COMMUNITY COUNCIL

Safety and Health Guidelines

**Introduction:**

This manual has been developed to meet a legislative requirement of The Workplace Safety and Health Act, and just as importantly, it has been developed to assist council in providing the commitment and leadership that will lead to improved safety attitudes and practices in your community.

**Disclaimer:**

This manual is the property of the Government of Manitoba and has been developed exclusively for use in communities in the jurisdiction of Indigenous Reconciliation and Northern Relations.

Use of this manual, in whole or in part, by other organizations or individuals is not authorized and any harm (including death) or damage caused in relation to the use of this manual, however caused, is not the responsibility of Manitoba.

COMMUNITY COUNCIL

Safety and Health Guidelines

|  |  |  |  |
| --- | --- | --- | --- |
|  **Guidelines** |  **Development** |  **Review** |  **Review**Date |
|  | Date | ByWhom | Date | By Whom |  **Date** | By Whom |
|  M |  D |  Y |   |  M |  D |  Y |  | M |  D |  Y |  |
| Asbestos & Vermiculite Exposure |  |  |  |  |  |  |  |  |  |  |  |  |
| Carbon Monoxide Airline Monitor Calibration |  |  |  |  |  |  |  |  |  |  |  |  |
| Cordless Battery Powered Equipment |  |  |  |  |  |  |  |  |  |  |  |  |
| Deep Fryers and Stoves |  |  |  |  |  |  |  |  |  |  |  |  |
| Electrical Safety |  |  |  |  |  |  |  |  |  |  |  |  |
| Emergency Eyewash Equipment |  |  |  |  |  |  |  |  |  |  |  |  |
| Hanta Virus |  |  |  |  |  |  |  |  |  |  |  |  |
| Inspection Process, Hazard Recognition & Control System |  |  |  |  |  |  |  |  |  |  |  |  |
| Mould |  |  |  |  |  |  |  |  |  |  |  |  |
| Operating a Boat Under 6 meters with more than 7.5kW or 10HP |  |  |  |  |  |  |  |  |  |  |  |  |
| Operating Garbage, Sewer or Water Truck |  |  |  |  |  |  |  |  |  |  |  |  |
| Operating Truck Box Hoist |  |  |  |  |  |  |  |  |  |  |  |  |
| Pregnant & Nursing Workers |  |  |  |  |  |  |  |  |  |  |  |  |
| Proper First Aid to Prevent Infections |  |  |  |  |  |  |  |  |  |  |  |  |
| Pump Maintenance |  |  |  |  |  |  |  |  |  |  |  |  |
| Pumping Liquids |  |  |  |  |  |  |  |  |  |  |  |  |
| Roof Work |  |  |  |  |  |  |  |  |  |  |  |  |
| Vaccinations |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |

**Asbestos and Vermiculite Exposure**

Safety and Health Guidelines

Refer to part 37 of The Manitoba Workplace Safety and Health Act and Regulations, Guideline

for Working with Asbestos.

**Asbestos Exposure**

Asbestos is a mineral with long fibres that can be separated into thin threads. Asbestos fibres are heat

resistant and do not conduct electricity. It is used as an insulator and a barrier to corrosive chemicals

and has been used for a wide range of manufactured goods in industries such as:

**Construction** (i.e., roofing shingles, ceiling and floor tiles, paper products, asbestos cement products,

paints, insulation)

**Automotive** (i.e., clutch, gaskets, brake and transmission parts)

**Textiles** (i.e., heat-resistant blankets and curtains, fire-resistant clothing)

When asbestos fibres are firmly bonded or encased in a material and cannot be released into the air,

they are generally safe. When these materials break down, asbestos fibres can be released into the

environment. This may occur during product use or during repair or demolition work which requires

sanding, grinding, ripping or cutting.

Breathing asbestos fibres into your lungs increases your risk of developing several diseases, mainly

related to the respiratory system (nose, mouth, throat, and lungs). The risk of getting these diseases

depends on how long you are exposed, and how much asbestos is in the air of the work environment.

**Vermiculite Exposure**

Vermiculite is a mineral used in a number of consumer products, including home insulation.

Some vermiculite produced at Libby Mine in Montana from the 1920s until 1990, sold primarily

under the brand name Zonolite®, has been found to contain asbestos. While not all vermiculite

produced before 1990 contains asbestos fibres, it is reasonable to assume that if a building has

older vermiculite-based insulation, it may contain some asbestos.

**Employees should not disturb or handle any potential material containing asbestos or**

**vermiculate.** In workplaces where employees believe that there may be a risk of asbestos or

vermiculite exposure, a professional should be contacted regarding the safe removal. Service

providers can be found in the Yellow Pages under Asbestos Abatement/removal.

Note additional information can be found on the Department of Labour and Immigration website

safemanitoba.com in the Guidelines for “Working with Asbestos”.

**Carbon Monoxide Airline Monitor Calibration**

Safety and Health Guidelines

**General Requirements:**

The carbon monoxide airline monitor should be calibrated by a trained technician prior to use or

monthly if the unit is used on a regular basis.

Maintenance procedures requiring confined entry should be planned one month in

advance to provide adequate time to have the unit calibrated.

In the event of an emergency situation, contact the Technical and Public Works Consultant

assigned to your community for assistance with calibration and for a list of trained technicians.

**Community Responsibilities**

Council must ensure that:

* carbon monoxide airline monitor is calibrated prior to use; and
* equipment is used only by employees

**Cordless Battery Powered Equipment**

Safety and Health Guidelines

**PPE Required:** Safety glasses or face shield, hearing protection, steel- toe boots

**Warning:**

Do not wear gloves, loose clothing or rolled up sleeves

Remove all jewelry

Disconnect the battery power before repairing or servicing.

This procedure addresses cordless battery powered tools such as drills, circular saws, reciprocating saws, nailers etc.

**Steps:**

1. Read and understand equipment manual before operating.
2. Use the Manual Lifting Safe Work Practice (section III-F, SWP-1) if working with heavy material.
3. Layout work and mark area to be worked on. (Drill, cut)
4. Visual inspection of tool to check for possible problems to prevent possible injury.
5. Disconnect battery from tool. Install bit/blade driver in chuck or on head and tighten by hand.
6. Never use the power of the battery to tighten or loosen attachments.
7. Ensure the work area is free of debris and obstructions.
8. Use tool as per manufacturer instructions. Pay attention to:
9. Do not change direction of tool rotation until the tool comes to a complete stop.
10. Keep battery charged for optimum performance.
11. Use clamps to secure work.
12. Remove and store after use. Put battery into charger. Do not leave on scaffold or ladder.
13. Clear the work area of debris.

**Deep Fryers and Stoves**

Safety and Health Guidelines

**PPE Required:** Aprons, oven mitts, gloves, fire extinguisher, first aid kit.

When cooking with deep fryers and stoves the following precautionary measures should be followed:

* + Use extreme caution when working with and around hot oil
	+ Follow the instructions manual for proper use and maintenance of all equipment
	+ Wear all protective clothing when handling hot items
	+ Use gloves and scrapers and other cleaning tools with proper handles
	+ Use the correct cooking oil level and cooking temperature for the deep fryer
	+ Keep the stove surfaces clean to prevent grease flare-ups
	+ Extinguish hot oil or grease fires by sliding a lid over the container
	+ Avoid reaching over or climbing on top of fryers and other hot surfaces. Clean vents when cool
	+ Keep floor surfaces clean and dry to prevent slipping or falling onto hot surfaces, wear slip-resistant shoes, floors should be cleaned with grease-cutting solutions
	+ Do not spill water or ice into oil
	+ Do not overfill or pour excessive amounts of frozen food into deep fryer overfilling causes excessive splashing and bubbling over of hot oil
	+ Do not overheat the oil. Use manufacturers recommended cooking temperatures
	+ Do not move or strain hot oil. Wait until cool
	+ Do not work close to hot fryers when floor is wet
	+ Do not store oil on floors by grill area.

**Electrical Safety**

Safety and Health Guidelines

Refer to part 38 of The Manitoba Workplace Safety and Health Act and Regulations, Electrical Safety.

**PPE Required:** Steel-toe boots (Ohm rated), safety glasses, hearing protection, hard hat, coveralls, gloves (Ohm rated)

Council must ensure that all electrical work is completed by an electrical worker as specified

under The Electricians' Licence Act and The Manitoba Electrical Code.

Electrical work means work in connection with the placing, installing, maintaining, repairing, replacing, or removing of any electrical equipment, and includes such work done on conduits of any description designed or used for the purpose of enclosing or carrying electrical conductors independent of the characteristics of the current, and on any conductors or electrical equipment designed or used for the purpose of supplying any electrical service or for any purpose in connection with such electrical service.

**General:**

**Council must ensure the following:**

* if a defect or unsafe condition is identified in electrical equipment, that steps are taken to protect the safety and health of employees who may be at risk and that the repair or condition is addressed;
* that electrical extension cords are of an approved type with a proper grounding connection, and that the cord is visually inspected each day before it is used for possible damage and repaired or replaced, if necessary;
* extension cords are not used if the grounding post has been removed or made inoperative, and where the cord passes through a work area that it is covered or elevated to protect it from damage and prevent a tripping hazard;
* that extension cords in disrepair are not used;
* that extension cords are not used in or around wet areas;
* that there is an emergency procedure for rescuing, administering first aid and obtaining further medical assistance for an employee coming into contact with energized electrical equipment;
* that the employee who implements the emergency procedure is trained in the emergency procedure;
* that energized electrical equipment is suitably located and guarded to prevent contact; and
* that electrical circuits are protected by a class "A" ground fault circuit interrupter when work is being done in damp location or in an approved enclosure.

**Emergency Eyewash Equipment**

Safety and Health Guidelines

Refer to part 21 Emergency Washing Facilities of The Manitoba Workplace Safety and Health Act and Regulations.

Under The Workplace Safety and Health Act an employer is required to provide emergency eyewash equipment where there is a risk of eye injury from exposure to hazardous chemical substances. Accidental exposure of eyes to chemical substances in any form can result in irritation, temporary or permanent impairment or blindness.

All eyewash equipment must meet the requirements identified in the American National Standards Institute (ANSI) for Emergency Eyewash and Shower Equipment Z358.1-04. Council must request proof of certification from the supplier when purchasing.

There are three types of emergency eye wash stations as follows:

1. drench showers (plumbed units)
2. self contained wall mounted units (with preservative solutions)
3. portable bottles (with preservative solutions for use when operating equipment)

The following outlines the operational requirements, emergency use procedure and solution

change out requirements:

**Operational Requirements:**

* all employees must be familiar with the location and use of emergency eye wash stations;
* all employees must read and understand the manufacturers' instruction manual;
* there should be no sharp projections anywhere in the operating area of the unit;
* the location and the path to these units must always be clear of obstructions;
* the eyewash unit should be identified with a highly visible sign. The area around or behind, or both, should be painted a bright color;
* all employees who may be exposed to eye injury should be instructed in the proper use of emergency eyewash units;
* plumbed eyewash units should be activated weekly to flush the line and verify proper operation;
* self contained wall mounted units should be inspected a minimum of weekly;
* vehicles must be equipped with portable emergency eye wash bottles; and
* portable bottles can support but not replace proper eyewash stations.

**Emergency Use Procedure:**

1. Activate eye wash station.
2. Hold eyelids open using the thumb and index finger.
3. Water or eye solution should not be aimed directly onto the eyeball, but at the base of the nose.
4. Flush eyes and eyelids for a minimum of 15 minutes. Roll eyes around to ensure full rinsing, and hold eyelids open while flushing.
5. Contact lenses must be removed as soon as possible to ensure that chemicals are not trapped behind the lenses.
6. Seek medical attention without delay to ensure there are no lasting effects of the exposure.

The first few seconds following an eye injury are often critical to keeping injury to a minimum. A personal eyewash unit may be kept in the immediate vicinity of employees working in a potentially hazardous area. The main purpose of these units is to supply immediate flushing. With this accomplished, the injured individual should then proceed to a plumbed or self-contained eyewash and flush the eyes for the required 15-minute period. Safety Data Sheets (SDS) should be consulted for additional recommendations.

**Solution Change Out Requirements:**

The following are solution change out requirements for self contained wall mounted units and portable bottles:

* manufacturers' “Solution Change Out” requirements **must be followed;**
* self contained wall mounted units must contain the preservative solution as per the manufacturers' instructions and must be changed at required intervals;
* portable bottles must be replaced as per the expiry date and when used;
* use proper lifting procedures for self contained wall mounted units. Full units may weigh up to sixty pounds. Get assistance when lifting unit off and onto wall mounts;
* drain existing eye solution and rinse with clean water;
* fill with fresh eye solution. Ensure fill opening and hands are clean during filling; and
* records should be kept related to change out requirements and completion.

**Community Responsibilities**

Council must ensure that:

* emergency eye wash equipment is provided, operated and change out solution requirements are followed.

**Hanta Virus**

Safety and Health Guidelines

**PPE Required:** Disposable gloves and clothing, goggles, disposable mask with high efficiency filter

The Hanta Virus is a life-threatening virus carried by rodents, most commonly by the deer mouse. The virus is shed primarily in rodent's urine and possibly feces. Transmission occurs when people become in close contact with these secretions and by inhaling contaminated dust.

Hygiene procedures must be followed when exposed, or potentially exposed to this risk.

Employees should wear protective clothing which includes disposable gloves, goggles, disposable mask with high efficiency filter, disposable clothing.

Use a mix of 100 ml liquid bleach OR 100 grams granular bleach (calcium hypochlorite) to 1 litre of water, spray droppings or nest materials until wet with solution. If the material is in place where it can be flooded, pour the solution directly from the bottle. Allow materials to soak in solution for 15 minutes

Dispose of soaked material with small scoop or shovel in a plastic trash bag, knot bag, place in a

second trash bag and dispose of clothing. Tie up bag and dispose in normal trash.

Wash goggles with disinfectant, clean hands with waterless hand cleaner and sanitize with hand disinfectant. Wash face and hands with soap and water before eating or smoking.

Use caution around any electrical or computerized equipment to prevent electrical shock. If the

materials to be disinfected are in contact with electrical or computer circuit, turn off power before applying wet or damp cloths. To protect against static charge with a grounding strap attached to a metal cabinet.

Good preventative measures are to be followed including placing appropriate levels of pea gravel

or rock around the perimeter of the building and replacing or repairing damaged exterior closures to vents and pedestal covers to maintain the integrity of a sealed environment. Always ensure electric/electronic equipment is dry before replacing covers or closing cabinets, then reenergize.

ACT Hanta Virus clean up kits are available for contractor purchase through Levitt Safety located at:

100 Plymouth Street, Winnipeg.

**Inspection Process, Hazard Recognition & Control System**

Safety and Health Guidelines

The Manitoba Workplace Safety and Health Act and Regulations, section 7.4(5) states "a workplace safety and health program must include a schedule for the regular inspection of the workplace " and requires employers to have an ongoing system for "the identification of existing and potential dangers to workers at the workplace and the measures that will be taken to reduce, eliminate or control those dangers, including procedures to follow in an emergency."

**Infrastructure Audits:**

Infrastructure audits are an effective tool for council's use to assist in identifying existing and potential maintenance related issues. The results of the audit provide council with the data to plan for their maintenance requirements immediately and in the future.

**Inspection Process:**

Inspections are one of the most common and effective tools for identifying and correcting problems before they cause injuries and illnesses. Inspections should also be used to draw attention to and encourage good safety and health practices. Inspections help focus attention on change, help solve problems and can be used as part of a hazard assessment.

**At this time, all inspections will be conducted by the department.**

Inspections will be conducted by departmental staff along with the public works employee and the workplace safety and health (WSH) representatives. The representatives and public works employee must complete training in Hazard Recognition and Control and Level 1 – Workplace Safety and Health. There are two basic types of inspections:

**Unplanned inspections:** are inspections that are not scheduled, and do not necessarily encompass every situation/activity in the workplace. A minimum of one unplanned inspection is required annually. This type of inspection does not need to be a complete inspection. The inspection will emphasize high risk areas. These inspections will be conducted during any regular visit throughout the year (exact dates are left to the discretion of departmental staff).

**Planned inspections:** are inspections that are a planned walk through or examination of a workplace, selected work area or particular hazards, machinery, tools, equipment and work practices. Planned inspections (WSH Audit) must include an inspection of work processes and procedures.

A **minimum one planned inspection is required annually**. Planned inspections will cover the following workplaces:

* water systems;
* wastewater systems;
* solid waste; and
* public works (docks, grounds, buildings, vehicles, equipment, roads, skating rinks, arenas, cemeteries).

Planned inspections will be conducted during the infrastructure audit. Follow up on corrective action will occur during the next community visit.

Completed and signed inspection documentation must be filed in the designated WSH file. Records must be retained for 5 years.

**Hazard Recognition & Control System:**

A hazard is defined as any activity, situation or condition that can cause hurt to someone. All council members and council employees have a responsibility to ensure that any and all unsafe or unhealthy conditions are identified and corrective action taken. A hazard assessment identifies the hazard and provides an opportunity to develop a control.

Situations or circumstances may arise that require a hazard assessment can include:

* changes in the workplace that may affect health or safety such as the introduction of new technologies or production methods or new hazards identified;
* problems identified through inspections, concerns, Infrastructure Audits and investigations;
* better ways of doing the job are identified;
* the purchase or replacement of tools, equipment, machines, devices or biological or chemical substances. Legislation requires that suppliers must provide training, instruction or Workplace Hazardous Materials Information System (SDS sheets) on safe use. Examples that would require training, instruction or SDS sheets include but are not limited to:
	+ tools - chainsaw or lawn mower
	+ equipment - tractor or loader
	+ machines/devices - welder or pipe threader
	+ biological or chemical substances – chlorine

When a risk or hazard has been identified the following process should be followed:

1. upon notification or observation, the supervisor and the regional office should be notified immediately;
2. the employee should be removed from the hazard until it is controlled; and
3. council should take appropriate action to ensure the safety of residents.

The ongoing system to identify hazards and implement appropriate controls to eliminate or reduce the hazard includes the following:

1. planned inspections and appropriate follow up on corrective action;
2. unplanned inspections and appropriate follow up on corrective action;
3. annual infrastructure audit process and appropriate follow up on corrective action;
4. training or instruction provided by the supplier for new or replaced tools, equipment, machines, devices or biological or chemical substances.
5. new employee orientation on safe work procedures, safe work practices and safety rules;
6. development and implementation of the following:
	* Violence Prevention Policy
	* Community Harassment Prevention Policy
	* Community Ergonomic Plan
7. effective emergency response plan;
8. effective implementation of a Plan to Control Chemical and Biological Hazards (Prevention Plan);
9. completion of required training in Hazard Recognition and Control, Level I – Workplace Safety and Health;
10. appointment of a workplace safety and health management and employee representatives; and
11. effective implementation of Safe Work Procedures, Safe Work Practices and Safety Rules

**Community Responsibilities**

Council must ensure that:

* corrective action is addressed for infrastructure audits and inspections;
* training or instruction provided by suppliers for new or replaced tools, equipment, machines, devices or biological or chemical substances.
* requirements for an Emergency Response Plan are implemented;
* new employees are orientated on safe work procedures, practices and safety rules;
* training is provided to both the management and employee Workplace Safety and Health representatives as outlined;
* documentation is filed accordingly.

**Mould**

Safety and Health Guidelines

Refer to part 36 of The Manitoba Workplace Safety and Health Act and Regulations, Chemical and Biological Substances.

**PPE Required:** Gloves, approved respirator (not a dust mask), disposable full-body clothing, eye protection. **Note:** PPE required varies depending on the square area of mould found.

Refer to Cleaning Mould below.

**General:**

There are 20,000 different types of moulds. Moulds produce small spores that are carried by the

air as part of the mould reproduction process. Both mould and mould spores are naturally

present in outdoor air and can enter a building through any openings, ventilation systems and

even on shoes, clothing, etc. It is impossible to eliminate all moulds and mould spores in the

indoor environment.

**Mould Growth:**

Three conditions are needed to enhance mould growth:

1. The right temperature for growth: most moulds prefer the same temperature range that people do;
2. Nutrients or food: many building materials provide suitable nutrients or support for mould to grow, such as: Paper and paper products, cardboard, ceiling tiles, wood products, drywall, dust, paints, wallpaper, insulation materials, carpet, fabric and upholstery; and
3. Moisture, water activity in a material or high relative humidity: the following can lead to a build up of moisture or directly allow water to leak into the building:
	* inadequate ventilation can lead to a buildup of moisture;
	* wall leaks due to landscaping, windows or gutters; and
	* plumbing leaks, condensation, roof leaks and high interior humidity from outside.

Different moulds like different moisture levels.

When spores drop on damp or wet surfaces, they begin to grow and will eat whatever they are growing on in order to survive. **Growth usually begins after 24 to 48 hours.**

**Health Concerns:**

All moulds have the potential to cause health problems (allergies). Toxins can remain in the environment long after the moulds are dead. Only a few moulds can invade living cells and cause disease (general only in people with immune system problems, the elderly and the very young)

There are three types of reactions that people can experience when exposed to moulds:

1. Allergic reactions: are the most common and typically cause hay-fever type allergic symptoms (eye, nose and throat irritation) and asthma;
2. Infectious disease: some moulds can cause or is capable or causing infectious lung diseases; and
3. Toxic reactions: can create many symptoms, such as the ones listed above. These reactions can range from mild to severe, depending on the amount and duration of exposure and the overall health condition of individuals.

**Mould Control:**

The only practical way to control/eliminate mould growth in a building is to make sure there is no

standing water (no matter the amount) or excessive moisture in the air.

**Prevention and Maintenance:**

Council must ensure that the building inspections are thoroughly conducted, including areas that

can lead to mould growth. All maintenance items should be scheduled in a timely way.

**Emergency Plan:**

Council should have an emergency plan in place to address any removal/cleaning of water from buildings (either from pipe breaks, pump failures or flooding). Water should be removed within 24-48 hours.

**Finding Mould:**

If mould is found:

* advise employees and council of the location of the mould;
* prevent any persons from being in the same area as the mould;
* all records related to mould contamination (types, location of problems, causes, removal plan, monitoring, employees exposed, etc. must be retained
* for 30 years); and
* any worker that has been exposed must be made aware of hazards of mould exposure.

**Cleaning Mould:**

**Area Less Than 0.3 Square Meters:**

**PPE:** Disposable respirator, gloves and eye protection

It is not necessary to vacate building, however people who are:

* immune-suppressed;
* have chronic lung problems; and
* are pregnant or just out of surgery

**should not be in an area during removal**. Wash with soap and water.

**Area of Removal of Between 0.3 and 3 Square Meters:**

**PPE:** N99 Respirator, disposable clothing, eye protection and gloves

* All surfaces of material to be misted
* All materials, that are removed, have to be in double 6 mil poly bags
* All contaminated poly and clothing have to be disposed of
* All surfaces have to be dry before reapplying Gyproc and insulation
* No eating or smoking in work area
* Require visible signs warning of remediation work
* Use a 6-mil poly wall to isolate area from the public
* A HEPA vacuum and negative air is required
* All doors to have double flaps
* Only persons who are trained can do this work

**Area Greater Than 3 Square Meters:**

Contact the Mould and Asbestos specialists in the industry to handle identifying, removing and monitoring the area until such a time that it is deemed safe.

**Operating a Boat Under 6 meters with more than 7.5kW or 10HP**

Safety and Health Guidelines

**PPE Required:**

1. properly sized standard lifejacket for each person;
2. 2 paddles, an anchor with 15m of cable, rope or chain or any combination;
3. a bailer or a manual bilge pump;
4. Class ABC fire extinguisher;
5. buoyant heaving line, not less than 15 m in length, with rescue loop;
6. watertight flashlight;
7. three approved pyrotechnic distress signals;
8. permanently fitted navigation lights; and
9. first aid kit, in a scalable rigid-plastic watertight container, containing:
	* 20 adhesive bandages
	* 2 sterile pads
	* one 10-cm x 4.5-m gauze bandage
	* one 7.5-cm x 4.5-m roller bandage
	* three triangular bandages, with minimum base of 100 cm, and 2 pins
	* one 1.25-cm x 4.5-m roll of adhesive first-aid tape
	* one pair of safety scissors
	* 60 mL if antiseptic would solution and 10 disposable applicators, or 10 antiseptic swabs
	* a first aid manual
	* 2 pairs of non latex examination gloves
	* one resuscitation face shield
	* a sound-signaling device

**Requirements:**

The boat must have a Canada Coast Guard conformity plate indicating the boats vital information including;

* vessel type, serial number, manufacturer and the compliance of the pleasure craft with the construction standards, and indicate:
* the recommended maximum gross load capacity
* the recommended maximum number of persons
* the recommended maximum safe limits of engine power
* any circumstances under which an exemption to the limits referring to engine power may apply

The operator must carry valid proof of competency at all times according to the Competency of operators Pleasure Craft Regulation. Proof can take one of three forms:

1. proof of having successfully completed a boating safety course in Canada prior to April 1, 1999;
2. a Pleasure Craft Operator Card issued following the successful completion of an accredited test; or
3. a completed rental boat safety checklist (for power driven rental vessels).

**General:**

Follow safe boating practice indicated in the Operating Manual and those in the Transport Canada Safe Boating Guide.

**Steps:**

1. Check the weather (keep your eye on the sky throughout for weather changes in case it is necessary to head for shore), prepare a trip plan, giving it to a responsible person and instruct them to contact a rescue coordination centre if you are overdue.
2. Ensure:
	1. the boat, motor, steering, throttle, electrical and fuel lines are operating properly.
	2. there is sufficient fuel with a reserve of 1/3 the total fuel.
	3. all the appropriate safety equipment is on board and stored properly.
3. Before a vessel leaves any place where passengers embark, the person in charge of the vessel shall brief all passengers respecting the safety and emergency procedures that are relevant to the type and length of the vessel, including:
	1. the location of lifejackets;
	2. the location and use of personal protective equipment, boat safety equipment and distress equipment;
	3. the safety measures to be taken, including those relating to the protection of limbs, the avoidance of ropes and docking lines and the effect of the movement and grouping of passengers on the stability of the vessel; and
	4. the prevention of fire and explosions.
4. The person in charge of the vessel shall, during a safety briefing, demonstrate how to put on each type of lifejacket carried on board the vessel; and
5. Report that you have safely returned from your trip.
6. See Powered Mobile Equipment Procedure (section III-E, VLE-18) for general instructions to operate powered and mobile equipment.

**References:**

Canada Shipping Act 2001, Small vessel regulations, for more info call Transport Canada Boating Safety Info line toll free at 1-800-267-6687 or on the web at

<http://www.tc.gc.ca/acts-regulations/GENERAL/C/csa/regulations/070/csaQ76/csa076.html>.

Transport Canada Safe Boating Guide available at most Department of Conservation offices.

**Operating a Garbage, Sewer or Water Truck**

Safety and Health Guidelines

**PPE Required:** Hard hat, hearing protection, reflective safety vest, coveralls, rubber/puncture resistant gloves, safety glasses and steel- toed boots, emergency eye wash bottle

Only licenced, competent operators to operate a vehicle.

**Preparation:**

1. Do a circle check of the unit and fill in log book or inspection sheet.
2. Check all fittings and hoses to be in place.
3. An operational fire extinguisher must be in vehicle.
4. Check portable eye wash unit.

**Steps:**

1. Start truck using Starting Equipment (Cold Start) Procedure.
2. Add fuel to the truck using Fuelling Vehicles or Equipment Procedure.
3. Use Backing Up (Vehicles & Equipment) Procedure

**Garbage Truck:**

1. Drive route and sort/load garbage using the Manual Lifting Safe Work
2. Park off driven road area if possible. Use four-way flashers.
3. Deposit solid waste at refuse site in proper marked areas.
4. For box-hoist vehicles use Operating a Truck Box Hoist Guideline
5. Use the Manual Lifting Safe Work Practice for stationary material.
6. Proceed to unloading area.
7. If vehicle is equipped with rotary light, have it operating at all times while in operation.

**Sewage Truck:**

1. Park off main road area if possible. Use four-way flashers.
2. Use the Manual Lifting Safe Work Practice for stationary material.
3. If vehicle is equipped with rotary light, have it operating at all times while in operation.

**Water Trucks:**

1. Drive route and load and unload using the Manual Lifting Safe Work
2. Park off main road area if possible. Use four-way flashers.
3. Deposit sewage waste at approved site or lagoons.
4. Use the Manual Lifting Safe Work Practice for stationary material.
5. If vehicle is equipped with rotary light, have it operating at all times while in operation.

**Shut- Down:**

1. Return truck to storage area.
2. Use Equipment Hot Turn Off Procedure
3. Do circle check of truck. Grease if necessary.
4. Check all hoses and fittings to ensure they are still all in place.
5. Ensure water and sewage truck pumps are drained during cold weather operation.
6. For cold weather storage ensure tanks and pumps on water and sewage trucks are completely drained.
7. See Powered Mobile Equipment Procedure for general instructions to operate powered and mobile equipment.

**Operating a Truck Box Hoist**

Safety and Health Guidelines

**PPE Required:** Safety glasses, hard hat, hearing protection, steel-toe boots and high visibility safety vest

**Steps:**

1. Start vehicle using Starting Equipment Procedure
2. Check for overhead obstructions or electrical power lines. Ensure box is empty and engage power take off control to raise the hoist.
3. Block hoist at both pivot arms using metal or hardwood blocking.
4. Check hydraulic fluid level. Inspect hoist components for stress cracks. Grease all fittings.
5. Remove chocks and lower truck hoist slowly. Ensure the end gate is secured.
6. Drive to the loading area, park on level ground and set the park brake. Wheel chocks are required if level ground is not present.
7. **Do not load a vehicle on a 5% or greater grade.**
8. When the truck is to be loaded with heavy equipment, leave the cab and stand a safe distance
9. from the equipment. Before leaving the cab, ensure that the park brake is on and the engine is shut down, with the transmission in the lowest forward gear. Use the Getting On or Off Equipment Procedure when getting on or off equipment.
10. Restart engine.
11. Make sure the load is secure and drive to the load discharge site.
12. Back into the load discharge site using Backing Up Procedure
13. Set the park brake and leave cab using the Getting On or Off Equipment. Inspect the area immediately behind and above for obstructions or electric power lines.
14. Release the end gate locks and climb back into the cab using the Getting On or Off Equipment
15. Procedure. Release the park brake and apply light pressure to the foot brake. Raise the hoist slowly. The truck will want to move forward when the load is released.
16. Drive forward a few feet to completely empty the truck box.

**Care must be used when the load is stuck in the box**

* + Never walk in front of a raised end gate of a loaded box. Lower the hoist slowly (hydraulic fluid will "blow" out of the reservoir if a fully loaded box is lowered rapidly) and inspect the load.
	+ Redistribute if necessary and remove any material that may jam at the end gate.
	+ Never slam the end gate of a raised box or drive in reverse and stop rapidly to discharge a stuck load.
	+ Never use a back-and-forth movement of the truck box (bucking) to release load. Spray- coat the inside of the box in the spring and fall months in order to prevent the loads from sticking (using an environmentally friendly spray.
1. Lower the hoist slowly and lock the end gate.
2. Drive back to the garage or vehicle storage area and park vehicle.

**Pregnant and Nursing Workers**

Safety and Health Guidelines

Part 2 of The Manitoba Workplace Safety and Health Act and Regulations, requires that:

"When a worker informs her employer that she is pregnant or nursing, the employer must:

1. inform the worker of any known or foreseeable risk that conditions at the workplace pose or may pose to the safety or health of the worker or to her unborn or nursing child; and
2. so far as is reasonably practicable,
3. take steps to minimize the exposure of the worker to the condition that creates the risk, or
4. if alternate work is available that involves no risk or less risk and the worker is reasonably capable of performing that work, assign the worker temporarily to that alternative work without loss of pay or benefits. "

**Proper First Aid to Prevent Infections**

Safety and Health Guidelines

Only trained first aiders to provide first aid, refer to part 5 of The Manitoba Workplace Safety and

Health Act and Regulations.

**PPE Required:** First aid supplies, non-latex gloves.

**The following steps should be followed to avoid infections:**

1. Remove person from scene of contaminants, wash your hands with soap and water.
2. Remove any clothing gently from the area of the laceration, wet with small amounts of water
3. to loosen any clothing stuck to the wound.
4. Inspect the wound thoroughly in order to establish how deep it is. Gently remove any foreign objects in the cut that are easily accessible.
5. If not deep or bleeding a lot, gently rinse the wound with clean water. Rinse away from the laceration to prevent surface dirt and particles from entering the laceration and to prevent contaminants in the wound from being driven further. Use a large amount of water if available.
6. Gently separate the sides of the cut and inspect thoroughly.
7. Wash with clean soap and water until no other particles can be seen.
8. Pat dry with a clean towel or pad.
9. Apply clean or sterile pad.
10. Wrap tightly with a clean or sterile gauze if available.
11. If there is a lot of bleeding apply firm continuous pressure using a clean or sterile pad and elevate the part if possible. Proceed to the nearest health care facility without delay. Do not apply tourniquet unless a part is near or completely amputated.
12. Do not place any objects into the laceration to assist in removing foreign objects. Do not attempt to remove any larger foreign objects in a cut. Rinse well with water around the object and wrap with a clean or sterile pad and proceed to the nearest health care facility. Keep the foreign body secure in place if possible.

**Pump Maintenance**

Safety and Health Guidelines

Council must ensure that all employees are appropriately protected from hazards associated with servicing pumps. Electrical work shall only be performed by those who are certified to do so.

**PPE Required:** Steel-toe boots, hardhat, safety glasses, gloves and coveralls

**Tools Required:** appropriately sized pipe wrenches, multi - meter, voltage indicator, grease gun, screw drivers, open end wrenches and socket set clean, dry rags

**Preparation:**

1. Inform council and residents of any expected water or sewer service disruptions.
2. Read and understand the pump's manual.
3. Refer to the following Safe Work Procedures and Safe Work Practices if required:
	* Lockout Procedure
	* Pipefitting Procedure
	* Confined Space Procedure
	* Manual Lifting

General:

1. Lockout procedure must be performed prior to any pump service work.

2. Only a certified electrician may service electrical motors.

3. Have a plan in place for loss of pump service; include back up pumps, alternate source of water delivery, spare parts, list of suppliers, etc.

**Maintenance Procedures:**

1. Grease the pump as specified in the owner's manual.
2. Listen for variations in the pump's operation.
	* a grinding noise indicates cavitation (usually resulting from inadequate water supply to the pump). Ensure intake valves are fully open - you may need to temporarily throttle (partially close) a discharge valve to balance the system.
	* water hammer (banging pipes during pump on-off cycling) is caused by a sudden increase or decrease in water pressure. Consider having a flexible coupling installed on the discharge side of the pump and check the operation of the pressure relief valves.
3. Look for water leaks and change in water pressure.
	* water leaks between the pump and motor indicate a worn mechanical seal. As the replacement usually requires the removal of the pump motor, a certified electrician is required.
	* a decrease in water pressure indicates leakage somewhere in the system. If no leaks are detected in the plant, visually inspect the pipeline route and ensure that all unoccupied houses have their water service turned off. Isolate the damaged section of pipe and repair using G-3, Pipefitting
	* Check the rotation of the pump - a counter-clockwise rotation indicates a flow reversal and is caused by a failed check valve.
4. Carefully feel the pump and motor case for heat. Excessive heat usually indicates:
	* Inadequate lubrication. Lubricate as required.
	* Worn parts. If a spare pump or motor is not available, order a replacement.
	* Loss of prime. Prime pump and ensure full intake pipe flow - check reservoir level. After priming, some pumps require backpressure to operate - throttle the discharge valve until the pressure builds to normal operating range and slowly open until the pressure stabilizes at full open.
	* Undersized pump or motor. Consult with your assigned Technical & Public Works Consultant.
	* An increase in backpressure from throttled valves. Ensure all discharge valves are fully open.

**Pumping Liquids**

Safety and Health Guidelines

**PPE and Safety Equipment Required**: Steel-toe boots, safety glasses, hard hat, gloves, coveralls, fire extinguisher, first aid kit

**Steps:**

1. Set up barricades using Barricade Procedure
2. Load pump and equipment into truck using the Manual Lifting Safe Work
3. Drive to location and unload using the Manual Lifting Safe Work
4. String out hoses to remove any bends or knots.
5. Set pump on a firm, level surface. Attach intake and discharge hoses to pump.
6. Ensure suction hose end has a screen and is in deep water.
7. Read and understand instruction manual before operating pump.
8. Fuel the pump and check oil level
9. Prime the pump and start the engine.
10. Do not leave the pump unattended. Keep checking the suction line for plugging or running out of water.
11. When pumping is completed, remove and roll up hoses ensuring all water is removed.
12. Load pump and equipment into truck using the Manual Lifting Safe Work Practice
13. Remove barricades if used.

**Roof Work**

Safety and Health Guidelines

**PPE Required:** Safety harness, steel -toe boots, gloves, hard hat, safety glasses

This procedure applies to every workplace where roofing material is repaired, applied to or removed from a building or structure.

**General:**

1. Before any roof work is completed, the roof must be evaluated to determined if it will hold the load of the workers, tools and materials;
2. When a roof has a slope greater than 4:12 and no more than 6:12 it is required to have roof jacks and toe boards installed along the continuous length of the eaves, and not more than 2.4m apart, below the work area;
3. Roof jacks must have an effective non slip device;
4. Toe boards must be fastened to the roof jacks and be at least 50x150mm (2x6); and
5. When the slope of the roof is greater than 6:12 guardrails are to be installed and a fall protection system is required. See Fall Protection Procedure

**Vaccinations**

Safety and Health Guidelines

Some tasks, situations or activities expose employees to infectious diseases/biological hazards. Vaccinations provide protection to employees to avoid these hazards.

It is recommended that public works employees obtain the following vaccinations:

1. Hepatitis A - two doses 6 months apart
2. Hepatitis B - three doses
	* 1st
	* 2nd 1-2 months after 1st
	* 3rd 4-6 months after 1st
3. Hepatitis A & B - "TWINRIX” as directed by Health Official
4. Tetanus - at 16 years of age and every seven years
5. Tuberculosis - if suspected infection, seek medical attention

**Getting On or Off Equipment (3-point Method)**

Safety and Health Guidelines

**Steps:**

1. Ensure that the machine is equipped with side grab rails and steps.
2. Clean mud or snow off boots before climbing onto the machine.
3. Face the machine and step onto the first step.
4. Maintain a 3-point contact at all times (2 hands and 1 foot or 2 feet and 1 hand).
5. Climb into cab or other areas provided with non slip surfaces.
6. Make sure the machine is in neutral and brakes are engaged before getting off. Shut off machine if necessary.
7. Step out of cab onto ladder and while facing the machine, descend using the 3-point method.

**Changing a Grinding Wheel**

Safety and Health Guidelines

**PPE Required:** Safety glasses or face shield, hearing protection, gloves, steel- toe boots

**Warning:** Do not wear loose clothing or rolled up sleeves and remove ALL jewellery.

**Steps:**

1. Read and understand equipment manual before operating.
2. Use Lockout Procedure if hard wired. Unplug the bench grinder or portable to remove power.
3. Remove the wheel guard screws and the wheel guard.
4. Hold the grinding wheel firmly. Remove the nut and flange.
5. Remove the old wheel and replace it with the new one.
6. Assemble the flange and nut onto the spindle. Tighten the spindle nut just enough to hold the wheel firmly. If the nut is tightened too much, the wheel may be damaged.
7. Attached the wheel guard.
8. Turn the grinder on and let it come up to speed and idle for one minute. Look for any wobble
9. before use.

**NOTE:** Turn the spindle nut on the right-hand side counter clockwise to loosen. Turn the spindle nut on the left-hand side clockwise to loosen.

**Emergency Response Plan**

Safety and Health Guidelines

**Emergency Response Plan Training Requirements:**

Councils are responsible to ensure that the following emergency response plan training is provided to ALL community employees:

1. orientation of this plan
2. fire departments shall train all employees on the use and location of fire extinguishers in their specific work area and evacuation procedures. Training should be reviewed every six months or as required;
3. fire drills, where applicable shall be held annually; and
4. new employees shall be orientated on the above, and
5. Mayor and council to review when elected and annually thereafter.

Community councils should ensure that fire departments and constables are properly trained as per departmental policy.

Councils must ensure that emergency telephone numbers are posted by each telephone. A sample is attached. Employees must have the capability of summoning assistance in the case of an emergency. See the Working Alone Procedure in this manual.

Council must ensure that this emergency response plan is reviewed annually.

**Situation Specific Emergency Response Plans:**

The following emergency response plans have been developed in the case of specific emergencies that may arise in your community workplace. Council may develop their own plans to deal with emergencies however the plan must be in writing and form part of this manual.

After an emergency situation, council should ensure that the emergency plan is reviewed and updated accordingly.

**Note:** fire departments would include ambulance personnel where applicable.

**Infrastructure Fire:**

1. Alert others by activating the fire alarm if available.
2. Evacuate the building.
3. Call the fire department on the nearest telephone or communication system available. Have the fire department activate the fire hall alarm.
4. Extinguish fire ensuring that you will not endanger your personal safety or the safety of others.
5. Attend to injured. Note this step may happen earlier depending on the situation and whether or not the fire department has arrived at the scene.
6. Alert other agencies, if warranted (RCMP, Office of the Fire Commissioner).
7. The Office of the Fire Commissioner must ensure the workplace is safe for re-entry.
8. Depending on the situation the community EMO plan may be activated.

**Fire Outside:**

1. Alert others by activating the fire alarm if available.
2. Evacuate the area.
3. Call the fire department on the nearest telephone or communication system available. Have the fire department activate the fire hall alarm. If a local Department of Conservation Fire Tac Crew is available, they should be contacted as well.
4. Extinguish fire ensuring that you will not endanger your personal safety or the safety of others.
5. Attend to injured. Note this step may happen earlier depending on the situation and whether or not the fire department has arrived at the scene.
6. Alert other agencies, if warranted (RCMP, Emergency Measures Organizations, Office of the Fire Commissioner).
7. The Office of the Fire Commissioner must ensure workplace is safe for re-entry.
8. Depending on the situation the community EMO plan may be activated.

**Explosions (inside or outside buildings):**

1. Alert others by activating the fire alarm if available and applicable.
2. Evacuate the building/area.
3. Call the fire department on the nearest telephone or communication system available. Have
4. the fire department activate the fire hall alarm.
5. Extinguish fire ensuring that you will not endanger your personal safety or the safety of others.
6. Ensure area is cordoned off.
7. Alert other agencies, if warranted (RCMP, Emergency Measures Organizations, Office of the Fire Commissioner).
8. Depending on the situation the community EMO plan may be activated.

**Chemical Spills/Leaks (gas, propane etc.) – Inside Infrastructure:**

1. Alert others.
2. Evacuate the building/area.
3. Call the fire department who will determine the next steps.
4. Material Safety Data Sheets (MSDS) are required in each building. These same sheets must
5. also be stored centrally.
6. Depending on the situation the community EMO plan may be activated.

**Chemical Spills/Leaks (gas, propane etc.) – Outside:**

Potentially dangerous situations could involve an accident where dangerous goods may harm humans and the environment. An example is a ruptured propane fuel line to a furnace or a train derailment in a community where corrosive airborne vapors are released and blowing into a habited area.

1. Alert others by activating the fire alarm if available.
2. Evacuate the building/area.
3. If applicable, contact Dangerous Goods (for major spills, the Department of Conservation, Emergency Measures Organizations and Office of the Fire Commissioner.
4. Depending on the situation the product supplier should be contacted for advice
5. Depending on the situation the community EMO plan may be activated.

**Hostage Taking/Gang Altercation Etc.:**

Where the community constables are not available, the nearest RCMP office should be contacted.

Community councils must ensure that constables are trained prior to involving themselves in

situations that could create harm to the constables or others or a liability situation for the council,

the Department of Aboriginal and Northern Affairs or the Province of Manitoba.

1. Community constables must ensure that they do not endanger their personal safety (or the safety of others) when attempting to assist in a hostage taking or gang altercation etc.
2. Contact the RCMP or acquire assistance from the neighboring band constable (if available).

**Domestic Violence:**

Where community constables are not available, the nearest RCMP office should be contacted.

1. Constables must ensure that they do not endanger their personal safety (or the safety of others) when attempting to assist in a domestic violence situation.
2. Constables should determine the level of intervention and then contact the RCMP or acquire assistance from the neighboring band constable (if available).

**Communication Systems Failure:**

Each council should assess the situation and develop a community specific plan of action to

address this possibility. Your plan could include using a telephone, a two-way radio system

or another form of communication.

**Building Evacuation Plan:**

Council should ensure that a building specific evacuation plan is developed (where applicable) to protect life and property during an emergency, and to provide for a safe, rapid and orderly evacuation when necessary. The evacuation plan should include a floor plan of the building indicating the location of exit doors and fire extinguisher. The floor plan should be posted at each exit along with emergency telephone numbers. Samples of a floor plan and an emergency phone number list is attached.

Any person seeing fire or smoke shall warn persons nearby and phone the fire department. Portable fire extinguishers may be used on small fires providing there is no danger to the operator.

If you hear the word fire or smell smoke, all building occupants are required to immediately leave the building using the nearest or safe exit. Occupants should walk and not run. Ensure that exits are clear at all times.

**All doors should be left unlocked to assist the fire department in the event of a fire call situation.**

Upon exiting the building, all occupants should meet at a pre designated area. Do not

attempt to re-enter the building until clearance has been given by the Office of the Fire

Commissioner.

Fire drills should be held annually and should be recorded and filed in the designated WSH filing system.

**Storage of Combustibles and Flammable Materials:**

Combustibles and flammable materials come in various forms (liquid, compressed gas, natural gas, solids). Each individual product has its own handling and storage requirements, depending on the type, the quantity and the location.

Combustible and flammable materials must be handled and stored in accordance with The Manitoba Workplace Safety and Health Act and Regulations. See Plan to Control Chemical and Biological Hazards part 36.

WHMIS stipulates, copies of the safety data sheet (SDS) are to be kept in a binder in the following workplaces:

* each work site;
* centrally in a designated WSH filing system; and
* fire hall in case of an emergency.

Further information regarding combustible and flammable handling and storage is also available from the Office of the Fire Commissioner.

**First Aid Program:**

Council must ensure:

* a trained first aider 2 is available in the workplace during working hours;
* that first aiders are provided refresher training within 3 years after the date of issue of the previous certificate;
* a list of trained first aiders is posted on the Workplace Safety and Health bulletin board;
* that a first aider is allowed to provide prompt and adequate first aid to an ill or injured employee and that the first aider suffers no loss of pay or other benefits as a result of providing the first aid;
* that an employee who becomes ill or is injured at the workplace receives assistance from a first aider;
* that a seriously ill or injured employee is transported to a medical facility at council's expense; and
* that all illness or injury suffered by an employee is recorded on the attached First Aid Treatment Form. Records must be retained for five years.

**First Aid Services - First Aid Kits:**

Council must ensure:

* that each municipal building has a first aid kit that includes the following:

(a) general:

(i) a recent edition of a first aid manual

(ii) a pair of impervious disposable gloves

(iii) a disposable resuscitation mask with a one-way valve

(iv) a disposable cold compress

(v) 12 safety pins

(vi) splinter forceps

(vii) one pair of 12 cm bandage scissors

(viii) 25 antiseptic swabs

(ix) waterless hand cleaner

(x) waterproof waste bag;

(b) dressings - each of the following items must be sterile and individually wrapped in order to maintain sterility:

(i) 16 surgical gauze pads (7.5 cm squares)

(ii) 4 pads (7.5 cm X 10 cm, non-adhesive)

(iii) 32 adhesive dressings (2.5 cm wide)

(iv) 2 large pressure dressings; and

(c) bandages:

(i) 3 triangular bandages (1 m each)

(ii) 2 conforming bandages (10 cm each)

(iii) 2 rolls of 2.5 cm adhesive tape

(iv) 1 roll of 7.5 cm elastic adhesive bandage

(v) 2 rolls of 7.5 cm tensor bandage.

* that all municipal vehicles are equipped with an appropriate first aid kit;
* that first aid kits are replenished or replaced immediately after each use;
* that monthly inspections of first aid kit contents are conducted; and
* the location of the first aid kit is clearly marked and employees are aware of the location.

**Workers Compensation Board Requirements:**

It is mandatory that all incidents (no matter how minor) that result in injuries shall be reported to the council by the employee. The Workers Compensation Board of Manitoba Notice of Accident Form shall be used for this purpose. Council should ensure that every injury at work results in a completed form. These forms can be obtained by phoning the Workers Compensation Board toll free at 1-800-362-3340, the general inquiries line ext. 4922 or dial 0, or visit [www.wcb.mb.ca](http://www.wcb.mb.ca).

Use our Community/Incident Report form

**Smoke Detector Program:**

Council should implement a smoke detector program incorporating the information provided below.

Fire alarm systems are required where the total occupancy load exceeds 300 in assembly type buildings or 75 occupants above or below the first story in a low or medium hazard in an industrial setting.

The department recommends that battery powered smoke detectors be installed as an extra precaution or early warning appearance of smoke. Councils should purchase smoke alarms equipped with non-removable lithium powered batteries.

Smoke alarms should be installed, tested and maintained in conformance with the manufacturer's instructions.

**Portable Fire Extinguisher Program:**

Councils are responsible to follow the guidelines below as it relates to their fire extinguisher program:

**Location:**

* Portable extinguishers shall be located in or adjacent to corridors or aisles that provide access to exits.
* Portable extinguishers in proximity to a fire hazard shall be located so as to be accessible without exposing the operator to undue risk.
* Portable fire extinguishers shall be available in all community vehicles.
* Portable fire extinguishers must be available at all job sites.
* Signs should be posted advising of the fire extinguisher location.

**General Requirements:**

There are a variety of fire extinguishers that are available for purchase. The type of fire you anticipate would determine what type of fire extinguisher you purchase.

The classification of fire extinguishers is noted by a letter, A, B, C, or D which indicates the type of fire it is effective against. The letter is preceded by a number that indicates its extinguishing effectiveness. An ABC classed fire extinguisher can be used to extinguish any of the three most common type fires (Class A, B or C below).

Portable fire extinguishers shall be maintained in a fully charged and in operable condition, and kept in their designated places at all times when they are not being used. Maintenance, servicing and recharging should be performed by a trained person that is equipped to provide the service.

If a fire extinguisher has been discharged, immediate arrangements must made with the fire department for re-charging and a back up. Fire extinguishers shall be conspicuously located where they will be readily accessible and immediately available in the event of a fire. Preferable they will be located along normal paths of travel, including exits from areas.

The department recommends that if council is purchasing a new fire extinguisher or replacing old extinguishers that 20 Ib. fire extinguishers be purchased.

Fire extinguishers not more than 40 Ib. shall be installed no more than 5 feet off the floor. Fire extinguishers more than 40 lbs. are to be installed no more than 3.5 feet off the floor, with at least 4-inch space between the floor.

**The classification of fires are:**

* **Class A Fires:** Fires in ordinary combustible materials such as wood, cloth, paper, rubber, and many plastics.
* **Class B Fires**: Fires in flammable liquids, combustible liquids, petroleum greases, tars, oils, oil-based paints, solvents lacquers, alcohol and flammable gases.
* **Class C Fires:** Fires that involve energized electrical equipment, where the electrical conductivity of the extinguishing media is of importance (when electrical equipment is de-energized, fire extinguishers for Class A or Class B fires can be used safely).
* **Class D Fires**: Fires in combustible metals, such as magnesium, titanium, zirconium, sodium, lithium and potassium.
* **Class K Fires:** Fires in cooking appliances that involve combustible cooking media (vegetable or animal oils and fats).

**There are 3 classifications of hazards:**

* **Light (Low) Hazard:** Light hazard occupancies are locations where the total amounts of Class A combustible material, including furnishings, decorations, and contents are of minor quantity. This can include some buildings or rooms occupied as offices, classrooms, churches and assembly halls.
* **Ordinary (Moderate) Hazard:** Ordinary hazard occupancies are located where the total amount of Class A combustibles and Class B flammables are present in greater amounts than expected under light (low) hazard occupancies. These occupancies could consist of dining areas, mercantile shops, allied storage, light manufacturing, parking garages and workshops.
* **Extra (High) Hazard:** Extra hazard occupancies are locations where the total amount of Class A combustibles and Class B flammables present, in storage, production, use, finish product, or any combination thereof, is over and above expected in occupancies classed as ordinary (moderate) hazard. These occupancies could consist of woodworking, vehicle repair, aircraft, boat servicing and cooking areas.

**Table: Fire Extinguisher Size and Placement for Class A Hazards**



Where the floor area of a building is less than 3000 sq. ft. at least one fire extinguisher of the minimum size recommended should be provided.

Each 2.5-gallon water extinguisher (rated 2-A) will protect an area of 3000 sq. ft. in an ordinary hazard.

**Table: Fire Extinguisher Size and Placement for Class B Hazards**



**Fire Extinguisher Size and Placement for Class C Hazards:**

Fire extinguishers with Class C ratings shall be required where energized electrical equipment can be encountered that would require a nonconducting extinguishing medium. Since the fire itself is a Class A or Class B hazard, the fire extinguisher shall be sized and located on the basis of the anticipated Class A or Class B hazard.

**Fire Extinguishers Size and Placement for Class D Hazards:**

Fire extinguishers or extinguishing agents with Class D ratings shall be provided for fires involving combustible metals. Fire extinguishers shall be located not more than 75 ft. (23 m) of travel distance from Class D hazard.

**Fire Extinguisher Size and Placement for Class K Fires:**

Fire extinguishers shall be provided for hazards where potential for fires involving combustible cooking media (vegetable or animal oils and fats). Maximum travel distance shall not exceed 30 ft. (9.15 m) from the hazard to the extinguisher.

**Inspection:**

Fire extinguishers shall be inspected to ensure it is functioning (charged) when initially placed in service and thereafter at approximately 30-day intervals. Records shall be kept on a tag or label attached to the fire extinguisher. An inspection checklist should be maintained on file in the designated WSH filing system.

Fire extinguishers shall be hydrostatic tested annually or when specifically indicated by an inspection.

Hydrostatic test intervals vary from every 5 years to 12 years, depending on the type. Every 6 years stored-pressure fire extinguishers that require a 12-year hydrostatic test shall be emptied and subjected to the applicable maintenance procedures.

**Class A Ratings:**

Class A portable fire extinguishers are rated from 1-A through 40-A. For 1-A rating 1.25 gallons are required. A 2-A rating requires 2.5 gallons.

**Class B Ratings:**

Extinguishers suitable for use on Class B fires are classified with numerical ratings from 1-B through 640 -B. The rating is based on the approximate square foot area of a flammable liquid fire that a nonexpert operator can extinguish. A nonexpert operator is expected to extinguish 1 square foot for each numerical rating or value of the extinguisher rating.

**Class C Ratings:**

There are no fire extinguishing capability tests specifically conducted for Class C ratings. Extinguishers for use on Class C fires receive only the letter rating because Class C fires are essentially Class A or Class B fires involving energized electrical equipment.

**Class D Ratings:**

Test fires for establishing Class D ratings vary with the type of combustible metal being tested.

**Multiple Markings:**

Extinguishers suitable for more than one class of fire are identified by combinations of letters. The three most common combinations are Class A-B-C, Class A-B, and Class B-C. It is recommended that councils replacing fire extinguishers purchase a type that is suitable for the work area. An ABC type extinguisher is effective against the three most common classes of fires.

**Portable Fire Extinguisher Training:**

All employees, including new employees must be instructed on the proper use of fire extinguishers. Training should include how to engage the extinguisher and where to effectively apply the extinguishing agent. The fire department should be charged with the responsibility of providing this training.

Employees should be made aware that fire extinguishers are to be used against incipient (just starting) fires of limited size.

**Community Responsibilities:**

Council must ensure that:

* emergency phone numbers are posted;
* employees are trained as outlined in the Emergency Response Plan;
* fire departments and constables are trained as departmental policy;
* a building evacuation plan is developed;
* SDS sheets are stored centrally as well as in a binder in each building;
* first aid services are provided as outlined;
* trained first aiders are available in the workplace;
* appropriate first aid kits are available in each municipal building and vehicle;
* employees complete Workers Compensation Notice of Accident Form if injured at work;
* a smoke detector program is implemented; and
* a portable fire extinguisher program is implemented.