category of respirators requires much more specific information and training. If you need to use Atmosphere Supplying Respirators, you should get expert advice.

### APRs

There are two basic types of APRs:

1. Disposable fiber type with or without charcoal or chemical filter "buttons".
2. The reusable rubber face mask type with disposable rechargeable cartridges.

The choice depends on the job, labor, cost and your maintenance facility.

It is important to remember that APRs are limited to areas where there is enough oxygen to support life. APRs do not supply or make oxygen.

The service life is affected by the type of APR, the wearer breathing demand, and the concentration of airborne contaminants. When an APR is required, consult the MSDS, O.H. &.S. or supplier for the exact specifications for APRs.

Facial hair can prevent a good seal and fit on an APR. Follow the manufacturers' instruction regarding the mask filter, cartridges and other components.

An APR is only as good as its seal and its ability to filter out the contaminants it was designed to filter.

### **Combination Respirators**

This type of APR combines separate chemical and mechanical filters. This allows for the change of different filters when one of them becomes plugged or exhausted before the other filter (usually the dust filter plugs before the chemical filter). This type of respirator is suitable for most spray painting and welding.

For more information, check the: MSDS, the local O.H. &.S office, the safety equipment supplier.

For more information about APRs, look at the: Alberta O.H. &.S statute and regulations, CSA standards "compressed breathing air", Chemical Hazard regulation.

### **DO:**

- Train workers in the APRs use, care and limitations.
- Ensure that the respirators are properly cleaned and disinfected after each use, according to the manufacturer's instructions.
- Dispose of exhausted cartridges and masks in sealed bags or containers.
- Keep new, unused filters separate from old, used filters.
- Monitor APR use, they are useless just hung around the neck.
- Replace filters when breathing becomes difficult.

### **DON'T:**

- Use for protection against materials which are toxic in small amounts.
- Use with materials that are highly irritating to the eyes.
- Use with gases that cannot be detected by odor, nor by throat or nose irritation.
- Use with gases not effectively halted by chemical cartridges, regardless of concentration (read the cartridge label).
- Use respirators or masks if the serviceability is in doubt.
- Use APRs where oxygen content in the air is less than 16% or 18 kilopascals (partial pressure or greater).

## **Info Sheet for Hearing Protection**

## General Information

Hearing protection is designed to reduce the level of sound energy reaching the inner ear.

As a general guideline, **workers should use hearing protection when they must significantly raise their voice in order to be heard over the background noise.** Any are of work where noise exceeds the OH&S occupational exposure limits or is over 82 dBA requires hearing protection.

The most common types of hearing protection in the construction industry are earplugs and earmuffs. If you chose to use the other types of hearing protection, ask your safety supplier or local O.H. &S office for further information.

It is important to have different styles of hearing protection available. Different styles allow for a better chance of a good fit. Each person's head, ear shape and size are different. One style may not fit every worker on the crew. If hearing PPE does not fit or is painful to use, the worker will likely not use it. If the hearing protection is not properly fitted, it will not supply the level of protection it was designed to deliver.

Most earplugs, if properly fitted, generally reduce noise to the point where it is comfortable (take the sharp edge off the noise). If hearing protection does not take the sharp edge off the noise, or if worker has ringing, pain, headaches or discomfort in the ears, consult an expert for advice.

Workers should wear ear muffs or ear plugs when operating motorized equipment, and have their hearing tested once a year, or twice a year if they work in high noise areas.

Schedule 3, Table 2 of the OHS Code Selection of hearing protection devices

Maximum equivalent noise level (dBA $L_{ex}$ )	CSA Class of hearing protection	CSA Grade of hearing protection
$\leq 90$	C, B or A	1, 2, 3, or 4
$\leq 95$	B or A	2, 3, or 4
$\leq 100$	A	3 or 4
$\leq 105$	A	4
$\leq 110$	A earplug + A or B earmuff	3 or 4 earplug + 2, 3, or 4 earmuff
$> 110$	A plug + A or B earmuff and limited exposure time to keep sound reaching the worker's ear drum below 85 dBA $L_{ex}$	3 or 4 earplug + 2, 3, or 4 earmuff and limited exposure time to keep sound reaching the worker's ear drum below 85 dBA $L_{ex}$

## Info Sheet for Safety Belts, Lanyards and Life-Lines

### General Information

Body belts and harnesses are used in construction to provide workers at heights above ground level with freedom of movement and protection from falls. These devices will arrest a fell and absorb some of the shock of the fall. The systems are usually worn around the body and attached to a lanyard, fall arresting device or rope grab. Better quality systems usually have some sort of shock absorber in the system.

If the fall to be arrested is short (less than 2 feet) a safety belt can be used. If the fall is greater than 2 feet, a body harness is recommended to prevent further injury caused by the sudden stop at the end of the fall. **A life-line should never be used as a service line.** The only time a life-line becomes a load bearing line is in the event of a fall. At other times it should be just slack enough to permit free movement. In the construction industry, full body harness systems used with a shock absorber are preferred over waist safety belts. It is important to get quality advice in the selection, protection and maintenance of your fall arresting equipment.

(See CSA Standards)

**DO:**

- Obtain expert advice before purchasing a fall arresting device.
- Properly train and practice with the system you decide to use.
- Use webbing type harnesses instead of leather harnesses.
- Use only the manufacturers' components for replacement parts.
- Inspect device before each use (inspection to be performed by trained worker).
- Ensure that the anchor points are secure and able to support the load in the event of a fall.
- Follow the manufacturers' instructions on care and use.
- Ensure all lines used with the system have thimbles.
- Use a full body harness with shock absorber whenever possible.

**DON'T:**

- Modify, change, or put additional holes in the harness or hardware.
- Jerry-rig the system.
- Use the system for any other purpose than it is intended.
- Use the life line for a service line.

## GENERAL RULES

1. **Consuming or being in possession of alcohol, prescription, over the counter medication or illegal drugs on company premises, or on any company jobsite is strictly prohibited. (Refer to the Substance abuse policy)**
2. **Fighting, horseplay, practical jokes or otherwise interfering with other workers is prohibited.**
3. **Theft, vandalism or any other abuse or misuse of company property is prohibited.**
4. **All unsafe acts and conditions, including "near miss" incidents are to be reported to appropriate supervision IMMEDIATELY.**
5. **All incidents that result in damage or injury are to be reported to your supervisor IMMEDIATELY.**
6. **First Aid treatment is to be obtained IMMEDIATELY for any injury.**

7. **CSA approved Hard hats, safety boots (w/6"ankle support) and safety glasses are to be worn on all jobsites when required.**
8. **All work shall be carried out in accordance with appropriate safe work practices and the supervisor's direction.**
9. **Only those tools that are in good repair with all guards and safety devises in place shall be used. Workers shall remove damaged tools IMMEDIATELY and advise the supervisor for immediate repairs or replacement as deemed necessary.**
10. **Every worker shall keep his/her work area neat, clean, SAFE and orderly. Good house-keeping rules will be enforced for safety reasons.**
11. **It is the sole responsibility of the employee to review the Handi-Guide to Alberta OH&S Act Regulations & Code and to comply.**

Failure to comply with company rules will result in disciplinary action. Depending on the severity of the situation, written warning will be issued. Following two written warning employees are subject to dismissal at supervisor's digression. Employees are entitled to appeal a warning at any time prior to dismissal.

## TOOL BOX AND SAFETY MEETINGS

It is the policy of Rocky Mountain Solar Co. to hold tool-box meetings, and safety meetings consistently to keep all employees informed of any events, changes, or news in the work place regarding health and safety.

Bi-Weekly tool box meetings are to be conducted on work sites by a supervisors, or foreman, and minutes of the meetings are to be documented on the proper tool-box meeting forms. Documentation of these tool-box meetings are to be submitted to management for review.

Quarterly safety meetings are to be held at Rocky Mountain Solar Co.'s main office and shop and are to be chaired by a supervisor. Management staff are to participate in the safety meetings along with supervisors and workers. Minutes are to be taken during these meetings, and documentation of the safety meetings are to be submitted to management for review.

## MAINTENANCE PROGRAM POLICY

The purpose of this policy is to provide RMSC with a well-documented record of all tools, equipment, vehicles and property which are required to have a periodic maintenance servicing. The management of Rocky Mountain Solar Co. is committed to providing safe working quality tools and equipment.

Our maintenance priority is that no worker is injured, and that there is no damage to the environment, property or equipment due to faulty or improper maintenance.

Maintenance of all tools and equipment shall be as per manufactures instructions and or recommendations and will meet any legislative requirements. Tools and equipment capacities shall not exceed their manufactures rated recommendations.

Management is responsible for providing safe working tools and equipment and for establishing and maintaining adequate standards of equipment and trained personnel to ensure preventive maintenance. Management will keep and maintain an

inventory of all equipment and records of all maintenance performed to the equipment.

Supervisory personnel are responsible for ensuring that workers are properly instructed in the safe use and handling of all tools and equipment, for enforcing safe work procedures and regulations; and for correcting all unsafe activities. Supervisors must make regular checks of all tools and equipment being used on their work site. Any faulty tools or equipment must be taken out of service and repaired. If it cannot be repaired on site, it must be brought back to the shop.

All workers and subcontractors are required to ensure that all tools and equipment are in safe working condition before use. All defective tools and equipment will be immediately removed from service. If a tool or piece of equipment is not in working order, it must be brought to the attention of the site foreman. The foreman is to remove the defective item from service, tag it out using the appropriate label, and inform the superintendent that the item is defective. It will be the responsibility of the superintendent to determine if the tool or piece of equipment can be repaired or must be disposed of.

Everyone is expected to correct or report unsafe conditions and activities, and to work cooperatively toward the prevention of incidents.

Our maintenance program will meet or exceed the applicable Occupational Health and Safety Legislation and will meet the requirements of our clients.

The safety information in this policy does not take precedence over O. H. & S. Regulations. All employees should be familiar with the O. H. & S. Act and Regulations.

## SAFETY TRAINING POLICY

This policy has the express purpose of providing all employees with adequate and functional safety training.

### **Policy:**

The company will provide, and the employees will participate in, all safety and any related training necessary to minimize losses of human and physical resources to the company. The company will provide refresher training as necessary.

This training will include, but is not limited to:

- New Employee safety orientation
- On-site job specific training
- First Aid training for all supervisors
- Torch and open flame applications

In addition, safety meetings involving ALL employees will be held biannually.

## ON THE JOB TRAINING FOR NEW WORKERS

- Alberta workers between the ages of 15 and 24 have one of the highest work-related accident rates of any age group. More than 25% of work-related injuries and 1/3 of work-related fatalities involve young workers, even though they make up only 20% of the work force. This information suggests a lack of proper knowledge and awareness places young workers at risk of serious work-related injuries.

- Short service and new employees are identified as new until the end of the 3 month probationary period pending review of the employees skills acquired and knowledge of company rules and policies regarding health and safety within the work environment.
- All new workers must wear an identifier provided by the employer which clearly indicates that the employee is new for the other workers and clients to identify, this includes a name tag.
- New workers are required to work under the supervision of one or more skilled workers to company policies are being followed, as well as safe work practices be implemented. At no point should a new worker be approved to perform work alone.
- Young workers must be aware of their rights and responsibilities for workplace health and safety. Each worker must know and understand the proper and safe ways of completing their assigned tasks. Education, thus, is the most important part of ensuring safety among young workers.
- While many safety training techniques exist; the most common, referred to as “on-the job training”, assigns new employees to work with experienced and competent workers or supervisors.
- On-the-job training must include safety and safe work place practices as part of the training process for any new or recently transferred employees. This training ensures company safety policies and work place safety become habitual to all employees.
- Each position within the company will be assigned minimum qualifications. These qualifications must be met before an employee can take on that role. To be deemed qualified, an employee must provide supporting documentation showing they meet the qualifications.
- Clients will be informed that new employees are going to be present on site prior to the initial start of a project.

When training new employees, the following suggestions may prove useful:

- Consider the trainer’s willingness or abilities to train newly hired employees. The experienced employee should be a role model for the new employee(s) and should be matched carefully. Proper pairing will reduce the differences in background, language, personality, attitude and age which may otherwise inhibit communication and understanding between workers.
- Determine the level of training the new employee has by asking questions about prior employment and the value placed on safety. This will help determine what established attitudes and practices each employee will have about safety. Certain individuals need more time spent with them working on beliefs and behavior which may be detrimental to their current job.
- Make sure all workers know why a safety rule is in place. If there is no understanding of why a rule is relevant, there is a greater chance the rule will be ignored. Knowing the consequences of performing a task poorly or in an unsafe manner will help a worker understand the value of doing the job properly.
- Tell the new worker how to perform the task then show the worker how to perform the task and watch the worker perform the task.
- Break up large complex jobs into smaller, more manageable ones and build in the safety components of each step as integral parts of the operation.
- After the worker has successfully completed the job safely and correctly for a brief period of time, ask the worker what their questions are. This implies questions are normal, expected and constructive parts of the learning process.

- Review what has been learned and ask the worker to repeat the steps of the procedure, correct any deviation from the standard process.
- Trainees should be rotated between trainers to compensate for weaker instruction from some trainers. This process also exposes each trainee to the specific know-how of different workers.
- If a worker is performing a task incorrectly or following the wrong procedure, provide immediate feedback on what they are doing wrong. Ensure the employee understands the dangers and potential problems which may result from using the incorrect procedure. Do not discipline the worker at this point for any safety violations but let the worker know that kind of problem may warrant consequences at a later time, should it happen again.

**The challenge faced by the construction industry is ensuring each safety program is understood by everyone and is accepted as a regular part of everyday life for every task**

## JOB SPECIFIC TRAINING POLICY

### **Management:**

- Make regular inspections of all job sites to ensure workers are trained for the jobs they are doing; record their findings and ensure corrective actions are taken if necessary
- Ensure Non-Compliance Reports are issued to contractors who are found in violation of this policy.
- Required to lead formal hazard assessments, inspections, and investigations of non-compliance.
- Know that the Disciplinary Action for non-compliance with safety rules is as follows: 1<sup>st</sup> time offence brings a verbal warning, 2<sup>nd</sup> time offence requires a written warning and 3<sup>rd</sup> time offence could bring about dismissal. These actions should be taken in conjunction with the foreman.
- Ensure all foremen have proper access to all current MSDS they may require.
- Review with all employees the company's "Safe Work Practices" and procedures applicable to each job.
- Inform all employees of all known safety hazards potentially affecting the employees' performance.
- Determine what each employee can do and advise them on how best to proceed. This includes discussions with employees and observations of their work.
- Provide employees with all the information necessary for a safe and successful completion of a job.
- Know that the Disciplinary Action for non-compliance with safety rules is as follows: 1<sup>st</sup> time offence brings a verbal warning, 2<sup>nd</sup> time offence requires a written warning and 3<sup>rd</sup> time offence could bring about dismissal. These actions should be taken in conjunction with the management.
- Ensure all SDS required for their job sites are available for employees to review.

### **Workers:**

- Not attempt any job they have not been properly trained for or do not fully understand from the training received
- Always ask questions while being trained to ensure comprehension of job training.

- Know that the Disciplinary Action for non-compliance with safety rules is as follows: 1<sup>st</sup> time offence brings a verbal warning, 2<sup>nd</sup> time offence requires a written warning and 3<sup>rd</sup> time offence could bring about dismissal. These actions should be taken in conjunction with the management and the foreman.
- Review the MSDS of all hazardous material encountered and used on the job.
- All workers must understand the contents of the RMSC Safety Manual, and why it is important to be known and followed.
- Required to fully understand when a hazard assessment, inspection, or investigation is necessary with regards to safety violations.
- Are trained and advise to report any safety concern to management so that the issue can be resolved.
- Understand their own rights to refuse work if uncomfortable or do not wish to participate.
- Full education process of all regulatory requirements, discipline/enforcement policies, violence/harassment prevention plan, manual procedures, incident reporting, NCR, hazard reporting, and all other health and safety policies and procedures.

**Visitors or Other Employees:**

- Will not perform any work unless under the direct supervision of RMSC management.
- Review the MSDS of all hazardous material encountered and used on the job (if present).
- Will not be allowed in a RMSC building or on an RMSC site unless under the direct supervision of a RMSC employee.
- Required to fully understand when a hazard assessment, inspection, or investigation is necessary with regards to safety violations (if work is being performed)
- Are asked to immediately report any safety concern to management so that the issue can be resolved.
- Understand their own rights to refuse work if uncomfortable or do not wish to participate or visit an RMSC building or site.

## INSPECTION POLICY

The purpose of this inspection policy is to establish a standard for inspections on Rocky Mountain Solar Co. Ltd projects. Inspections are intended to identify, by observations of work practices and site conditions, situations that could cause or contribute to accidents and loss. Inspections are one of the tools used to evaluate compliance, and the effectiveness of our Health & Safety program. There are two types of inspections, formal and informal. Informal are done on a daily basis and completed whenever a supervisor/foreman walks through the job site. Formal inspections are on a per active job site basis which will be conducted monthly by foreman/supervisors.

Formal inspections in the office and shop will be conducted semi-annually by management. Informal inspections shall be conducted by the foremen and craft supervisory personnel as part of their daily work activities. Conditions requiring correction shall be actioned as soon as possible. Any delegation of action items must be followed up on to ensure corrective action is taken. Supervisors have the responsibility to investigate and inspect unsafe conditions reported by personnel under their direction.

Any condition that cannot be corrected immediately and is likely to cause injury or damage shall be reported to the superintendent, or other management personnel.

Inspection schedules, reporting, correction of deficiencies and re-inspection review shall be the responsibility of the superintendent and foremen. All inspection reports shall be reviewed by management. A copy of the most current monthly inspection report shall be available on upon request to any employee.

The following are pre-inspection planning items for consideration; establish a date and time for the inspection. Establish the area to be inspected, and meeting area. Evaluate the need for personal protective equipment. Notify the participants of these requirements. Have inspection report including hazard references list available.

## INVESTIGATIONS AND REPORTING POLICY

### **PURPOSE:**

To ensure that a systematic process of investigation of all incident causes is used to achieve the goal of determining appropriate corrective actions and controls that can be implemented to eliminate or reduce the probability of an incidents reoccurrence.

### **POLICY:**

Investigations are a management responsibility and performed by frontline supervision, HS Representatives and JWSHSCs as the experts in their respective fields. All management will receive training for incident investigation and reporting which includes investigation techniques. If further expertise is required senior management will provide the necessary tools required to complete a thorough investigation. All incidents no matter how minor they may be perceived to be will be reviewed by senior site management for accuracy and completeness prior to being distributed to the corporate office or clients.

All incidents must be reported immediately to your direct supervisor and documented.

\*The safety information in this policy does not take precedence over applicable government legislation with which all employees should be familiar

### **INCIDENT INVESTIGATION DEFINITIONS AND RESPONSIBILITIES**

**Incident:** All near miss events, occupational illness, work refusals, hazardous conditions and any event resulting in physical harm to person(s) or losses to the environment, assets or company reputation.

**Field personnel:** Supervision directly responsible for the activity where the incident occurred. This includes but is not limited to: Foreman, HS Representatives, members of JWSHSC.

**Site Supervisor:** Superintendent and higher as per the site organization chart.

Any person present at a work location has the responsibility to contact the local Emergency Services Department (ESD) in the event of an emergency.

Field personnel will take the appropriate immediate actions required to control the scene and ensure there is no further danger or loss that could exist to workers or ESD. Field personnel will freeze the scene and begin the incident investigation process.

#### **INCIDENT INVESTIGATION AND REPORTING PROCEDURE**

The following procedure will be followed in the event of an Incident which includes losses or potential losses to company, visitor or client personnel, the environment, assets or reputations.

- All work in the immediate area shall stop and the scene **will be frozen in time** until further notice from the Site Supervisor.
  
- The following Steps shall be followed.
  - All work in the immediate area must stop.
  - Any injured employees must be stabilized and taken to the closest medical facility if possible or an ambulance shall be called to attend to the injured party(s).
  - Site Supervisor shall be informed once the scene is stabilized.
  - Photos / sketches of the frozen scene and individual statements from all persons in the immediate area as well as those directly involved in the incident must be gathered as well as any hazard assessments performed for the scope of work the incident occurred in. When gathering statements isolate individuals from each other so that statements are not communal or influenced by others.
  - Once it is believed all information has been gathered the scene may be released/unfrozen by site supervisor.
  - With the information gathered during the investigation the causes of the incident will be determined and corrective actions implemented to eliminate the causes or reduce the likelihood of reoccurrence to an acceptable level.
  - If during the course of determining the cause(s) of an incident it is realized that information has been missed every attempt must be made to gain the information at that time.

In the event of an injury incident:

- Once the employee is released from the medical facility they must report back to the site as soon as reasonably possible to complete all necessary documentation.
- Should the injured employee be hospitalized site management will contact Corporate Management to update on the condition of the injured person.
- If it is a requirement to contact legislated authorities; confirm with local legislation to determine reporting requirements. If it is the prime contractors' responsibility to make this contact; site management should also make a courtesy contact with the legislated authority if they were not present when the prime contractor makes the initial or subsequent notification to the legislated authority.

- If an injured employee is able to perform modified work duties this will be determined by the attending physician. If meaning full work is available at the work site it will be accommodated by the Company Claim Administrator, site supervisor.
- It will be up to the attending physician to assess the employee as to his/her return to full duties.
- Should any type of therapy be required the employee will keep all appointments and will keep management informed. All required documentation will be completed by the employee.

All related documentation shall be filled out as soon as possible

### **SERIOUS INJURIES / ACCIDENTS INVESTIGATION AND REPORTING PROCEDURE**

The site supervisor shall report the following incidents to the responsible regulatory authority as soon as is reasonably practicable.

- an injury or accident that results in death,
- an injury or accident that results in a worker's being admitted to a hospital for more than 2 days,
- an unplanned or uncontrolled explosion, fire or flood that causes a serious injury or that has the potential of causing a serious injury,
- the collapse or upset of a crane, derrick or hoist, or
- The collapse or failure of any component of a building or structure necessary for the structural integrity of the building or structure.

If an injury or accident referred to above, or if any other serious injury or any other accident that has the potential of causing serious injury to a person occurs, the prime contractor or, if there is no prime contractor, the contractor or employer responsible for that work site is responsible to:

- carry out an investigation into the circumstances surrounding the serious injury or accident
- prepare a report outlining the circumstances of the serious injury or accident and the corrective action, if any, undertaken to prevent a recurrence of the serious injury or accident, and
- Ensure that a copy of the report is readily available for inspection by an officer.

The prime contractor, contractor or employer who prepared the report must keep the report for 2 years after the serious injury or accident.

The senior site manager will determine the site required reporting protocol and comply as required.

A report prepared for these purposes is not admissible as evidence in a trial arising out of the serious injury or accident, an investigation or public inquiry under the *Fatality Inquiries Act* or any other action as defined in the *Alberta Evidence Act* except in a prosecution for perjury or for the giving of contradictory evidence.

Except as otherwise directed by a Director of Inspection, an occupational health and safety officer or a peace (law enforcement) officer, a person shall not disturb the scene of an accident reported as per the above except as necessary when:

- attending to persons injured or killed,
- preventing further injuries, and
- Protecting property that is endangered as a result of the accident

#### INCIDENT FOLLOW-UP

After management has determined a root cause, any possible underlying causes, and any corrective actions needed, it is important to communicate those findings to other employees. The most effective way to communicate this message is through a dedicated Tool-Box meeting. If the findings do not warrant a dedicated meeting, they can be noted and brought up at the next company safety meeting. Whenever a change is made to procedures, policies, or other sections of the manual it will be up to management to decide on the most effective way to convey the message to all employees so that they can act on the changes.

## EMERGENCY PREPAREDNESS PLAN

Rocky Mountain Solar Co.'s emergency preparedness plan is designed to ensure the best course of action is taken by all employees involved in any emergency. It will provide the framework for employees to identify potential emergencies and create an effective plan of action should one occur. Management must provide employees a written, current emergency response plan that outlines what is required in the event of an emergency.

The success of this plan depends upon the execution of these main points:

- Prior to work on any jobsite an Emergency Response Plan document must be filled out by the foreman or job supervisor. This document will be provided by Rocky Mountain Solar Co.'s management, it must be dated, signed and contain the name of the jobsite that it pertains to.
- The Emergency response plan document must be kept current. One copy of the document must be created and filled out for each jobsite and revised whenever it is deemed necessary by the supervisor/foreman.
- A No. 2 OH&S First Aid kit will be provided to each crew. It is the responsibility of the supervisor and any crew members who are First Aid trained to maintain the kit and inform management of any need for supplemental First Aid supplies.

- The Emergency Response Plan document should identify all potential emergencies and then outline a procedure or procedures for responding to each individual situation.
- Each supervisor is equipped with a company cell phone which can be used to contact external emergency services at any time, it is the responsibility of the supervisor to ensure that the cell phone is in good working order and has a strong signal at all times.
- Space will be provided on the Emergency Response Plan document for
  - Location of emergency equipment and those trained to use the equipment.
  - Emergency response training requirements.
  - Alarm and Emergency Communication.
  - These spaces should all be filled out prior to starting work.
- The nearest emergency medical facilities, i.e. Hospital or clinic must be identified for each site by the supervisor.
- In the event of an emergency that requires evacuation each site must designate a meeting point a safe and reasonable distance from the worksite or emergency so that a headcount can be done by the supervisor.
- In the event of an emergency that requires rescue, employees are not trained in this area and therefore must exercise good judgment and allow rescuers who are trained to perform their duties to the best of their abilities.
- Emergency phone numbers will be programmed on each company phone and be available on the Emergency Response Plan document.
- It is important to perform an emergency response drill a minimum of once per year in order to test the emergency response plan for deficiencies, and be able to apply corrective actions before there is ever a real emergency.

## FIRST AID

Workers may need to perform first aid in the event of an emergency. Workers must be properly certified before performing any First Aid. The supplies needed will be provided by management, and it is the responsibility of the workers to monitor them and ensure that everything is in good condition at all times. Supplies must be stored properly in a clean dry place; they must be extremely accessible at all times in the event of an emergency. It is the responsibility of all workers to know the location and best route to the nearest health care facility in case of an emergency. Most times the company truck will be used for transportation, but in the event that it is not, workers must ensure that an alternate means of transportation is readily available. It is the responsibility of management to ensure that a suitable number of workers are trained in First Aid to handle any incidents that may arise. Any illness or injury, regardless of the size or severity, must be reported to management so it can be documented and recorded.

## WORKPLACE VIOLENCE AND HARASSMENT POLICY

**Intent**

Rocky Mountain Solar Co. is committed to building and preserving a safe working environment for its employees. In pursuit of this goal Rocky Mountain Solar Co. does not condone and will not tolerate acts of violence and/or harassment against or by any Rocky Mountain Solar Co. employee. In accordance with Canada Labour Code and the Canada Occupational Health and Safety Regulations, Rocky Mountain Solar Co. will take every reasonable precaution and implement measures to prevent violence and harassment and will protect all employees from these situations.

Our Workplace Violence and Harassment Policy is not meant to stop free speech or to interfere with everyday interactions. However, what one person finds offensive, others may not. Usually, harassment can be distinguished from normal, mutually acceptable socializing. It is important to remember it is the perception of the receiver of the potentially offensive message be it spoken, a gesture, a picture or some other form of communication which may be deemed objectionable or unwelcome that determines whether something is acceptable or not.

### **Definitions**

The following definitions have been sourced from Federal Labour Standards, Publications and Reports; Canada Labour Code (R.S.C., 1985, c. L-2), And the Canada Occupational Health and Safety Regulations (SOR/86-304).

Workplace Violence – Any threatened, attempted, or actual conduct of a person towards an employee in their work place that can reasonably be expected to cause physical or psychological harm, injury or illness to that employee.

Sexual Harassment – The code defines sexual harassment as any conduct, comment, gesture, or contact of a sexual nature that is likely to cause offence or humiliation to any employee; or that might, on reasonable grounds, be perceived by that employee as placing a condition of a sexual nature on employment or any opportunity for training or promotion.

Other definitions of importance to this policy:

Workplace Harassment – is commonly defined as a course of comments or actions that are known, or ought reasonably to be known, to be unwelcome. It can involve words or actions that are known or should be known to be offensive, embarrassing, humiliating, demeaning, or unwelcome, based on a grounds of discrimination identified in the human rights policy. Harassment can occur on any of the grounds of discrimination such as; Race, religious beliefs, colour, physical disability, mental disability, age, ancestry, place of origin, marital status, source of income, family status, gender, gender identity, gender expression, or sexual orientation.

### **Guidelines**

Rocky Mountain Solar Co. is committed to providing a safe and healthy work environment free from violence, discrimination, harassment, intimidation and any other misconduct. Similarly, weapons are strictly prohibited from the company's premises and violators will be subject to disciplinary actions and the incident will be reported to the police.

This policy prohibits physical or verbal threats, with or without the use of weapons, discrimination, intimidation, or violence in the workplace.

It is a violation of Rocky Mountain Solar Co.'s Workplace Violence and Harassment Policy for anyone to knowingly make a false complaint, or to provide false information about a complaint. Individuals who violate this policy are subject to disciplinary and/or corrective action, up to and including termination of employment.

This policy prohibits reprisals against individuals, acting in good faith, who report incidents of workplace violence or act as witnesses. Management will take all reasonable and practical measures to prevent reprisals, threats of reprisal, or further violence. Reprisal is defined as any act of retaliation, either direct or indirect.

Rocky Mountain Solar Co. will ensure that all employees are trained and educated on violence and harassment and that they are clear about the roles and responsibilities as well as this policy and its procedures. In addition a copy of this policy will be posted and made available to all employees.

### **Application of this Policy**

Rocky Mountain Solar Co. will not tolerate any form of violence, harassment or discrimination against any individual, including job candidates, employees, managers, or clients, on any grounds. This commitment applies to such areas as training, performance, assessment, promotions, transfers, layoffs, remuneration, and all other employment practices and working conditions.

Every Rocky Mountain Solar Co. employee shall be held personally accountable and responsible for enforcing this policy and must make every effort to prevent violence, discrimination and/or harassing behaviour. As such, employees must report every incident of violence and/or harassment immediately – whether it was observed, happened to them personally, or is the problem was reported to them.

For the purposes of this policy, violence and harassment can occur:

- At the Workplace;
- At employment-related social functions;
- In the course of work assignments outside the workplace;
- During work-related travel;
- Over the telephone, if the conversation is work-related; or

Elsewhere, is the person harassed or who has suffered an act of violence or potentially violent situations immediately to work-related responsibilities or a work-related relationship?

### **Violence Reporting Procedure**

Employees are required to report any violence or potentially violent situations immediately to management.

- All reports shall be kept confidential
- All reports shall be investigated
- Any employee or individual who threatens, harasses or abuses another employee or any other individual at or from the workplace shall be subject to;
- Disciplinary action, up to and including termination of employment;
- Immediate termination of service agreements; and/or

- The pursuit of legal action
- Violent action, threats and assault and considered a serious criminal offence and disciplinary measures will be taken by Rocky Mountain Solar Co., leading up to and including termination of employment.

**The Company Shall:**

- Investigate all reported acts/incidents of violence.
- Consult with other parties such as legal counsel, health and safety consultants, employee assistance provider, human rights office or local police services regarding the incident/act.
- Take all reasonable measures to eliminate or mitigate risks identified by the incident.’
- Document the incident, its investigation, and the corrective action taken.

**Formal Procedure:**

If you believe you have been harassed you may make a written complaint to the management team. The written complaint must be delivered to management and include:

- The date and time of each incident you wish to report
- The name of the person(s) involved in the incident(s)
- The name of any person or persons who witnessed the incident(s)
- A full description of what occurred

**Investigating Reports of Violence or Harassment**

Once a written complaint has been received, Rocky Mountain Solar Co. will complete a thorough investigation. Harassment should not be ignored as silence can, and often is, interpreted as acceptance. Employees will not be demoted, dismissed, disciplined or denied a promotion, advancement or employment opportunities because they rejected sexual advances or because they lodged a complaint when they honestly believed they were being harassed or discriminated against.

For the purpose of this section the following definitions apply:

**Complainant** – The person who has made a complaint about another individual who they believe committed an act of violence or harassment against them.

**Respondent** – The person whom another individual has accused of committing an act of violence or harassment. The investigation will include:

- Informing the accused of the complaint
- Interviewing the complainant, any person(s) involved in the incident and any identified witnesses
- Interviewing any other person(s) who may have knowledge of the incident(s) complaint
- Statements from all parties involved will be taken and a decision will be made
- If necessary, Rocky Mountain Solar Co. may employ outside assistance or request the use of our legal counsel
- Where it is determined that harassment has occurred, a written report of the remedial action will be given to the employees concerned

A copy of the complaint, detailing the complainant's allegations, shall be provided to the respondents(s) and contain the following information:

- The respondent is invited to reply in writing to the complainant's allegations
- The reply will be made known to the complainant before the case proceeds
- Rocky Mountain Solar Co. will take all reasonable measures to prevent any unnecessary disclosure of the incident and the identities of the parties

If the complainant decides not to lay a formal complaint, Senior Management may decide that a formal complaint is required, which will be based on the investigation of the incident, and will file such document(s) with the person(s) against whom the complaint is laid.

If it is determined that personal harassment has occurred, appropriate disciplinary measures will be taken immediately.

### **Seeking Immediate Assistance**

Canada's Criminal Code deals with matters such as violent acts threats and behaviours such as stalking. The police should be contacted immediately when an act of violence has occurred in the workplace or when someone in the workplace is threatened with violence. If an employee feels threatened by a co-worker, volunteer, contactor, student, vendor, visitor or client/ customer then an immediate "911" is required.

### **The Right to Refuse Unsafe Work and the Right to Assistance**

- This is a legal right of every worker. Rocky Mountain Solar Co. is committed to ensuring a safe workplace

### **Special Circumstances**

Should an employee have a court order, also known as a restraining order or "no-contact" order, against an individual, the employee is encouraged to notify his/her supervisor or manager of the situation and provide a copy of the order. This will be required particularly in the situations where the employee strongly feels that the aggressor may attempt to violate the order and contact the employee at Rocky Mountain Solar Co. Any information received and disclosed will be held by Rocky Mountain Solar Co. with the utmost confidentiality.

If Rocky Mountain Solar Co. is aware that domestic violence is likely to expose an employee or the workplace to harassment, violence, injury or risk, management will take every reasonable precaution to protect the individual and the workplace.

If any visitor to Rocky Mountain Solar Co. is seen with a weapon, or is known to possess one, makes a verbal threat or assault against an employee or another individual, employee witnesses are required to immediately contact police.

### **Fraudulent/Malicious Complaints**

It is important to realize that unfounded/frivolous allegations of violence and/or personal harassment may cause both the accused person and the company significant damage.

Making a false complaint or providing false information about a complaint is strictly prohibited and a violation of this policy. If it is determined by the company that any employee has knowingly made a false complaint regarding an allegation of harassment or discrimination, immediate disciplinary action will be taken up to and including termination.

### **Disciplinary Measures**

If it is determined by the company that any employee has been involved in the violence, harassment or discrimination of another employee, immediate disciplinary action will be taken, up to and including dismissal without further notice. Any disciplinary action will be determined by the company and will be proportional to the seriousness of the behaviour/action concerned. Rocky Mountain Solar Co. will also provide appropriate assistance to any employee who is a victim of violence, discrimination or harassment.

### **Control Measures to Prevent Violence and/or Harassment**

In a continuing effort to prevent workplace violence from ever happening, the company will ensure that signage is posted around the office, reminding all employees of this policy. The company has also set up security cameras in the yard area, and the shop area to deter would-be harassers. In addition to these measures, the company's zero-tolerance policy will be explained to all new hires during orientation.

### **Confidentiality**

All records of violence and/or harassment, and subsequent investigations, are considered confidential and will not be disclosed to anyone except to the extent required by law. Rocky Mountain Solar Co. will do everything it can to protect the privacy of the individuals involved and to ensure that complainants and respondents are treated fairly and respectfully.

In cases where criminal proceedings are forthcoming, Rocky Mountain Solar Co. will assist police agencies, lawyers, insurance companies, and courts to the fullest extent.

### **Training**

In accordance with the Canada Occupational Health and Safety Regulations, All employees shall receive the following information, instruction and training:

- The nature and extent of workplace violence and/or harassment and how employees may be exposed to it;
- The communication system established by the employer to inform about the workplace violence and/or harassment;
- Information on what constitutes workplace violence and/or harassment and on the means of identifying the factors that contribute to these behaviours;
- The workplace violence and harassment prevention measures that have been developed; and
- The employer's procedures for the reporting on risks and incidents of the workplace violence and harassment.

### **Review and Revision**

At least once every three (3) years and in either of the following circumstances, Rocky Mountain Solar Co. shall review and update, if necessary, the Workplace Violence and Harassment Policy, information, instruction and training provided to all employees:

- When there is a change in respect of the workplace violence or harassment; or
- When new information on the risk of workplace violence or harassment becomes available.

Status	Created/Approved By	Date (MM/DD/YYYY)
Drafted	Ryan Cornforth	09-24-2021
Reviewed		10/11/2019
Amendment #1		

workers

## MODIFIED WORK POLICY

The management of this company is committed to providing a supportive environment for all employees, to assist them in getting back to work. Management will ensure that workers are educated on the company’s Fit for Duty policies and procedures.

All workers at the company must be physically capable of performing their job. If workers are injured and not physically able to perform their regular duties, they are expected to participate in our modified work program in order to assist them in their recovery and facilitate an early return to work. Employees who are participating in the modified work program must be fit and ready for duty every day. Any worker who is noncompliant with this policy will be subject to disciplinary action up to and including termination. Disciplinary action will include a written report which will be presented to WCB as an ongoing management protocol of WCB claims and modified work participants.

Our program is available for work and non-work related injuries, and is very flexible to accommodate whenever possible the restrictions placed on a worker by a physician. Workers enrolled in the modified work program have an obligation to come to work on time, be fit for duty, attend all scheduled medical appointments, and work within the restrictions placed by the medical practitioner. Many jobs and tasks are available for an injured worker to continue participating and contributing to the company.

### Procedure

Should an employee be injured, whether it is work or non-work related the procedure for modified work should be completed as follows:

1. Complete and submit an “Offer of Modified Work” form.
2. Management will arrange a meeting with the injured employee.
3. Injured employee will complete a “Fitness for Work” and “Physical demands analysis” form, and arrange a list of tasks that can be completed until the injured worker is able to return to regular work.
4. All proper forms will be documented and submitted to the WCB

### **Notes:**

- Modified work that is performed after the day of the accident needs be reported to WCB.
- All modified work offers are approved and documented.

- Regular contact between the injured worker, their doctor, the company and WCB is important.

## FATIGUE MANAGEMENT

Fatigue refers to mental or physical exhaustion that stops a person from being able to function normally. It is more than simply feeling tired or drowsy. Fatigue is caused by prolonged periods of physical and/or mental exertion without enough time to rest and recover.

Rocky Mountain Solar Co. is committed to ensuring employees do not compromise safety performance by undertaking work while impaired by fatigue or stress. The following Fatigue Management Policy applies to Rocky Mountain Solar Co. employees and subcontractors.

### **HOURS OF WORK**

No person shall work longer than **12** hours in a day unless an unforeseeable or unpreventable emergency occurs.

### **REST BREAKS**

No work period shall exceed **5** hours. All workers to have a minimum **30** minutes break after the each 5 hour work period. Workers performing high energy use tasks will have an additional **15** minute break between work periods this is to be agreed and recorded at toolbox meetings.

### **SUPPLIES**

Foreman shall ensure all staff have sufficient water. Extra water must be made available during the summer season.

### **CREW DRIVER & CO-DRIVER**

If the drive home exceeds one hour, the Crew Driver is entitled to take a 30 minute paid break prior to driving, and to take sufficient hydration and nutrition in this period. Should the work day exceed 10 hours the Crew driver is encouraged to take a "power nap".

The front right passenger is designated as a co-driver and is responsible (paid) for monitoring the driver for fatigue. The Co-Driver is empowered to take over from the driver "no questions asked".

### **REVIEW OF DUTIES**

In the event of Fatigue being identified as a significant safety issue at a work site, alternative duties will be sought for affected workers.

## NOISE MANAGEMENT

Noise is one of the most common workplace hazards. At Rocky Mountain Solar Co. workers may be exposed to noise levels that could damage their hearing. This policy was created to protect workers from work-related hearing loss by providing education and training on noise management. Workers will receive training on the noise management program during their initial orientation before starting work; the training will include educating workers on the hazards of noise exposure, the implementation of this policy and the proper use of hearing protection in accordance with the manufacturer’s specifications.

It is policy that an initial noise survey will be performed by Rocky Mountain Solar Co. management in work areas where workers must significantly raise their voice in order to be heard over the background noise. The noise surveys are to be performed by a competent person as defined by the OH&S Code. The noise survey must be done in accordance with the Canadian Standards Association standard z107.56-06, and the equipment used to measure the noise exposure must meet the requirements listed in section 219(3) of the OH&S Code.

Where exposed to noise exceeding the Occupational Exposure Limits or 82 dBA, appropriate engineering controls should be put into place. Engineering controls are meant to minimize or eliminate exposure by altering or removing the source of the noise. Engineering control options include substitution, modification or maintenance of noisy equipment, or isolation of workers away from the noisy area. If engineering controls are not practical, workers must wear proper hearing protection. Schedule 3, Table 1 of the OHS Code Occupational sets out the exposure limits for noise.

Schedule 3, Table 1

Exposure level (dBA)	Exposure duration
82	16 hours
83	12 hours and 41 minutes
84	10 hours and 4 minutes
85	8 hours
88	4 hours
91	2 hours
94	1 hour
97	30 minutes
100	15 minutes
103	8 minutes
106	4 minutes
109	2 minutes
112	56 seconds
115 and greater	0

When workers are exposed to noise exceeding the occupational exposure limits or 82 dBA, it is the responsibility of RMSC management to provide workers with instruction about the noise hazard, how it can affect a worker’s health, how workers can protect themselves, and what a worker’s responsibilities are in the noise management program. RMSC management will also ensure appropriate processes or methods for protecting workers from exposure to noise are implemented; this may be done through engineering controls, hearing protection or a combination of both.

For information on the proper selection, use and maintenance of hearing protection refer to Schedule 3, table 2 of the OH&S Code, as well as, the info sheet for hearing protection which can be found in the personal protective equipment section of this manual.

## ENVIRONMENTAL POLICY

We Rocky Mountain Solar Co., a construction company providing fabrication, construction & maintenance services in Canada, established an Environmental Management Policy System and we are committed to:

- Protect and manage our natural resources in order to prevent pollution and to continually improve Environmental Management System.

- Comply with applicable and other legal requirements.
- Provide a work environment where we prevent pollution.
- Implement this policy through a comprehensive plan with measurable goals and with monitoring and analysis of performance against the plan.
- Apply Waste Management Principles to reduce waste to the landfill.
- Apply Energy Management Principles to reduce the waste of energy.
- Minimize the negative impact on the environment, through a process of continual improvement in environmental performance.

## ENVIRONMENTAL TRAINING AND AWARENESS

As a part of RMSC's commitment to the environment management understands it is responsible for training all employees and ensuring they are aware of current legislation, current policies, and current best practices. The steps that will be taken to ensure that all employees are trained, and then kept current on policy is:

- Provide orientation for all newly hired employees which outlines the most up-to-date policies and procedures pertaining to the environment and the Environmental Protection Act and Regulations.
- Engage in weekly Tool Box meetings. Any new environmental concerns, policies, or procedures need to be addressed during those meetings.
- As with all safety policies, procedures, and best practices it is imperative that all levels of the company participate actively. Any time that new environmental issues arise, a meeting, or memo will be created to relay the message.

### **Management of Chemicals and Hazardous Materials**

In the initial planning stages of a project a risk assessment must be performed which includes the identification of environmental concerns such as spills and releases. Proper equipment maintenance, equipment placement and storage facilities planning will greatly reduce the probability and impact of environmental spill incidents. These measures need to be considered for all potentially hazardous materials, chemicals, or pieces of equipment.

### **Equipment Maintenance**

To reduce the risk of equipment fluid leaks Rocky Mountain Solar Co. has a comprehensive Equipment Maintenance. Special attention must be given to hoses and tanks containing fluids which may have an adverse effect on the environment.

### **Equipment and Fuel Storage**

Careful consideration must be given to the placement of equipment such as generators, light plants, compressors, propane tanks, and torch equipment as well the bulk storage of products which may have an adverse effect on the environment. Equipment should be placed so that it is a minimum of 15 meters (50feet) from any drain. If this is not practical secondary containment must be placed under the equipment and the equipment must be moved away from the drain at the end of each work day.

### **Erosion and Sediment Control**

As part of this policy, RMSC must be aware of controlling erosion and sediments. Although the majority of our work is completed on a controlled site such as a solar, where erosion is extremely rare, it must be accounted for when considering hazards. Sediment risks include dust/debris from cutting materials. That debris must be managed properly using proper garbage collection and disposal procedures.

### **Spill Containment**

In the event of a spill which could have an adverse effect on the environment the first priority is the protection of people. All persons in the area which could be affected by the spill must be cleared from the incident scene.

If the spill is still flowing from equipment or tanks every effort must be made to stop the stream by shutting off equipment, closing valves, or some other means of stopping the flow.

The spill must be contained to the smallest area possible and not allowed to enter bodies of water or wetlands. This can be done using several processes including but not limited to pumper trucks, adequate spill absorbing products or dirt berms.

### **Reporting**

After a spill has been contained and there is no risk of further contamination the incident must be reported. Depending on the quantity, location and type of product spilled various agencies and or stakeholders may need to be notified. Check local environmental legislation and contractual obligations for the correct reporting protocol for the area where the spill occurred.

### **Investigation**

Begin your investigation as you would any incident by taking photos of the spill area and by taking note of the location so that any evidence that is disturbed by the cleanup process can be preserved in the photos. Determine causes and implement corrective action.

### **Remediation**

Depending on the size, location and type of product spilled specialized spill cleanup contractors may need to be utilized. Remove all contaminated soils, vegetation, or water and any absorbing products that were utilized and immediately dispose of them in an approved fashion such as containment bins, trucked to a hazardous waste collection agency ect as soon as can be reasonably achieved. If onsite temporary storage is required because of quantity, type of material, or availability of disposal processors adequate barriers must be provided to ensure further contamination does not occur. Soil testing may be required to determine if residual contamination is at or below acceptable levels.

## **WASTE MANAGEMENT/ CARBON FOOTPRINT**

The site foreman will be responsible for managing waste generated on the job, and ensuring all proper PPE is being used while handling waste materials; at each job site a Waste Management System will be set up to aid employees and create a user friendly environment for effective waste management. This will include portable bins for Reusable material, recyclable material

and waste. Prior to the start of a job, a rough estimate will be made of the amount of waste which may be generated to determine the amount of bins required. A system to dispose of or recycle materials will be discussed with the building owner, or representative prior to job start-up. At this point it will be made clear whether the responsibility of waste disposal is that of the company or the site owner.

Waste Management is everyone's responsibility. RMSC is committed to working with each site owner to ensure the best possible strategy for waste disposal is used on a per case basis.

### **PLANNING**

During the initial planning stages of a project; consideration must be given to waste generation, the reduction of energy consumption and its management.

Where ever possible operations must consider environmentally friendly products during the procurement process. Project managers should use FSC, Energy Star, Green Seal or Eco Logo products where ever possible. Vehicle use should be considered whenever possible, to help limit GHG emissions.

### **PRACTICES**

Industrial waste bins for separated recyclable waste such as: metals, paper and cardboard will be used whenever practical.

Ceramic cups and dishes will be used and washed if cleaning facilities are available. Styrofoam and plastic dishes are always a last resort.

Reading documents and editing on the computer as opposed to printing and marking up will always be encouraged.

When documents are printed but not needed, the paper will be reused and printed on the other side when drafts-for-review are needed.

### **ENERGY AND WATER REDUCTION**

Below are some simple examples of how to reduce the consumption of energy/carbon footprint;

- Turn off lights at the end of the work day and turn the thermostat down on weekends.
- Keeping the thermostat adjusted in our shops and facilities so they are at the lowest acceptable levels while maintaining worker comfort and constructability needs.
- Never leave vehicles or equipment idling for extended periods of time.
- Car pool or take the bus to and from work
- Use crew vans as opposed to individual vehicles to transport workers to and from camp locations when allowed.
- Wash hands with cold water
- Wash vehicles only on set schedule
- Turn down the temperature on the hot water tank
- Use Low-flow toilets and urinals

### **WASTE MANAGEMENT SYSTEMS**

The Canadian Standards Association (CSA) describes an Environmental Management System as follows:

**“The organizational structure, responsibilities, practices, procedures, processes and resources for implementing environmental management”**

Rocky Mountain Solar Co. is a proactive organization that applies government requirements to minimize the waste impact on our environment. It is our goal to develop new ideas to minimize waste and to redefine, update and amend these ideas. It is our practice to regularly evaluate our environmental performance and to involve our employees in the waste management process. It is the aim of Rocky Mountain Solar Co. to provide directing principles towards an effective Waste Management System on the job site rather than step by step instructions. This will allow more flexibility to adapt to the particulars of each individual job.

#### **BENEFITS OF EFFECTIVE WASTE MANAGEMENT**

1. Cost reduction of waste removal;
2. Positive impact on the environment;
3. Positive example for employees;
4. Compliance with Provincial and Municipal regulations; and
5. Improved image.

#### **EFFECTS OF A WASTE MANAGEMENT SYSTEM**

1. Ensures that waste management policies and objectives are met;
2. Places an emphasis on prevention of environment effects;
3. Allows for timely reviews and evaluations;
4. Ensures adequate resources are available to manage waste;
5. Allows improvements to be implemented easily and on an ongoing basis; and
6. Attains and maintains a desired level of waste management performance at minimal cost.

Material becomes waste or garbage when it has been used by its final end user and discarded. At the job site, there shall be implemented, a waste and recycle separation directly at the source.

**Reuse:** Whenever possible, materials pertaining to a job shall be reused. (I.e. Insulation, gravel)

**Recycle:** Any material which cannot be reused, but is recyclable, shall be recycled. (I.e. wood, clean metal etc.)\_Wooden pallets delivered with material from various suppliers will be returned to the supplier for reuse.

## **SUBCONTRACTOR POLICY**

### **Sub-contractor Responsibilities**

All contractors working for Rocky Mountain Solar Co. will be made aware of Rocky Mountain Solar Co.'s Health and Safety Program.

It is each subcontractor's responsibility to perform the job in compliance with RMSC's safety standards.

Rocky Mountain Solar Co.'s subcontractors are responsible for complying with all Occupational Health and Safety legislations, as well as with all remaining applicable legislations.

## Contracts and Purchase Forms

As a subcontractor signing a contract with Rocky Mountain Solar Co. you are agreeing that your company, management staff, supervisory staff and workers will comply with Rocky Mountain Solar Co.'s Health and Safety Program, and all applicable Occupational Health and Safety Legislations as minimum standards. This is binding while you are on our work site.

Should any subcontractor fail to comply with Rocky Mountain Solar Co.'s Health and Safety Program, or all applicable Occupational Health and Safety Legislations, Rocky Mountain Solar Co. Reserves the right to terminate the contracts with the subcontractor.

All subcontractors working for Rocky Mountain Solar Co. must verify and, provide in writing, a copy of their company's safety manual and commitment for a safe work environment, if the company does not have a safety manual or Rocky Mountain Solar Co. feels our manual is superior, the subcontractor will be required to use and follow Rocky Mountain Solar Co.'s manual..

This basic responsibility will include, but will not be limited to the following:

- For any projects that will last more than a week, conduct tailgate and toolbox meetings weekly and submit minutes to the Site Superintendent;
- Notify Rocky Mountain Solar Co. immediately of any incident on site and conduct incident investigations and promptly submit copies of investigation findings and recommendations;
- Ensure special work procedures are followed and submitted (i.e., confined space entry, lockout, etc.);
- Ensure that Workers' Compensation Board coverage for workers is current. And a copy of the current WCB coverage is submitted with in the last 3 months.
- Guarantee that workers are trained and certified in WHMIS when handling chemicals and other regulated materials;
- Review and adhere to all safety standards and requirements put forth by RMSC and the owner client.

## Subcontractor Management Policy

Purpose:

The hiring of specialty sub-contractors to perform some scopes of work that Rocky Mountain Solar Co. may not have the expertise or production capacity to complete may be necessary to accomplish project goals and corresponding scopes of work. To ensure these specialty sub-contractors have the same high standards with regard to Health Safety and the Environment that Rocky Mountain Solar Co. has, a systematic approach to subcontractor selection and management must be taken.

Policy:

Rocky Mountain Solar Co. is responsible for ensuring that selected sub-contractors are competent to perform the work they have been hired for in a safe manner while always complying with corporate, client and legislated requirements. Rocky Mountain Solar Co. holds safety as a core value and will continue to work toward the elimination of all losses. With this goal in mind Rocky Mountain Solar Co. will only hire sub-contractors who have similar goals and objectives.

## Subcontractor Evaluation Policy

Purpose:

The purpose of this procedure is to establish the management standards for the evaluation and management of subcontractors.

Guideline:

The subcontractor shall complete the document – “Subcontractor Checklist” and submit this to the Rocky Mountain Solar Co. administration for review.

All subcontractors shall comply with Rocky Mountain Solar Co. Corporate Health, Safety and Environment Program along with all other applicable specifications, policies, procedures and legislation as required by clients, regulatory bodies and municipal, provincial, and federal government.

Subcontractors will be provided with a site orientation prior to performing work on any given project, allowing for health, safety, security, and/or environmental concerns to be addressed.

Subcontractors shall provide a written statement of management commitment, to comply with the requirements of Rocky Mountain Solar Co. and our clients.

Rocky Mountain Solar Co. is accountable for providing all information pertaining to the project at hand to the subcontractor, which includes safety standards and requirements; this includes drug and alcohol policies.

Rocky Mountain Solar Co. strives to meet or exceed industry standards. Our primary goal is to establish a safe, proactive and energetic work place. With established safe work practices and continual involvement from all staff and subcontractors, safety is implemented as a core value.

Evaluation:

Rocky Mountain Solar Co. wishes to do business with subcontractors that share our health, safety, and environmental philosophy and goals. Hence, subcontractors with HSE management systems that are deemed to have minor deficiencies may be accepted with a management plan. Subcontractors with major program deficiencies will not be accepted.

The following assessment guidelines shall be used to determine eligibility:

- RIF (recordable incident frequency), TIF (total incident frequency)
- Occupational Health and Safety Offences involve one or more convictions under Provincial Health, Safety or Environmental Legislation.

Monitoring:

Job Safety performance reviews are performed periodically for the duration of the project following RMSC audit processes. Upon completion of a scope of work, Post Job Performance Reviews are conducted with the contractor to evaluate potential further scopes of work being awarded.

All subcontractors used by Rocky Mountain Solar Co. will be required understand and refer to the safety policies and procedures put forth by RMSC. All subcontractors must sign a declaration that they have read and understand all the requirements set forth in the RMSC safety manual and that they will adhere to those standards.

Subcontractors are encouraged to try to solve safety issues themselves, however when that is not possible Rocky Mountain Solar Co. must be contacted immediately and a plan will be put in place to remedy the situation. Rocky Mountain Solar Co. must communicate incident reporting requirements to Subcontractors. Subcontractors must report all incidents to Rocky Mountain Solar Co. If a subcontractor is involved in an incident, Rocky Mountain Solar Co. is responsible for reporting the incident to the hiring client. Rocky Mountain Solar Co. must ensure the incident is investigated, and must participate in the investigation with a statement that elaborates on policies and procedures followed by the hired subcontractor.

In any case where the subcontractor is unsure of the proper safety procedure or policy, this safety manual must be adhered to. It is the responsibility of the subcontractor to have an understanding of the policies within this manual, and it is the responsibility of Rocky Mountain Solar Co. to ensure that a copy of the manual is presented to the subcontractor and made available whenever needed.

Subcontractors are expected to attend, and participate in all of RMSC's site safety meetings if they are on site at the time the meeting is being conducted. Should our subcontractors feel that additional safety meetings are necessary, RMSC asks that a copy of the meeting minutes be forwarded to the RMSC office so that we might learn from the ideas brought up on site.

## Subcontractor Safety Review Policy

Upon completion of a scope of work, Post Job Performance Reviews are conducted with the contractor to evaluate potential further scopes of work being awarded. Rocky Mountain Solar Co. will perform a subcontractor performance review in conjunction with their internal HSE review. Rocky Mountain Solar Co. will hold a formal subcontractor review to discuss subcontractor's performance. If deemed that the subcontractor failed to meet RMSC's health, safety and environmental expectations then they will be deemed ineligible for future work scopes for an indefinite time.

## STATISTICS AND REPORTING

In an effort to continuously improve the safety program, the management of this company is committed to recording and maintaining records and statistics on health and safety. This policy is designed to identify safety trends and prevent reoccurring injuries, and incidents.

The data and statistics are to be recorded and analyzed monthly to identify any reoccurring safety trends. Through the analysis of trends, the management will develop control measures and communicated the controls to all workers though the safety meetings and tool box meetings. The supervisor will follow-up with on-site inspections to be sure the controls are implemented.

The complete and active participation of all employees is necessary for the success of this policy.

## COMPETENCY POLICY

Any person working for Rocky Mountain Solar Co. must be deemed competent before being allowed to perform a task alone/without supervision. For this purpose, competency is defined as: having the necessary ability, knowledge, and skill to do something successfully.

## MANAGEMENT OF CHANGE POLICY

Any time there is a change in process, procedures, and/or equipment within RMSC the following procedure will take effect:

- When a change in job scope occurs the on-site staff must immediately inform their supervisor. All changes must be reflected on the jobsite hazard assessment, and if the supervisor deems the change large enough a new hazard assessment must be completed. If the change in job scope was not instructed by RMSC management then it is the responsibility of the supervisor to inform management as soon as it is reasonable and safe to do so. Once the new job scope has been properly assessed for potential hazards and corrective action is taken, the site staff can return to work.
- When changes occur to equipment machinery or other conditions not related to the scope of a job, management will inform all employees of the changes coming. If the change creates a new hazard then the hazard will be added to the master hazard assessment. If no new hazards are created then the change will be covered in a tool box meeting with all employees. In the case of new equipment, if training is required to operate the machine/equipment then management will ensure the training is provided for all employees who may operate it.

## CONFINED SPACE ENTRY POLICY:

The purpose of this policy is to establish management standards set forth by RMSC, and to ensure the protection of their employees and sub-contractors as well as their compliance with regulatory bodies

## CONFINED SPACE SAFE WORK PROCEDURE

A confined space is a restricted space that has one or more of the following characteristics:

- a) An atmosphere that is or may be injurious by reason of oxygen deficiency or enrichment, flammability, explosiveness or toxicity
- b) A condition or changed set of circumstances within the space that presents a potential for injury or illness.
- c) The potential or inherent characteristics of an activity which can produce adverse or harmful consequence within the space

Restricted Space has one or more of the following characteristics (Alberta only)

- a) An enclosed or partially enclosed space.
- b) Not designed or intended for continuous human occupancy
- c) Has a restricted, limited or impeded means of entry or exit because of its construction

Some examples of potentially restricted spaces are: windowless room, trench, pit or chlorine room.

1. Management must do a Project Hazard Assessment (PHA) before commencement of work to identify potential confined space and restricted space risks.

2. For each confined space or restricted space identified the following step by step procedure must be followed.
3. The confined space and restricted space entry permit is provided to assist you in pre-job planning and preparation.
4. A carefully prepared and communicated emergency response plan backed up by an effective training program is an essential part of the code of practice.
5. A pre-job meeting must take place to ensure the hazards and procedures are understood by all employees involved. Every employee associated with the confined space entry must attend this meeting.
6. A Safe Work Permit (e.g., Safe Entry Authorization Form) is required before work can begin. This permit must be posted at the access/egress points of the confined space.
7. *Employees must sign the back of the permit or an attached log sheet to indicate they have been trained to work in the confined space and understand the safe work practices, procedures and protocols related to this confined space.*
8. The permit space must be clearly identified, instances include but are not limited to Post warning signs (e.g. DANGER, CONFINED SPACE), installing barriers or barrier tape.
9. The safety watch performs an essential role. Their responsibilities include:
  - a) participating in the test of communication systems at the start of the job and after every work break;
  - b) monitoring all life support systems and air monitoring devices;
  - c) maintaining constant communication with the employees in the confined space;
  - d) communicating any change in working conditions to the employees and rescue support help
  - e) knowing, at all times, how many people are in the confined space (Safety Watch Log)
  - f) ensuring that only authorized and trained employees are in the confined space
  - g) Ensuring that only trained and properly equipped rescue employees enter the confined space in the event of an emergency
10. *For any type of Confined Space Entry in any type of vessel, all supply lines (meaning flow) must be blinded off or pan caked off and marked by numbers which shall be referred to on the confined space entry permit.*
11. An employer must ensure that persons who are not authorized by the employer to enter a confined space are prevented from entering.
12. An employer must ensure that employees in a confined space are protected from hazards created by traffic in the vicinity of the confined space.
13. If the hazard assessment identifies a potential atmospheric hazard and an employee is required or authorized by an employer to enter the confined space, the employer must ensure that a competent employee performs a pre-entry atmospheric test of the confined space to:
  - a) verify that the oxygen content is between 19.5 percent and 23.0 percent by volume, and
  - b) Identify the amount of toxic, flammable or explosive substance that may be present.

14. If the atmospheric testing under section 13 identifies that a hazardous atmosphere exists or is likely to exist in a confined space, an employer must ensure that the confined space is ventilated, purged or both before an employee enters the confined space.
  
15. An employer must ensure that an employee does not enter or remain in a confined space unless:
  - a) An effective rescue can be carried out.
  
  - b) the emergency response plan includes the emergency procedures to be followed if there is an accident or other emergency, including the procedures in place to evacuate the confined space immediately under the following circumstances
    - when an alarm is activated,
  
    - if the concentration of oxygen inside the confined space drops below 19.5 percent by volume or exceeds 23.0 percent by volume, or
  
    - If there is a significant change in the amount of hazardous substances inside the confined space
  
  - c) An employer must ensure that persons who are not authorized by the employer to enter a confined space are prevented from entering.
  
  - d) An employer must ensure that employees in a confined space are protected from hazards created by traffic in the vicinity of the confined space.
  
  - e) An employer must have a written code of practice governing the practices and procedures to be followed when employees enter and work in a confined space.
  
19. An employer must ensure that an employee who is assigned duties related to confined space entry, is trained by a competent person in recognizing hazards associated with working in confined spaces, and is performing the employee's duties in a safe and healthy manner.
  - a) An employer must keep records of the training given
  
  - b) An employer must ensure that competence in the following is represented in the employees responding to a confined space emergency:
    - first aid;
  
    - the use of appropriate emergency response equipment;
  
    - Procedures appropriate to the confined space

20. A person must not enter a confined space at a work site without a valid entry permit.

a) An employer must establish an entry permit system for a confined space that:

lists the name of each employee who enters the confined space and the reason for their entry,

gives the location of the confined space,

specifies the time during which an entry permit is valid,

takes into account the work being done in the confined space, and

Takes into account the code of practice requirements for entering, being in and leaving a confined space.

b) An employer must ensure that, before an employee enters a confined space, an entry permit is properly completed, signed by a competent person and a copy kept readily available.

c) Based on a review of similar confined spaces, an employer may issue an entry permit that can be used for a number of similar confined spaces.

An employer must ensure that all personal protective equipment and emergency equipment required for use in a confined space is inspected by a competent person before employees enter the confined space to ensure the equipment is in good working order.

An employer must ensure that written records of the inspections are retained.

An employer must ensure that all records respecting entry and work in a confined space, including entry

permits and testing under this Part, are retained for not less than:

1 year if no incident or unplanned event occurred during the entry, or

2 years if an incident or unplanned event occurred during the entry

NEVER EVER ENTER A CONFINED SPACE TO RESCUE EMPLOYEES WITHOUT WEARING AND USING THE PERSONAL PROTECTIVE GEAR PROVIDED FOR THIS PURPOSE.

*If job conditions change from those discussed at the pre-job meeting, the safe work permit must be reviewed, revised and re-issued. All employees must be informed of the changed conditions and any changes in operating or emergency protocols must be put into effect.*

**Refer to the "O. H. & S. Manual" for detailed guidance and instructions.**

**Remember, every confined space is unique. Supervisors and employees must take the development and implementation of confined work procedures very seriously – your lives may depend on them**

**ATMOSPHERIC TESTING PRACTICE**

Atmospheric testing may be required before a safe work permit is issued and/or as part of a specific job procedure. Any employee performing gas tests in a suspected Immediately Dangerous to Life or Health (IDLH) environment must be utilizing S.C.B.A. or S.A.B.A. to perform the tests. No employee will enter a suspected area without the proper protection.

All atmospheric testing will be performed according to the requirements of the hazard assessment safe work permit and applicable safe work procedures. All results will be recorded on the permit and a copy of the permit will be given to the confined space Standby person.

Continuous or periodic gas testing in the confined space must be conducted based on a thorough hazard assessment which examines but is not limited to: operational and purging activities, previous confined space history, new construction and activities being conducted inside and adjacent to the confined space.

Based on the hazard assessment the frequency of testing may be established. When initially starting the confined space work, the minimum testing requirement is:

1. Prior to first entry
2. Prior to each break (during peak activity)
3. When workers have been away from the confined space for greater than 30 minutes
4. If atmospheric testing shows oxygen levels of 20.9% and all other testing elements are zero for two consecutive shifts the testing requirement can be reduced to prior to entry only.

If the work activity inside the confined space changes (welding begins) testing must be performed as per initial requirements above.

***Atmospheric testing is mandatory for all Confined Space work areas*****EXCAVATING AND TRENCHING****PURPOSE:**

To ensure workers safety, eliminate or minimize harm to the environment loss of production or damage to equipment.

**POLICY:**

Prior to trenching or excavating operations greater than 30 centimeters (12inches) or less depending on client policies a hazard assessment must be performed.

When trenching or excavating within 60cm (24inches) of existing utilities hand exposure or hydrovacing is to be used unless under the direct supervision of the utilities owner.

**EXCAVATING PRACTICE:**

Ground is disturbed if a work operation or activity on or under the existing surface results in a disturbance or displacement of the soil, but not if the disturbance or displacement is a result only of

- a. routine, minor road maintenance,
- b. agricultural cultivation to a depth of less than 450 millimeters below the ground surface over a pipeline,

or

- c.** hand-digging to a depth of no more than 300 millimeters below the ground surface, so long as it does not permanently remove cover over a buried facility

Soil is classified as “hard and compact” if it closely exhibits most of the following characteristics:

- d.** it is hard in consistency and can be penetrated only with difficulty by a small, sharp object;
- e.** it is very dense;
- f.** it appears to be dry ;
- g.** it has no signs of water seepage;
- h.** it is extremely difficult to excavate with hand tools;
- i.** if it has been excavated before.

Soil is classified as “likely to crack or crumble” if

- a.** it has been excavated before but does not exhibit any of the characteristics of “soft, sandy, or loose” soil, or
- b.** it closely exhibits most of the following characteristics:
  - i.** it is stiff in consistency and compacted;
  - ii.** it can be penetrated with moderate difficulty with a small, sharp object;
  - iii.** it is moderately difficult to excavate with hand tools;
  - iv.** it has a low to medium natural moisture content and a damp appearance after it is excavated;
  - v.** it exhibits signs of surface cracking ;
  - vi.** it exhibits signs of localized water seepage.

Soil is classified as “soft, sandy or loose” if it closely exhibits most of the following characteristics:

- c.** it is firm to very soft in consistency, loose to very loose;
- d.** it is easy to excavate with hand tools;
- e.** it is solid in appearance but flows or becomes unstable when disturbed;
- f.** it runs easily into a well-defined conical pile when dry;
- g.** it appears to be wet;
- h.** it is granular below the water table, unless water has been removed from it;
- i.** it exerts substantial hydraulic pressure when a support system is used.

If an excavation contains soil of more than one soil type, it must be assumed that all of it is the soil type with the least stability.

An Employer may stabilize the soil in an excavation, tunnel underground shaft or open pit mine using an artificial soil stabilization technique, including freezing soil by artificial means or grouting if the process used is

- a. designed by a professional engineer to control soil conditions, and
- b. performed in accordance with the professional engineer's specifications

Employees must not use natural freezing of the soil as an alternative or partial alternative to a temporary protective structure or to stabilize the soil in an excavation, tunnel or underground shaft.

Before an employee begins to work in an excavation more than 1.5 meters in depth and closer to the wall or bank than the depth of the excavation, the RMSC will ensure the employee will be protected from cave-ins or sliding materials by:

- a. cutting back the walls of the excavation to reduce the height of the remaining vertical walls, if any, to not more than 1.5 meters;
- b. installing temporary protective structures; or using a combination of cutting back the walls and installing temporary protective structures.

Above doesn't apply if a trench is constructed in solid rock throughout the entire trench.

Where the cutback method is used, the walls must be cut back:

- a. in hard and compact soil to not less than 30 degrees from the vertical, or
- b. in other soils to not less than 45 degrees from the vertical.

RMSC will ensure:

- a. temporary protective structures in an excavation 3 meters or less in depth are constructed of materials of sufficient strength to prevent the walls of the excavation from caving in or otherwise moving into the excavation;
- b. temporary protective structures in an excavation over 3 meters in depth are designed and certified by a professional engineer;
- c. any foundation which may be affected by an excavation is supported before proceeding with the work by a temporary protective structure designed, constructed and installed according to the specifications of a professional engineer;
- d. that an excavation that an employee may be required or permitted to enter is kept free of an accumulation of water that may pose a hazard to the employee,
- e. loose materials are scaled or trimmed from the sides of an excavation where employees are or will be present;
- f. the spoil pile is piled so:
  - a. it is kept at a distance of at least one (1) meter from the edge of the excavation, and
  - b. the slope of the soil pile next to the excavation is at an angle of not more than 45 degrees from the horizontal, and
  - c. loose materials are scaled and trimmed from the spoil pile

RMSC will provide employees with a safe means of entering and leaving an excavation, tunnel or underground shaft. It is up to both employer and employee to ensure that no employee enters an excavation, tunnel or underground shaft that is not in compliance.

RMSC will ensure that if an employee is required to enter a trench that is more than 1.5 meters deep, a safe point of entering and leaving is located not more than 8 meters from the employee.

An employer must ensure that if an employee is in a trench that is more than 1.5 meters deep, the trench is supported or sloped so that the worker can reach the safe point of entering and leaving safely.

Before the ground is disturbed at a work site RMSC will

- a.** contact the owner or the owner's designate of
  - i.** a pipeline that is within 30 meters of the work site, and
  - ii.** any other buried facility that may be affected by the ground disturbance,
- b.** advise the owner or the owner's designate of the purposed activities,
- c.** ask the owner or the owner's designate to identify and mark the location of the buried facility, and
- d.** not begin disturbing the ground until buried facilities have been identified and their locations marked.

RMSC will ensure that employees are aware of locate marks for buried facilities.

RMSC will ensure that steps are taken to re-establish the locate marks for buried facilities if activities at the work site move or destroy the locate marks.

An employer may use as-built record drawings of the buried facilities for locating the buried facilities if

- a.** the work does not require excavation or removal of the soil or ground, and
- b.** the ground is penetrated to a depth of 1 meter or less.

As-built record drawings referred to must be certified by the owner of the buried facility as the most current drawings of record that indicate the constructed location of the buried facility.

RMSC will ensure that work with mechanical excavation equipment is not permitted within the hand expose zone of a buried facility until the buried facility has been exposed to sight:

- e.** by hand digging,
- f.** by a non-destructive technique acceptable to the owner of the buried facility, or
- g.** by method equivalent to a. or b.

RMSC will use mechanical excavation if ;

- a. the only buried facility is an electrical cable or conduit that is grounded and isolated so that its disconnection is visible,
- b. the owner of the electrical cable or conduit is notified of the operation before it begins,
- c. the buried facility is no longer in use,
- d. the owner of the buried facility gives the employer written consent to excavate or remove the facility,
- e. the employer ensures that excavating or removing the buried facility does not present hazard.

RMSC will reduce the width of a hand expose zone for a high pressure pipeline to within 1 meter on each side of the pipeline locate marks if:

- f. the high pressure pipeline is not governed by the *Pipeline Act*, and
- g. *the employer obtains written approval from the owner of the high pressure pipeline.*

If the ground that will be disturbed lies within a pipeline right-of-way an employer must:

- h. contact the operator or licensee of the pipeline, and
- i. get their consent to disturb the ground.

RMSC will not allow the use of mechanical excavation equipment within 600 millimeters of a buried pipeline unless the use of the equipment is under the direct supervision of the owner of the buried pipeline.

If an employer, on behalf of an electric utility, undertakes emergency work that

- a. involves ground disturbance to a depth of no more than 500 millimeters below the ground surface,
- b. in on the horizontal alignment or right of way of an electric utility structure, and
- c. the employer has determined that no buried facilities are present in the area affected by the work,

*An employer must ensure that any exposed buried facilities are protected and supported so that employees are not injured.*

If a pipeline is exposed during a work operation, an employer must notify the pipeline operator or licensee before backfilling the excavation.

When employees are carrying out an excavation near an overhead power line, their employer must ensure the work is carried out in a way that will not reduce the original support provided for the power line poles.

If there is a danger of an employee or equipment falling into an excavation, management must ensure that employees are made aware of the excavation through flagging, marking safeguards or other appropriate and effective means.

RMSC will ensure that an employee who installs shoring, stringers or bracing uses a ladder and works down from the top of the trench, installing each brace in descending order.

RMSC will ensure that an employee who removes shoring, stringers or bracing uses a ladder and works upwards from the bottom of the trench, removing each brace in ascending order

An employee must install shoring, stringers or bracing

If the quality of the ground in which a trench has been dug has deteriorated during operations to the extent that it is unsafe to use the method of removal required, an employer must ensure that the shoring, stringers or bracing is removed using a method that does not require the employee to be in the trench.

## TRENCHING PROCEDURE

Preventing cave-ins and soil movement is a necessary consideration in planning trench work.

*Before an employee enters a trench more than 1.5 meters in depth, his employer must ensure the employee is protected from cave-ins or sliding materials by:*

- cutting back the walls of the excavation to reduce the height of the remaining vertical walls, if any, to not more than 1.5 meters;
- installing temporary protective structures, or  
using a combination of cutting back the walls and installing temporary protective structures.

Where a cut back is required, the walls must be cut back at least: 30 degrees from the vertical in hard compact soil

45 degrees from the vertical in other soil

An employer must ensure:

- a) all shoring, stringers and bracing used in a trench between 1.5 and 6 metres deep is constructed of lumber and complies with pertinent Provincial Occupational Health and Safety regulations;
- b) all temporary protective structures used in trenches are designed and certified by a professional engineer except where shoring, stringers and bracing have been installed according to clause (a);
- c) where a cage is to be used in a trench, the cage is designed by a professional engineer to provide adequate protection against sliding, caving or rolling materials;
- d) additional protection, certified by a professional engineer, is used in a trench to compensate for the stress or weight of:
  - i. machinery or a heavy object placed or working within a distance from a vertical line drawn from the near edge of the bottom of the trench equal to the depth of the trench;
  - ii. an adjacent or abutting building or other structure.
- e) the vertical walls are shored or braced or a cage is used where the vertical walls of the square-cut portion of a trench are 1.5 meters or more in height.

- screw jacks, hydraulic equipment or other apparatus may be used as shoring, stringers or bracing if it is at least equivalent in strength and reliability to the

*shoring, stringers or bracing defined by the pertinent Provincial Occupational Health and Safety regulations*

- stringers need not be used for trenches less than 2.4 meters deep in hard and compact soil.

When installing shoring, stringers or bracing, an employee must use a ladder and work downward from the top of the trench, installing each brace in descending order.

When removing shoring, stringers or bracing, an employee must use a ladder and work upward from the bottom of the trench, removing each brace in ascending order.

Where the quality of the ground in which a trench has been dug has deteriorated during operations to the extent it would be unsafe to use the method of removal required by subsection #6, the employer must ensure the shoring, stringers or bracing is removed by a method which does not require the employee to enter any portion of the trench.

When using compressed-air shoring jacks, the jacks must contain a mechanical locking device (combination of screws and/or pins) so the shoring jacks do not only rely on the compressed air for locking.

NOTE:

*Always request underground locations before you dig. Contact local utilities owners.*

When trenching near overhead power lines, contact the utility operator for safe approach distances.

When trenching near power poles, request locations in case of grounding grids buried at the base of the power poles.

EXCAVATION/TRENCHING Size Chart

Select One of the following trench depths (if varying select deepest portion)

Width of Trenches Across the Top to Give 45 Degrees Cut Back

Width of Bottom	4 ft			6ft			8ft		
Depth of Trench (feet)	Width Across Top (feet)								
6	16			18			20		
7	18			18			22		
8	20			22			24		
9	22			24			26		
10	24			26			28		
11	26			28			30		
12	28			30			32		
13	30			32			34		
14	32			34			36		

15	34	36	38
16	36	38	40
17	38	40	42
18	40	42	44
19	42	44	46
20	44	46	48
21	46	48	50
22	48	50	52
23	50	52	54
24	52	54	56
25	54	56	58
26	56	58	60
27	58	60	62
28	60	62	64
29	62	64	66
30	64	66	68

## HEALTH AND SAFETY REPRESENTATIVE

### Policy

It is the policy of Rocky Mountain Solar Co. that any worksites which are active for more than 90 days and have 5 to 19 employees consecutively on site, are required to have a Site safety representation.

The HS Representative will be chosen by the workers on the site. It will be the duty of RMSC management and the HS Representative to meet regularly to discuss health and safety matters. The HS representative will report directly to management.

### Duties of the Health and Safety Representative

The duties and functions of the health and safety representative identified in the OHS Act, s.20, and include the items below

- Receive and consider concerns regarding health and safety
- Respond to and find solutions for worker concerns
- Participate in hazard assessments
- Develop corrective actions
- Monitor and follow up on corrective actions
- Promote overall health and safety at the work site

- Cooperate with OHS officers
- Establish and promote worker training and education programs
- Make recommendations regarding health and safety
- Inspect the work site
- Participate in investigations of incidents and serious incidents
- Maintain records of matters related to the duties of the committee

## DRUG AND ALCOHOL POLICY

### **I. Policy Statement**

Rocky Mountain Solar Co. (hereinafter the “**Company**”) is committed to promoting the health, safety and wellness of its employees, contractors and the public. The Company recognizes and accepts the responsibility to provide Workers with a safe, healthy and productive work environment. Workers have the responsibility to report to work capable of performing their tasks productively and safely (i.e., mentally and physically fit to perform assigned tasks). Impairment from Drugs, whether legal or illegal, Alcohol and Medications can have serious adverse impact on the workplace. The Company has established this Policy in order to balance our respect for individuals with the need to maintain an impairment-free work environment.

### **II. Application**

The construction tasks performed by the Company are safety and risk sensitive, and the present policies applies to all employees, contractors and subcontractors (hereinafter collectively referred to as the “**Workers**”) on all the company’s construction sites.

### **III. Responsibilities**

All Workers share responsibility for maintaining a safe and productive Alcohol and Drug free workplace.

All Workers are required to perform their job safely and in strict compliance with all applicable rules, policies and procedures. In addition, every Worker is required to:

- Read, understand and fully comply with this Policy. Any questions on policy details, interpretation or implementation are to be referred to Ryan Cornforth.
- Report for work Fit for Duty and remain Fit for Duty while on Company business;
- Immediately advise their supervisor of any worker suspected to be not Fit for Duty;
- Take appropriate action to minimize any safety risk and advise his/her supervisor accordingly;  
It is the Supervisor’s responsibility to:
- Be knowledgeable about and comply with this policy.
- Ensure they comply with all company and legislated work standards, so their work related activities are performed in an effective and safe manner.
- Be knowledgeable about the use of drugs and alcohol and be able to recognize the symptoms of drug and alcohol use.

- Complete Supervisor awareness training.
- Observe Worker performance. Document and take action on any negative changes or problems;
- Not to transfer any Worker responsibility including control of any machinery, equipment or vehicle to a Worker suspected to be not Fit for Duty;
- Guide Workers who seek assistance for a personal problem to the appropriate resource/department (i.e. Human Resources, Employee Assistance Program) while maintaining confidentiality;  
It is the Managers responsibility to:
- Provide a safe workplace
- Ensure that all workers are adhering to this policy
- Ensure effective employee assistance services are available to workers
- Provide training to workers on this policy and provide training and awareness to supervisors in dealing with the use of drugs and alcohol in the workplace.
- Ensure that this policy is being followed and enforced as outlined in this policy.

#### **IV. Company Standards**

To minimize the risk of unsafe performance due to impairment from alcohol, prescription or over-the-counter medication, or other drugs, whether legal or illegal and substances, all Workers are required to adhere to the following standards.

##### **A. Alcohol**

The following are strictly prohibited while on Company property, operating a Company vehicle or equipment, during working hours, at Company sponsored events, and whenever a Worker is representing the Company or conducting Company business:

- Reporting for duty or remaining on duty while being under the influence of Alcohol
- Consuming Alcohol during the work day including meals or other breaks
- Possessing, distributing, offering or selling Alcoholic beverages  
On an exceptional basis for Company-sponsored social events, Alcohol may be served on Company premises or outside of the Company premises with the explicit approval of Ryan Cornforth. (eg. Christmas Party). Workers who are permitted to consume Alcohol on such occasions are required to exercise moderation and good judgment, and to avoid operating a motor vehicle with a blood Alcohol level above the legal standard.

##### **B. Medications**

All Workers are expected to use prescribed and over-the-counter medications responsibly. The intentional misuse of medications (for example, using the medication other than as prescribed, using someone else's prescribed medication, or combining medication and Alcohol use against direction) while on Company property, operating a Company vehicle or equipment, during working hours, at Company sponsored events, and whenever a Worker is representing the Company or conducting Company business, is prohibited.

Furthermore, Workers are required to investigate through their doctor or pharmacist whether a medication can affect safe operation and take appropriate steps to minimize associated risk and to advise their Manager or Supervisor consequently.

##### **C. Drugs and other Substances**

The following are strictly prohibited while on Company property, operating a Company vehicle or equipment, during working hours, at Company sponsored events, and whenever a Worker is representing the Company or conducting Company business:

- Reporting for duty or remaining on duty while being under the influence of any Drugs, whether legal (eg. Marijuana) or illegal;
- Consuming legal or illegal Drugs during the work day including meals or other breaks;
- Possessing, distributing, offering or selling Drugs, whether legal or illegal;  
Workers who are on-call are expected to be fit for work in compliance with these standards. If an unexpected situation arises where a Worker is requested to perform unscheduled services and is unable to report to work due to impairment from Alcohol, medication or Illegal Drugs, the Worker must decline the call or request.

#### **D. Professional Assistance**

Any Worker who is unable to comply with the Alcohol and Drug policy or thinks he presents signs of an addiction to Alcohol, Drugs, whether legal or illegal, or medication should seek assistance from their Supervisor or Manager. The Supervisor or manager will direct the worker or the Employee Assistance Program (EAP) which may be reached at 403-217-4114.

Employees who accept assistance and go to treatment will be given leave and must successfully pass a drug and alcohol test prior to returning to work.

### **V. Prevention and Investigation Procedures**

#### **A. Investigation**

The Company will conduct an investigation into any suspected or confirmed violation of this Policy. A Worker may be held out of service with or without pay, depending on the circumstances, while the investigation is being conducted.

The Company reserves the right to investigate any situation where there are reasonable grounds to believe that Alcohol or Illegal Drugs are present on Company Premises or that other misconduct has occurred.

#### **B. Alcohol and Drug Testing**

All drug and alcohol testing records will be kept strictly confidential.

Pre-access drug and alcohol testing will only be conducted if requested by one of our clients prior to working on their site.

Drug and Alcohol testing will be required if there are reasonable grounds for testing, or if there has been an accident or Near Miss or Significant Incident affecting persons and/or property damage. If a prescription drug is required by a physician or medical professional that may have the potential for impairment, drowsiness or reduced alertness, the Worker must immediately report this to their supervisor or manager. The supervisor or manager must take appropriate steps to ensure that the Worker and the workplace are safe.

All drug and alcohol concentration limits for testing will be consistent with the standards referenced by Energy Safety Canada Alcohol and Drug Policy Model, the COAA Canadian Model for Providing a Safe Workplace, and/or the US DOT. All drug and alcohol testing will be performed by a qualified third party company and test are to be confirmed by a SAMHSA certified laboratory. See Appendix A for the test concentration limits.

#### **C. Reasonable Grounds for Testing**

Testing for the presence of Drugs and Alcohols when a Supervisor or Manager suspects a worker is unfit for duty due to impairment can be required of the Worker in the circumstance of reasonable grounds. Reasonable grounds include, but are not limited to, information established by the observation of the Worker's conduct or other indicators, such as the physical appearance of the Worker, his or her attendance record, speech, behaviour, and/or body odours which suggest the Worker, is under

the influence of a substance prohibited by this policy (including withdrawal symptoms). The Worker will not be permitted to return to work until verified negative test results have been received. If the Worker refuses to comply it will be considered misconduct and a violation of this policy. Any individual failing to cooperate with reasonable suspicion testing may be subject to discipline, up to and including termination of employment.

#### **D. Post-Accident/Post-Incident Testing**

Testing may be conducted following an accident, or following an incident at the workplace where safety precautions were violated and/or careless acts were performed which resulted in, or substantially increased the risk of, injury or harm to any person or damage to property or the physical environment. As soon as possible, following an accident or incident, the Worker shall submit to tests for substances prohibited by this policy, unless there is clear evidence that the accident and/or incident could not have been contributed by the Worker, but by an unsafe condition (i.e., structural or mechanical failure which the Worker could not have foreseen or prevented.)

#### **VI. Policy Violations**

The Company may discipline or terminate the employment of a Worker who fails to comply with the drug and alcohol policy, including failure to report for a test, delaying testing, or refusing to submit to a test. The appropriate consequences depends on the facts of the case, including the nature of the violation, the existence of prior violations, the response to prior corrective assistance programs, and the seriousness of the violation and applicable laws.

#### **VII. Definitions**

**Alcohol** - means the intoxicating agent in beverage Alcohol, ethyl Alcohol, or other low molecular weight Alcohols including methyl and isopropyl. It includes but is not limited to beer, wine and distilled spirits.

**Alcohol and Drug Test** - a test administered using technologies such as oral fluids, urine testing and hair samples analyzed by qualified personnel; in the case of urine laboratory test, samples are analyzed by an approved laboratory.

**Company Business** – refers to all business activities undertaken by Workers in the course of performing duties, whether conducted on or off Company premises.

**Company Premises** – includes but is not necessarily restricted to all land, facilities, mobile equipment and vehicles owned, leased, or otherwise directly controlled by the Company.

**Drug** – means any substance which may, depending on the context, include alcohol, legal drugs, Illegal Drugs or medications, the use of which has the potential to change or adversely affect the way a person thinks, feels or acts. For the purposes of this Policy, drugs of concern are those that inhibit a worker's ability to perform his or her job safely

**Worker** - any person engaged in work at the workplace and includes contractors and subcontractors.

**Fit for Duty** - means that a worker is able to safely perform assigned duties without any limitations resulting from, but not limited to: the use or after-effects of Illegal Drugs, Alcohol, and/or medications.

**Medication** – refers to a Drug obtained legally, either over-the-counter or through a doctor's prescription.

**Reasonable Grounds** - includes objective information established by observations of a Worker's conduct or other indicators such as physical appearance, attendance record, circumstances surrounding accidents or near misses in the workplace, presence of Alcohol, Drugs and Drug paraphernalia in the vicinity of the Worker or an area where the Worker works.

This Policy has been signed by senior management.

Dated this \_\_\_\_ day of \_\_\_\_\_, 20\_\_

Signed: \_\_\_\_\_ (Employer)

Print Name: \_\_\_\_\_

Signed: \_\_\_\_\_ (Employer)

Print Name: \_\_\_\_\_

**Table 1 Urine drug concentration limits**

Drugs or classes of drugs	Screening concentration equal to or in excess of ng/mL	Confirmation concentration equal to or in excess of ng/mL
Marijuana metabolite	50	15
Cocaine metabolite	150	100
Opioids		
- Codeine	2000	2000
- Morphine	2000	2000
- Hydrocodone	300	100
- Hydromorphone	300	100
- Oxycodone	100	100
- Oxymorphone	100	100
6-Acetylmorphine	10	10
Phencyclidine	25	25
Amphetamines	500	— 250
- Amphetamine	—	250
- Methamphetamine	— 500	250
- MDMA <sup>1</sup>	—	250
- MDA <sup>2</sup>	—	250

Source: U.S. Department of Transportation, Rule 49 CFR Part 40, January 1, 2018.

1. Methylendioxyamphetamine 2. Methylendioxyamphetamine

**Table 2 Oral fluid drug concentration limits**

Drugs or classes of drugs	Screening concentration equal to or in excess of ng/mL	Confirmation concentration equal to or in excess of ng/mL
---------------------------	--	---

Marijuana (THC)	4	2
Cocaine metabolite	20	—
– Cocaine or Benzoyllecgonine	—	8
Opioids	40	—
- Codeine	—	40
- Morphine	—	40
- Hydrocodone	—	40
- Hydromorphone	—	40
- Oxycodone	—	40
- Oxymorphone	—	40
6-Acetylmorphine	—	4
Phencyclidine	10	10
Amphetamines	50	—
- Amphetamine	—	50
- Methamphetamine	—	50
- MDMA <sup>1</sup>	—	50
- MDA <sup>2</sup>	—	50

**Source:** COAA and Energy Safety Canada, 2018.

1. Methylenedioxyamphetamine, 2.Methylenedioxyamphetamine