Newfoundland and Labrador Film and Television Production Health and Safety Guidelines

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Health and Safety Guidelines for the Newfoundland and Labrador Film and Television Production Industry

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General Health and Safety

1.0 Safety Responsibilities and Duties

1.1 Responsibilities

Safety takes precedence over expediency or short cuts. Safety is the responsibility of every individual. The following lists the duties and responsibilities of the Employer/Manager/Employee.

Executive Producer / Producer / Line Producer¹

- ensure the safety of all persons associated with the production and general public
- promote safety and provide safe working conditions
- provide and maintain at all workplaces any required First Aid supplies and services, and designate a person who shall be trained in First Aid, as required under the Occupational Health and Safety Regulations (refer to guideline 3.0)
- comply with all safety Statutes and Regulations
- ensure that the Department of Labour (O.H.S.) shall be notified of any production lasting 30 days or more

Production Manager

- facilitate the implementation of all reasonable safeguards and ensure safe working conditions for all persons associated with the production and the general public
- ensure that all employees have access to and are aware of the contents of the *Newfoundland and Labrador Film and Television Production Safety Guidelines*

1st Assistant Director

- ensure safe working conditions on set
- ensure that appropriate safeguards are in place and that an emergency plan has been devised
- confer and consult with the Stunt Co-ordinator, Special Effects Co-ordinator, Weapons Handler, Animal Handler, and Department Heads to assure that all reasonable safeguards are in place

- schedule sufficient time to allow the Stunt Co-ordinator, Special Effects Co-ordinator, Weapons Handler, Animal Handler, and Department Heads to inform the performers and crew of all pertinent safety considerations
- communicate on-set developments or potential hazards to the Producer and / or Production Manager
- comply with all safety Statutes and Regulations

It is recognized that there can be unforeseen or unique situations that will require on-site judgment calls. The safety of all personnel involved must be the foremost priority.

Department Heads²

- ensure that all department functions are performed in accordance with standard practices and that all necessary precautions are observed, including the use of proper safeguards and means of personal protection, and a careful check of all new and relocated equipment before it is placed in operation
- ensure that any necessary safety equipment and / or protective devices are being used or worn
- inform their department personnel of possible hazards and how to avoid them
- inform and educate their department as to the properties of any chemicals and / or hazardous materials stored or handled by them and emergency procedures to be followed
- instruct new / inexperienced personnel on departmental safety procedures
- insist that any injured personnel secure First Aid and report all injuries to the Safety Representative and / or 1st Assistant Director
- comply with all safety Statutes and Regulations

The department head on site during preparation will be designated as the safety representative

It is highly recommended that Department Heads hold informal safety meetings daily with work crews prior to job assignments. These five minute safety talks should: demonstrate proper safety procedures to complete the job; use safety bulletins or other hand-out training materials; introduce new workers to safety procedures, rules and practices; and make employees aware of safety equipment available for the job (respirators, harnesses, gloves, etc.)

Employee / Contractor / Freelancer³

- should follow safe procedures and take an active role in protecting themselves and all others possibly affected by their undertakings
- should in the case of injury, report promptly to Department Head and seek First Aid or medical help without delay
- should immediately report any hazardous situation to Department Head
- should comply with all safety Statutes and Regulations
- should wear or use protective devices, equipment or clothing as required

It is in the interests of the highest possible standards of safety on the set that any report of unsafe elements be welcomed as a sign of conscientiousness and professional competence.

The Safety Representative⁴

- should be elected by the crew and identified on the Call Sheet
- should be a representative for the crew (both production and technical, cast, and extras) in all matters concerning safety
- should be knowledgeable of the Occupational Health and Safety Act and Regulations
- should be knowledgeable of the guidelines and regulations contained in the *Newfoundland and Labrador Film and Television Production Safety Guidelines*
- should ensure that all employees have access to a copy of the Newfoundland and Labrador Film and Television Production Safety Guidelines

should comply with all safety Statutes and Regulations

Any employees who believes themselves to be in a potentially hazardous situation, which they have been unable to resolve in consultation with their Department Head, may request the Safety Representative to mediate on their behalf and approach Management if so deemed necessary

If the situation is not remedied and / or the employee has "reasonable grounds" that a hazard still exists, a work refusal based on Section 45 of the Occupational Health and Safety Act may be implemented (refer to Guideline 2.0 Procedure for Work Refusal)

1.2 Regulations

- 1.2.1 All sites or workplaces employing 10 or more people shall have a safety committee comprised of members of the production and technical work force. Members of the crew shall elect their own representative(s).
- 1.2.2 A copy of the Occupational Health and Safety Act and Regulations shall be available on each work site, as well as a copy of the Newfoundland and Labrador Film and Television Production Guidelines for Health and Safety.
- 1.2.3 All sites shall comply with the Department of Labour Occupational Health and Safety First Aid Regulations regarding First Aid requirements. This includes, but is not limited to, the provision of the correct size and type of First Aid kit and trained First Aid providers.
- 1.2.4 Provincial Fire Regulations shall be strictly adhered to.
- 1.2.5 The *Workplace Hazardous Materials Information System* (WHMIS) requirements shall be strictly adhered to. Any person performing activities or using materials covered by these regulations must ensure that all persons likely to be affected are fully informed of and trained to recognize any and all hazards.

1.3 Recommendations

- 1.3.1 Where a Call Sheet is used, a Safety Section should be incorporated. Information provided should include, but not be limited to:
 - notice of pyrotechnics, hazardous stunts, etc.
 - identification of Safety Representative or Officer
 - emergency numbers
 - reference to relevant Health and Safety guidelines
 - location of safety and First Aid equipment

Where a Call Sheet is not used, safety notices should be posted or distributed as appropriate.

- 1.3.2 A copy of the *Newfoundland and Labrador Film and Television Production Safety Guidelines* should be available on each work site.
- 1.3.3 It is recommended that, for production units involving one hundred or more cast and / or crew, or shoots involving potentially hazardous stunts or FX, a Safety Officer should be employed.

1.4 Definition of a Safety Officer

- 1.4.1 A Safety Officer is hired by the producer to facilitate safe working conditions and implement any reasonable safeguards necessary to ensure safe working conditions for the cast and crew. He or she:
 - is entrusted with the responsibility and authority to halt or abort any activity in perceived unsafe conditions until deemed safe
 - is knowledgeable of the film and television industry and the associated work
 - is knowledgeable of the Occupational Health and Safety Act regulations
 - is knowledgeable of the guidelines and regulations set forth in the *Newfoundland and Labrador Film and Television Production Safety Guidelines*
 - ensures compliance with all safety Statutes and Regulations
 - is a holder of a valid St. John Ambulance Advanced First Aid Certificate
 - is responsible for the design, co-ordination and implementation of all safety measures, emergency plans, etc.
 - is an advisor to the Health and Safety Committee and / or Safety Representative
 - files reports of work-related injuries to the producers and appropriate Government authorities
 - is trained to deal with the specialized nature of each shoot and / or enlist the aid of qualified personnel (i.e.: water, fire-burns, stunts, animals, chemical exposure, etc.)

2.0 Procedure for a Work Refusal⁵

- 2.1 A worker may refuse to do work that the worker has reasonable grounds to believe is dangerous to his or her safety, or the health and safety of another person at workplace:
 - until remedial action has been taken by the employer to the worker's satisfaction;
 - until the committee or worker health and safety representative has investigated the matter and advised the worker to return to work; or
 - until an officer has investigated the matter and has advised the worker to return to work.
- 2.2 Refused work may be offered to another worker, but the offer should be made in the presence of the refusing worker, and new worker should be advised that the offered work is subject of a work refusal, as well as the reasons for the refusal.
- 2.3 Where a worker refuses to do work under Section 2.1 his or her employer may reassign to the worker to other work that is reasonably equivalent to the work he or she normally performs, and the work does not conflict with collective agreement. The worker shall accept the reassignment until he or she is able to return to work under Section 2.1.
- 2.4 Where a worker is reassigned to other work under Section 2.3 the employer shall pay the worker the same wages or salary and grant him or her the same benefits the worker would have received had the worker continued in his or her normal work.
- 2.5 Where a worker has reasonably refused to work under Section 2.1 and has not been reassigned to other work under Section 2.3 the employer shall pay the worker the same wages or salary and grant the worker the same benefits the worker would have received had the worker continued to work until he or she is able to return to work under Section 2.1.

- 2.6 A reassignment of work under Section 2.3 is not discriminatory action.
- 2.7 Where a worker exercises his or her right to refuse work under Section 2.1, or where he or she believes that a tool, appliance or piece of equipment or an aspect of the workplace is or may be hazardous to his or her health or that of other workers at the workplace or another person at the workplace, the worker shall report the hazard to his or her supervisor.
- 2.8 Where a worker has made a hazard report under Section 2.7 and the matter has not been remedied to the satisfaction of the worker he or she shall report it, either in writing or orally, to the division or to an officer.

Contact Occupational Health and Safety Division of Service NL for:

- Information and Concerns on workplace safety and general inspections at 709-729-2706 or 1-800-563-5471
- All serious injuries must be reported to the Occupational Health and Safety Division of Service NL by calling: 709-729-4444 (24 hours, serious accidents only)
- 2.9 A worker shall not take advantage of his or her Right to Refuse to Work under Section 2.1 without reasonable grounds.

3.0 First Aid6

- 3.1 Every person shall take every precaution that is reasonable in the circumstances to protect their own health and safety and that of all other persons at or near the workplace and others who may be affected by their undertaking.
- 3.2 At least one person on each set or location (including prep work) shall be identified as a First Aid Attendant. The First Aid Attendant shall be:
 - assigned to work in the immediate vicinity of and to have charge of the First Aid kit
 - available at al
 - 1 times to treat an injured person without undue delay
 - currently certified to the level outlined below:

# of Employees	St. John Ambulance Certification Required
1 to 15	Safety Oriented Emergency First Aid Certificate
	(or higher award)
15 to 200	Safety Oriented Standard First Aid Certificate
	(or higher award)
200 or more	Advanced First Aid Certificate (or higher award,
	eg. Paramedic, Nurse, Safety Officer)

- 3.3 The First Aid Certificate of a First Aid Attendant shall be posted at the workplace.
- 3.4 Anyone who sustains an injury at a workplace should, without undue delay, use the First Aid services and supplies provided by the Producer.

- 3.5 Where First Aid is administered to an injured person in the workplace, a written record shall be maintained of:
 - the full name, age and occupation of the injured person
 - the date and time of the injury
 - the location and nature of the injuries
 - the time when First Aid was administered
 - the First Aid treatment provided
 - the name of the person who provided the First Aid
 - the name of the person to whom the injury was reported.
- 3.6 The production company, at its expense, shall ensure that the First Aid supplies and services required by the Regulations are provided, supplied, maintained and readily accessible to the employees during all work hours (refer to Appendix A1).
- 3.7 The list below defines the appropriate First Aid kit required (refer to Appendix A1 for details):

# of Employees	First Aid Kit Required
1 employee	Kit #1
More than 1 less than 15	Kit #2
More than 15 less than 200	Kit #3
More than 200	First Aid Room

- 3.8 Prior to the commencement of any work, the Production Manager, in consultation with the Location Manager, should submit to the Producer for approval a resume of the First Aid facilities to be provided which should include:
 - the number of employees and description of the operations to be undertaken
 - a description of the First Aid facilities
 - the planned methods of emergency transportation
 - the methods of two-way communication available
 - the qualifications of the First Aid attendant or nurse or both.

3.9 Where an employee is engaged in pre-production work at a location, the Production Manager, with the assistance of the Location Manager, should provide the Heads of Departments with a list of emergency contacts and the planned method of emergency transportation. In addition, the Production Manager, with the assistance of the Location Manager, shall provide a suitable First Aid kit at each location (refer to Appendix A1).

Where an employee is engaged in pre-production work at a remote location, two-way communication should be ensured.

Remote location is defined as a place more than 30 minutes away by means of surface transportation from the nearest health care facility that provides emergency services.

- 3.10 When Stunts, FX, Fire and Underwater work etc. are scheduled, a medical provider (eg.: Paramedics) should be standing by on set to administer medical treatment.
- 3.11 The Call Sheet should identify the location of the First Aid Kit and the designated Safety Representative, Safety Officer and / or First Aid Attendant.

Departmental Safety

4.0 Carpentry / Woodworking

4.1 Accident Prevention

- 4.1.1 Be aware of and follow all municipal, provincial and federal codes, ordinances and regulations.
- 4.1.2 Keep all equipment in good repair and inspect it before each use. DO NOT REMOVE safety shields or other safety devices.
- 4.1.3 Wear and use approved protective equipment at all times. ⁷ Remove rings, avoid watches and loose clothing, and suitably confine long hair.
- 4.1.4 Inspect work area for unsafe conditions, and remedy before beginning work. Keep work areas in a clean and sanitary condition.

4.2 Hand Tools 8

- 4.2.1 Keep all hand tools clean, sharp and in good repair
- 4.2.2 Use all hand tools for the purpose for which they were intended (eg., a screwdriver is not a chisel and vice-versa)
- 4.2.3 Do not carry sharp or pointed objects in pockets

4.3 Power Tools 8 and 10

- 4.3.1 Make all adjustments and tighten all locking devices before attaching tool to power supply. Make sure tool is switched off before connecting to power supply. Use grounded extension cords, grounded outlets and / or a Ground Fault Circuit Interrupter.
- 4.3.2 Operate all tools with all safety guards in place. Use the

- fence or guide, push-stick, etc. Always maintain an appropriate safety margin between cutting edge and hands.
- 4.3.3 Keep blades, bits, etc. sharp. Keep the tool and surrounding area free of debris. Follow manufacturer's maintenance instructions.
- 4.3.4 Handle all air-actuated devices with extreme caution.

4.4 Explosive-actuated Fastening Tools

- 4.4.1 Only trained and competent operators, as defined by Section 79.4 of the Occupational Health and Safety Regulations shall use explosive-actuated tools.
- 4.4.2 All operators shall wear eye and ear protection.
- 4.4.3 The explosive actuated fastening tools shall conform to CSA Z166, and any addition or amendment thereto, shall be used as a guide for the safe operation and maintenance of explosive-actuated tools.

4.5 Rope / Rigging 9

- 4.5.1 All rope and rigging used shall comply with Sections 346 and 372 of the Occupational Health and Safety Regulations.
- 4.5.2 Keep the load within the safe limits of the working strength of the rope. A safety factor of five-to-one is generally used for new rope, eight-to-one for old rope, ten-to-one for rigging.
- 4.5.3 Thread rope in sheaves or pulleys correctly. Never use a smaller pulley or sheave than is recommended for the size of rope being used.
- 4.5.4 Avoid knots (which can reduce strength of rope up to 50%)

- 4.5.5 Reverse rope ends in any tackle periodically so that all sections of it will receive equal wear
- 4.5.6 Never replace a shackle pin with a bolt
- 4.5.7 Hooks on bridles should point out (away from centre of pull).
- 4.5.8 Angle of sling legs to the load must be not less than 30 degrees.
- 4.5.9 Lift with load centered on shackle, not pin.
- 4.5.10 Do not lift with tip of hook.
- 4.5.11 Do not force hook.
- 4.5.12 Balance loads to be hoisted. Use tag lines wherever possible.
- 4.5.13 Wear approved protective equipment, such as hard hats, gloves, safety boots, eye protection, and fall protection equipment.
- 4.5.14 Any rigging involving live loads should be carried out by a competent person.

5.0 Ladders and Scaffolding¹¹

All ladders and scaffolding shall be designed, erected and maintained in accordance with the specification and requirements of the CSA, the ASA, or standards acceptable to the deputy minister or a registered professional engineer.

Erection, dismantling and / or working on any elevated platform are activities subject to certain hazards that cannot always be protected against by mechanical means - but only by the exercise of intelligence, care and common sense. It is, therefore, essential to be competent, careful and trained, as well as physically and mentally fit, in order to operate safely on these types of equipment. There must be some individual on site to affect a rescue.

5.1 Ladders

5.1.1 Ladders constructed of metal or other conducting material shall neither be used nor available for use on any job-site where they may come in contact with any electrical equipment.

Fiberglass or wooden ladders are the preferred choice for job-site ladders. No person shall bring any object within **6** metres (18 feet) of any electrical power line or support thereof.

5.1.2 Portable, non-self-supporting ladders shall be used at such a slope that the horizontal distance from the top support to the foot of the ladder, is one-quarter of the working length of the ladder (ie: base of 12 foot ladder is placed 3 feet from building).

Any ladder shall be so placed as to prevent slipping, and / or be lashed or held in position and footed. Any ladder shall extend 1 metre (3 feet) above a landing. No worker shall stand or work within 3 steps of the top of any ladder.

5.1.3 The tops and paint-shelves of stepladders shall not be used

- as a step. In setting up a stepladder, the legs shall be fully spread, and the spreader should be locked.
- 5.1.4 Ladders shall not be placed on boxes, barrels or other unstable bases to obtain additional height.

5.2 Scaffolding

- 5.2.1 Where work cannot be safely done on or from the ground, a scaffold or other safe means of support shall be provided. The installation, use or removal of a scaffold shall be supervised by a competent person designated by the producer, employing approved techniques and procedures including, but not limited to, the following:
 - erect on firm foundation or utilize mudsills to prevent unsafe settlement use screw jacks, not blocking (apple box, 246's, wedges, etc.) to adjust to uneven grades. Do not extend screw jacks more than the supplier's recommendation (approximately 2/3). Scaffolds should be leveled and plumbed.
 - fasten all braces securely and do not climb on braces. Tubular steel frames shall be pinned together. Perform manufacturer's suggested inspection daily before use.
 - working platform height shall not exceed three times the smallest base dimension without securing or outriggers.
 A scaffold shall be secured every 15 feet vertically and every 20 feet horizontally.
 - do not use ladders or makeshift devices on top of scaffolds to increase the height. Working platforms shall be a minimum of 500 mm / 20 inches in width and securely fastened in place.
 - a scaffold and all components shall be able to support at least four times the maximum load likely to be imposed on it.

- no person or unsecured equipment shall remain on a rolling scaffold while such scaffold is being moved. All casters shall be securely pinned to the frame and shall be locked when the scaffold is in a working position. A rolling scaffold shall have horizontal cross bracing installed at the base.
- a guardrail is recommended for any scaffold of any height. A guardrail (including top rail, midrail and toe board) shall be provided on the open sides and ends of a scaffold that is ten (10) or more feet (two or more sections) above the ground or other safe walking surface.
- electrical cords, ropes, hoses, etc. should be checked for adequate clearances and length prior to hoisting or moving.
- when hanging large areas of material (drapes, tarpaulins, silks, etc.) from a scaffold or other elevating device, additional adequate securing shall be provided by a competent person.
- in windy or gusty conditions, the designated supervisor should remove personnel, equipment, or both, from the scaffold and / or area, to reduce any risk from capsizing.
- 5.2.2 In the following cases, scaffold shall be designed by a professional engineer or other competent person and erected according to the design specification:
 - the scaffold exceeds 15 metres (50 feet) in height above its base support
 - the scaffold exceeds 9 metres (30 feet) in height above its base support, if it is made of a tube and clamp system
 - any non-manufactured suspension scaffold

- 5.2.3 Positive fall protection shall be used when a worker is at risk of falling a distance of 3 metres (10 feet) or more. This rule applies where work is performed on a surface within 2 metres (6 feet) of a fall hazard. Generally, positive fall protection could include the following:
 - a guardrail
 - a fall arrest system
 - a travel restraint system
 - a specially equipped ladder
- 5.2.4 A fall arrest system consisting of a full body harness, lanyard and large locking snap-hook should be used by workers engaged in erecting or dismantling a scaffold.
- 5.2.5 When lifting materials more than 3 frames in height (4.5 metres or 15 feet) from ground level, a wheel and davit must be used. The worker stationed on the scaffold platform receiving the material shall be equipped with a fall arrest system. Where practical, a lifeline connected to a fixed structure or building, and / or horizontal or vertical static line should be used.

Refer to Appendix A3: Bio-Mechanics of Lifting

6.0 Camera Cranes and Mobile Elevating Platforms¹²

6.1 Camera Cranes

- 6.1.1 The Key or Dolly Grip should be consulted as to the adequacy of any specific equipment for a particular sequence or shot. The Key or Dolly Grip should ensure that a competent person has inspected any equipment within twelve months prior to its use.
- 6.1.2 Preparation of both the equipment and its support surface should be made by the designated operator. The crane base and pedestal should always be leveled and plumbed before it is used.
- 6.1.3 Under no circumstances should any person or equipment be added to or removed from a crane without the permission of the designated operator. No one shall pass under either arm of a crane.
- 6.1.4 A crane should not be left unattended while being prepared for use, or while in use.
- 6.1.5 The following precautions should always be taken when using a crane:
 - incomplete or damaged equipment shall never be used
 - no crane over 750 volts shall operate within 5.5 m (18 feet) of a power line
- 6.1.6 When using a crane close to any overhead obstructions, or mounted on moving vehicles, adequate clearances should be maintained at all times, taking special care with all personnel involved in its use.

- 6.1.7 When using a crane on unstable surfaces, such as sand, a crane should be blocked in a way to prevent collapse if the surface shifts. This also applies to laying any supports or track over a change in surface (such as sand to rock) or a change in grade.
- Any riser used to raise a crane should be able to support the weight of the crane and the personnel using it. It should also be adequately braced against collapse, taking the surface conditions into account.
- 6.1.9 Tracking surfaces should be properly laid and constructed in accordance with Suppliers' and / or Manufacturers' recommendations
- 6.1.10 The crane arm should never be left unbalanced. If uncoated lead ingots are being used as weights, work gloves should be worn by any workers handling them
- 6.1.11 The designated operator should ensure that persons riding the crane use seats and safety belts.

Refer to Appendix A3: Bio-Mechanics of Lifting

6.2 Mobile Elevating Platforms

These guidelines encompass devices such as scissor-lifts, aerial extendable boom platforms, bucket-trucks, cherry pickers, etc. These guidelines do not replace other additional safety and precautionary measures recommended by the Manufacturer or Department of Labour Regulations to cover usual or unusual conditions.

6.2.1 Mobile elevating devices shall be operated and supervised by a competent person designated by the Producer.

- 6.2.2 Equipment should be inspected prior to its operation for satisfactory condition, damage, and defects, including all operational controls. A legible operator's manual as well as a maintenance log book shall be provided with the equipment.
- Operators shall, in considering the job to be performed, evaluate the job site location for potential hazards, stability, etc. Wheel locks shall be used on inclined surfaces.

 Outriggers or stabilizers must be used in accordance with Manufacturer's specifications.
- 6.2.4 The basket, tub or platform shall not be loaded or operated beyond its rated maximum height or reach.
- 6.2.5 Equipment shall not be operated within 5.5 metres (18 feet) of a power line. A written permit is required from Newfoundland Power to operate equipment within 10 feet of a power line. The operation of aerial devices over energized high voltage sources of any kind is prohibited at all times.
- 6.2.6 CSA Z259 approved harnesses with lanyard or safety strap, shall be worn when working on these platforms.
 - the safety strap or lanyard shall be securely attached to the boom, basket tub or platform
 - the safety strap or lanyard shall be attached in a manner that prevents a free fall of more than 1.2 metres (3 feet) unless equipped with shock absorbing system
 - tying off to an adjacent pole, structure or equipment while working from the basket, tub or platform is not permitted
 - objects or production equipment with the potential of falling from an aerial platform shall be secured with an adequate safety lanyard.
- 6.2.7 Ladders, planks or other objects shall not be placed in or on

top of the platform or guardrail to gain greater height. Personnel shall not sit or climb on the edge of the basket / platform.

- 6.2.8 Personnel shall not work from aerial platforms when:
 - exposed to extreme weather conditions (thunder storms, heavy rain, extreme heat or cold) unless provisions have been made to ensure their protection and / or safety
 - winds exceed 25 miles per hour.
- 6.2.9 "Towering" (travelling with a worker in the extended basket) is not permitted.
- 6.2.10 Any mobile elevating device left unattended by its designated operator must be lowered and locked or rendered inoperative to prevent the device from being started or set in motion by an unauthorized person.
- 6.2.11 There should be suitable means of communication between persons on these platforms and those operating the platforms on the ground.

Refer to Appendix A3: Bio-mechanics of Lifting

7.0 Electrical Safety¹³

- 7.1 Installation and General Information
 - 7.1.1 A licensed Journeyman Electrician shall tie-in to all electrical distribution systems.
 - A. A licensed Journeyman or Master Electrician who can draw a permit from the local Hydro Authority shall make connections and tie-ins at sources supplied by a Hydro Utility.
 - B. An experienced and competent Gaffer/Lighting Director, Best Boy or Generator Operator may make connections to a self-contained diesel-driven generator.
 - 7.1.2 Only experienced and **qualified** persons shall be authorized to do any work on any energized electrical lines or equipment.
 - 7.1.3 Electrical installations shall meet the requirements of Part One of the Canadian Electrical Code and may be superseded by the local regulatory authority.
 - 7.1.4 Appropriate proper non-conducting protective equipment, such as rubber-soled shoes, rubber gloves, and mats shall be worn / used when tying in and during conditions of high humidity.
 - 7.1.5 The power supply shall be disconnected, locked out of service and tagged before any work is done on electrical installations or equipment and also when people are working near exposed live parts of electrical installations or equipment.

7.1.6 Connectors and cable shall be provided with standard colour coding:

Red, Blue, Black Line
White Neutral
Green Ground

- 7.1.7 When there is a potential hazard from electrical contact in wet locations, a Ground Fault Circuit Interrupter shall be installed at the receptacle, or in the circuit at the panel.
- 7.1.8 Temporary leads exiting a distribution panel shall be secured so that the weight of any cables does not put a strain on any electrical connector.
- 7.1.9 All power feeds shall be protected from mechanical damage. In high traffic areas, cables shall be laid in rubber troughs or shall be covered with solid set pieces.
- 7.1.10 In areas where there is animal traffic such as horses, cattle, carriages and wagons, all cables shall be buried and covered to a depth of 150mm (6 inches)
- 7.1.11 Bare end wire connections made in a panel or trough shall be properly torqued to ensure a solid, vibration-proof connection.
- 7.1.12 "Trico" or similar open-jawed tie-in connectors may only be used on temporary connections when:
 - there is no other connection method available to acquire sufficient power.
 - the maximum amperage draw per phase shall not exceed 100 amps.
 - the jaws of the connector can be torqued to ensure complete bonding with the lug.
 - there is absolutely no cable weight transferred to the connector.
 - non-conducting dividers are used between lugs to ensure

- no "arc-over".
- connections and disconnections are made with the power off.

7.2 Electrical Department Procedures

- 7.2.1 Complete control of any electrical activity during production including the authority to abort should be given to a competent Gaffer / Lighting Director. The Gaffer / Lighting Director and / or Best Boy are responsible for, and are in charge of, all temporary power distribution systems for film or video productions. They must be consulted prior to the use of any electrical system, including all on-set practicals.
- 7.2.2 The electrical department should have an emergency lighting system available to adequately light an escape route in the event of a blackout.
- 7.2.3 All electrical personnel shall be aware of the load bearing capacity of each type of cable, adaptor, or distribution box in use on the set.
- 7.2.4 All personnel shall be made aware of high voltages used by gas discharge lamps such as neon, HMI's, CSI's and fluorescent. Anyone using these sources shall be familiar with the ballasts used and ensure that any related safety devices are in proper working order.
- 7.2.5 All personnel shall be advised that various "arc" type lamps including HMI's emit much larger amounts of ultraviolet (UV) light than tungsten lamps. Care shall be taken to protect against skin and eye damage when these instruments are set up close to people and animals.
- 7.2.6 In addition to protective footwear, protective equipment (including gloves, protective glasses, etc.) shall be worn when carrying, handling or moving hot luminaries. Bulbs shall be allowed to cool sufficiently before the luminaries

are moved.

- 7.2.7 In damp or rainy conditions, make sure that all persons are clear of the lamp-head as humid conditions increase the conductivity of the air, and thus the likelihood of "arcing".
- 7.2.8 Prior to "striking" an HMI or similar source, the operator(s) shall ensure that no one is in contact with the unit, its support, or its ballast.
- 7.2.9 Correct procedures should be exercised when performing lifting, lowering, carrying, pushing and pulling (refer to Appendix A3: Bio-Mechanics of Lifting).
- 7.2.10 Before a lighting fixture is re-lamped, repaired or otherwise worked on, the fixture shall be switched off and disconnected from the power source.

7.3 Electrical Equipment

- 7.3.1 The Gaffer / Lighting Director and/or the Best Boy shall maintain a logbook of major equipment repairs performed on-set.
- 7.3.2 Any equipment, cable or box that has been repaired on-set, shall be carefully tested for continuity and polarity before being re-used. Rental equipment that has been repaired on-set shall have the details of repair noted on the equipment so that the rental company can verify that the repair has been properly completed.
- 7.3.3 All electrical equipment connected to a power source shall be approved by an acceptable Certification Agency or be field inspected and approved by such Agency.
- 7.3.4 Scaffolds or other metal grids used to support lighting or power distribution devices shall be grounded.

- 7.3.5 All lighting fixtures and / or stands shall be adequately supported and weighted etc. to prevent tipping.
- 7.3.6 Safety wire or chain shall be used with all suspended fixtures.
- 7.3.7 Both the ballast and head of HMI's (or similar sources) must be grounded.
- 7.3.8 In the event of rain or high humidity, all HMI's or similar units shall be covered to prevent rain from entering the unit and ballast.

7.4 Generator Sources

- 7.4.1 All generators shall be operated and maintained by a competent operator.
- 7.4.2 Generators shall be properly grounded and shall have an emergency stop system. Because some hydro jurisdictions may bond the neutral to the ground, a generator shall not be grounded to the same point as a local or nearby hydro ground.
- 7.4.3 In locations near water, the water source may not be used as a ground if there is marine activity or underwater lighting being used.
- 7.4.4 A competent operator shall supervise the generator at all times while it is running and shall be available to activate the emergency stop system.
- 7.4.5 Before connecting a temporary power distribution system to a distribution panel, a competent person shall analyze the existing loads on the panel and determine the excess capacity that may be used for the temporary load.
- 7.4.6 If the main breaker feeding a panel is "tripped" under

- overload conditions, a competent person shall notify other users of power from the same panel that their loads may be disconnected
- 7.4.7 A competent person shall determine which loads will potentially create a safety hazard if shut down and shall take suitable precautionary actions.
- 7.4.8 Generators shall only be started under no load conditions and, unless under an emergency condition, stopped under no load conditions.
- 7.4.9 Two or more generators may not be paralleled unless they are designed for that purpose and have the necessary synchronous governor controls and inter-connection cables.
- 7.4.10 Generators may not be paralleled with local hydro distribution unless: they are designed for that purpose; and interconnections are made by a qualified person with the permission and under the supervision of the hydro supplier.
- 7.4.11 Direct Current Generators, such as those used to supply carbon arc lighting, shall have no interconnection with an Alternating Current generator.
- 7.4.12 Direct Current cables shall be clearly marked with polarity designators and shall not travel in the same path as Alternating Current cables.
- 7.4.13 Direct Current connectors shall be different from Alternating Current connectors, and it shall be made impossible to make any mechanical contact between either source of current.

7.5 Lasers

- 7.5.1 Lasers shall be operated by a competent technician, who shall inform all nearby personnel of the dangers of the laser use.
- 7.5.2 The energy level, colour frequency and consequences of a "strike" shall be clearly displayed on the surface of laser equipment.
- 7.5.3 Eye damage will result from looking directly into a laser source. Nearby, off-camera personnel shall wear regulation safety glasses.
- 7.5.4 Laser beams can reflect off certain objects. It is incumbent upon the operator to analyze the site and determine potential trajectories of all beams to ensure eye safety.
- 7.5.5 The laser technician shall inform the Gaffer/Lighting Director of other possible hazards.

7.6 Lightning Effects Generators

- 7.6.1 Lightning Effects Generators shall be approved units designed and tested for that purpose, such as the "Lightning Strikes" brand. They shall use a sealed xenon arc tube in a metal housing rated for the appropriate voltage and amperage.
- 7.6.2 Lightning effects shall not be generated using jury-rigged, "Open Carbon Arcs" with resistive shunts.
- 7.6.3 Lightning Effects Generators shall be operated by an experienced, competent person.

- 7.6.4 Lightning Effects Generators shall be connected to a "stand alone" power supply and shall not be connected to the same source as the general set lighting.
- 7.6.5 The operators of Lightning Effects Generators shall provide advance safety information and deliver appropriate warning before each strike.

7.7 Underwater Lighting

- 7.7.1 Underwater lighting shall be done with lighting units and ballasts properly designed and approved for that purpose, such as the "Hydroflex" brand of equipment.
- 7.7.2 Personnel setting up and operating underwater lighting shall be trained and qualified for that specific equipment and use and shall be able to display a certificate of qualification.
- 7.7.3 Personnel setting up and operating underwater lighting equipment shall be trained and qualified divers as defined in Section 26.

7.8 Temporary Electrical Distribution Box Standards and Equipment Designations

TABLE 1

Box #	Phases	Breakers	Line	Load	Load
			Connector	Connector	Maximum
					Per
					Connector
1	3-Phase	350 amp, 3 pole	CamLock	Camlock	315 Amps
2	Single		CamLock	Pyle National	315 Amps
3	3-Phase		CamLock	Pyle National	315 Amps
4	Single	6x60 Amp	CamLock	6x45A Joy	5KW
4A	3-Phase	6x60 Amp	CamLock	6x45A Joy	5Kw
5	Single	2x60 Amp	CamLock	2x4 Pin	5KW
		2-Pole		60 Amp Joy	
5A	3-Phase	3x60 Amp	CamLock	3x4 Pin	5KW
		2 Pole	1x5wire	60 Amp Joy	
6	Single	6x20Amp	4 Pin Joy	6x20Amp Joy	2KW
6A	Single	6x20 Amp	4 Pin Joy	6xDUPLEX	2KW
				"U" 15 Amp	
6 Spec.	Single	2x40 Amp	4 Pin Joy	2x45Amp Joy	5KW
		4x20 Amp		2x20Amp Joy	or
					2KW
7	Single	2x60 Amp	4 Pin Joy	2x45 Amp Joy	5KW
8	single	3x20 Amp	5KW Joy	3x20 Amp Joy	2KW
8A	Single	3x20 Amp	5KW Joy	3xDUPLEX "U" 15 Amp	2KW
10	3 Phase	3x100 Amp	CamLock	CamLock	10KW

7.9 Entertainment Cable Class Nominal Ratings

TABLE 2

CABLE SIZE	NOMINAL AMPERES IN AIR	
4/0 Feeder	315 Amperes/Phase	
3/0 Feeder	230 Amperes/Phase	
2/0 Feeder	175 Amperes/Phase	
2 Feeder	115 Amperes/Phase	
6/4 Joy Distribution	60 Amperes/Phase	
6/3 5KW Joy Distribution	45 Amperes/Phase	
10/3 with TwistLock Connector	30 Amperes	
12/3 Type S/SO/SJ Jacket	20 Amperes	
14/3 Type SJ Jacket	15 Amperes	
16/3 Type SJ Jacket	10 Amperes	
16/2 Zip Cord	5 Amperes	

When feeder cables are bundled or covered with mats and/or set pieces, they shall be rated lower than they are on the given tables. If the ambient heat in the area is above 20 degrees Celsius feeder cables shall be rated lower than they are on the given table. In the case of deteriorated insulation, feeder and distribution cables shall be rated lower than they are on the given table, or taken out of service.

7.10 Canadian Power Distribution and Voltage Standards as generally used by Utilities and Self Contained Generators

TABLE 3

120/208 Volt	Single Phase 3 Wire (2 Line 1 Neutral)	Residential
120/208 Volt	3 Phase 4 Wire Wye (Y) Transformer Tap	Industrial
	(1 Neutral)	
240 Volt	3 Phase 3 Wire Delta (D)Transformer Tap	Industrial
	(No Neutral)	
277/480 Volt	3 Phase 4 Wire (3 Line 1 Neutral)	Industrial
347/600 Volt	3 Phase 4 Wire (3 Line 1 Neutral)	Industrial

8.0 Hair and Make-Up14

8.1 Responsibilities

- 8.1.1 A "Hairstylist" is a person who meets the qualifications of the Newfoundland and Labrador Hairdressers Association or equivalent.
- 8.1.2 The Hairstylist and Make-up Artist shall make every effort to inform the Performer of toxicity and possible health hazards that may be associated with their materials.
- 8.1.3 It is the duty and responsibility of the Make-up / Hairstylist to check with the Performer regarding all known sensitivities, allergies, skin reactions, etc.
- 8.1.4 It is the duty and responsibility of the Performer to inform the Hairstylist / Make-up Artist of all known sensitivities, allergies, skin reactions, communicable diseases or any contagious infections (ie: head lice or "pink eye")
- 8.1.5 The Hairstylist / Make-up Artist has the right to refuse to work with an individual if that person is considered to be unsuitable to work with at that time.

8.2 The Facility

The hair and make-up room should:

- be clean
- be maintained at a reasonable and stable temperature for storage of make-up materials
- be well ventilated
- have adequate lighting, mirror, and table (or necessary work surface) and chair

- provide a First Aid kit with eye-washing bottles. The eye-wash bottles should be kept free of dirt and bacteria and completely refilled after each use.
- provide a hydraulic chair where possible (the importance of this requirement increases in direct relation to the duration of the production)
- adequate circuits and electrical outlets
- wash basin with hot and cold running water
- appropriate garbage disposal

8.3 Hygiene

Hygienic safety requires the following practices:

- hands or gloves must be washed before and after attending each performer or use antibacterial spray / gel
- each performer must have individual sponges, powder puffs, combs and brushes. When transported, these should be in a labeled zip-lock plastic bag or equivalent.
- containers, razors, electrical hair curlers, scissors, tweezers and spatulas must be disinfected before and after each use
- disinfect hairstyling combs and brushes with BarbercideTM (or equivalent); clean with soap; rinse with water
- keep all equipment clean and ready for use
- use one mascara per person, or use of disposable wands, to prevent the spread of infection
- use spatula to remove make-up from compact or lip colours from lipsticks, mix on palette then transfer to sponges, lipbrush, etc.
- update and replace old and stale make-up and hair productions regularly
- to avoid contamination via make-up, **no** person's hands should ever touch the make up
- towels and wraps must always be clean and freshly laundered
- clearly label all products

8.4 Chemical Guidelines

The following recommendations apply when hair / make-up chemicals are used during production:

- maintain an inventory of products used
- research the ingredients of these productions to identify any potential health hazards
- clearly label all chemicals
- have Material Safety Data Sheets (MSDS) for each toxic chemical to be used
- when involved in potentially hazardous activities –such as the application of colours or hair sprays, or the mixing of powder bleaches and oxidizing chemicals – appropriate protective equipment such as face masks, goggles, gloves, etc. should be worn
- wherever possible, use non-aerosol hair sprays
- wherever possible, use pre-mixed powders
- wherever possible, use non-solvent materials such as Isopropyl Myristate for removing special effects make-up
- there should be no eating, drinking, or smoking while chemicals are being handled
- dispose of used chemicals and applicators appropriately.

9.0 Hazardous Products¹⁴

- 9.1 Hazardous Products include, but are not limited to, paints, glues, solvents, stains, etc. When handling hazardous products on any film set or location, consideration shall be given to:
 - the hazards and risks posed by the chemicals
 - the regulatory requirements set out in the *Federal Hazardous Products Act* and both the Federal *Controlled Productions Regulations* and Newfoundland and Labrador's *Workplace Hazardous Materials Information System* (WHMIS) regulations
 - keeping the atmospheric contamination of the workplace by chemical substances as low as is reasonably practicable and in case of substances for which a threshold limit value is currently established by the American Conference of Governmental Hygienists (ACGIH)that threshold value shall not be exceeded.
 - 9.1.1 Disposal of hazardous products shall be in accordance with the environmental regulations for the disposal of a particular product.
- 9.2 Wherever possible, hazardous chemicals shall be replaced by less hazardous ones (ie: Latex-based contact cement shall replace Toluene-based contact cement, Latex-based paint shall replace Oil-based paint, Fibreglass shall replace Asbestos).

A substitute for lead-containing paints should be used wherever possible; otherwise, worker protection and decontamination procedures should be provided. Under no circumstances shall mechanical abrasions of lead-containing surfaces be implemented. All lead-containing materials should be appropriately labeled. Lead content of 0.5% is hazardous if burnt.

- 9.3 Before any controlled product is brought on site, the Head of the Department shall ensure that:
 - a current Material Safety Data Sheet is available to all workers who may use or be affected by the product (when such a sheet is available)
 - all containers of the product have appropriate labels when they are brought on site
 - any workers who will be handling the product receive adequate training in its proper use and handling, and all required personal protective equipment is provided
 - any workers who work in proximity to the product receive adequate training to allow them to react properly in case of an accidental release or chemical spillage
- 9.4 The Head of the Department and the user of the product shall ensure that proper workplace labels are applied where appropriate, particularly when "decanting" (transferring chemicals from large containers to small containers).
- 9.5 When not in use, all hazardous products shall be stored in a secure location at recommended temperatures. This location shall be designated with due regard to the separation of incompatible products.
- 9.6 When taking measures to minimize risk, the following preference scale shall be used:
 - substituting a less hazardous product
 - ventilation
 - administrative control (ie: rotating personnel)
 - personal protective equipment

- 9.7 Where the use of a product requires any worker to use any type of protective equipment:
 - the Head of the Department should verify that any equipment used is appropriate to the hazard
 - the individual using such equipment shall be trained in its operation, including its normal use, its limitations, and any emergency procedures.
- 9.8 When exposure to children is possible, the Threshold Limit Values shall be reduced by 90%. Extra caution should be taken in storage and labeling.
- 9.9 Eating, drinking and smoking shall be banned in any area where hazardous chemicals are used or stored.
- 9.10 Portable wash station should be on site.

Location Safety on Land¹⁵

10.0 Locations and Temporary Location Facilities

- 10.1 Winnies / Honeywagons / Temporary Wardrobe Units
 - 10.1.1 The Driver / Operator is responsible for maintaining a high degree of safety while these units are in use and is expected to meet high standards of competency. A qualified person should be present while such units are in operation.
 - 10.1.2 Generator exhausts shall be elevated a minimum of three feet above the floor level and vented to the outside at all times.
 - 10.1.3 Skirting encircling the unit shall not be closer than one foot from the ground.
 - 10.1.4 All portable electric heaters shall be equipped with safety tip-over switches. Such heaters may be installed only on a temporary basis during extremely cold weather, or if the permanently installed heater malfunctions.
 - 10.1.5 The vehicle and / or generator shall be shut down before fueling. Particular caution should be exercised when priming a carburetor. Fueling shall be done in a safe manner consistent with all Federal and Provincial Fire Codes.
 - 10.1.6 No anti-freeze shall be added to the portable water tanks except in winter conditions, and then it can be used **only** for portable toilets.
 - 10.1.7 Hand washing water and drinking water must be readily available.
 - 10.1.8 All steps shall be stable, slip proof and constructed securely. All steps shall be cleared of ice, snow and mud as required. Substitutes (ie: concrete blocks, boxes) shall not be used as

steps.

10.1.9 A single handrail or grab bar shall be installed on stairs where the floor is over three feet high.

10.2 Location Requirements

- 10.2.1 Adequate flush or chemical toilets shall be provided or made available for the use of employees (crew / cast and extras) within easy access of their place of work.
- 10.2.2 An adequate supply of safe drinking water shall be kept readily accessible for employees (crew, cast, extras, etc.)
- Holding areas should be properly heated or ventilated with suitable emergency escapes and seating capacity.
- 10.2.4 Cast and crew exposed to long hours in adverse exterior conditions (heat or cold stress) should be provided with appropriate items to combat such adverse conditions (ie: temporary shelter, temporary heating devices, hot shots, hot drinks, face masks, blankets, adequate fluids, etc.) (refer to Appendix A4)
- 10.2.5 On location and on remote location, two-way communication should be maintained at all times. An emergency plan should be in place.

10.3 Use of Roads and Highways

- 10.3.1 All activities on roadways within Newfoundland and Labrador shall comply with the *Temporary Workplace Traffic Control Regulations* and Sections 105 108 of the *Occupational Health and Safety Regulations*. Principles and procedures within the regulations enhance the safety of motorists and workers.
- 10.3.2 A traffic control plan shall be developed by the Production Manager and / or Location Manager prior to work start. Plans should be communicated to affected personnel before implementation.
- 10.3.3 Highway and street traffic movement shall be inhibited as little as possible.
- 10.3.4 Traffic shall be guided by accredited Signal Persons.
- 10.3.5 Routine monitoring of the traffic control plan shall be performed to ensure that the applicable Regulations are being complied with under varying conditions (eg.: traffic patterns, weather conditions, traffic volume, available light, topography, on-coming drivers' field of vision, etc.).
- 10.3.6 Whenever possible, the applicable Jurisdiction shall be consulted concerning street closures.
- 10.3.7 Trained persons should be assigned to direct Unit moves between locations.
- 10.3.8 As Units enter or leave a street or highway, signage appropriate to the conditions (eg.: traffic patterns, weather conditions, traffic volume, available light, landscape, oncoming drivers' fields of vision, etc.) must be clearly displayed.

Location Safety on Water¹⁶

11.0 Water Locations - Small Craft / Vessels and at Dockside

The following procedures are recommended for all work at dockside, aboard certified ships or small craft, for transfers between vessels / small craft, in and over the water.

As a general consideration, all persons working in these situations need to be prepared for the possibility of accidentally entering the water. Extra precautions are necessary to protect against this potentially hostile environment.

The greatest dangers are drowning and hypothermia. Most victims who drown prior to suffering the effects of hypothermia do so within six minutes of immersion (refer to Appendices A2 and A4).

11.1 At Dockside

- Work at dockside shall be carried out in accordance with Sections 42,43,44 and 59 of Occupational Health and Safety Regulations
- 11.1.2 High visibility clothing should be worn by all persons working on a dock. This is especially important if the dock is accommodating other work while filming is underway, or if heavy equipment is operating on the dock.
- Only competent and experienced persons shall operate equipment supplied at dockside, including outlets for steam, water or power. Crane operators shall possess appropriate Stationary Engineer's Certificate.

11.1.4 A spotter should accompany the camera operator at all times while filming on a dock. The spotter is responsible to ensure that if, during the course of set up and filming, personnel and/or equipment accidentally fall into the water the spotter will sound an alarm to begin rescue procedures. The spotter should be not be assigned other duties while acting as a spotter.

11.2 Aboard Certified Vessels

- 11.2.1 The Ship's Master shall be the final authority in all matters concerning safety provisions and procedures for all persons, and for the safe operation of the ship.
- In the event of adverse weather conditions, the Ship's Master shall be the final authority on whether the ship will sail, or, if at sea, whether the ship shall immediately return to port.
- 11.2.3 Before departure, all persons aboard should be thoroughly briefed about the location of safety equipment, its use, and procedures to be followed in the event of a person overboard or any threat to the integrity of the ship. Sufficient time for this briefing should be provided in the production schedule so that all persons may be present and not otherwise engaged in preparation or loading while the briefing is taking place.
- 11.2.4 A designated person should be in possession of equipment capable of providing two-way communication with the shore at any time while at sea. This person should be identified on the daily call sheet.

- 11.2.5 Non-slip footwear should be worn by all production personnel. Outer apparel should be unencumbered by items that could catch, such as belts, straps, etc. If kit / tool / battery belts need to be worn, they should not limit the free movement of the person while boarding, aboard, or departing the ship. It is important to consider the weight of these items when choosing flotation gear, as they may impair the flotation effect.
- 11.2.6 A spotter should accompany the camera operator at all times while filming on a ship.
- 11.2.7 Before a temporary structure aboard a ship is used by any employee, a competent person shall make an inspection of the structure. Where the inspection reveals a defect or condition that adversely affects the structural integrity of a temporary structure, no person shall use it until the defect or condition is remedied.
- 11.2.8 No person shall work on a temporary structure on a ship in rain, snow, hail or an electrical or wind storm that is likely to be hazardous to his / her safety or health, except where the work is required to remove a hazard, to rescue a person, or to protect the safety of the ship.
- 11.2.9 While any filming is underway aboard a ship, a second craft shall be in the immediate vicinity as a safety boat. At least one person aboard the safety boat should be qualified for life saving at sea. The safety boat shall be in two-way communication with the ship / craft, shall have the capacity to accommodate its own crew plus the number of persons it is providing protection for, and be able to return to shore under its own power.

11.3 Aboard Small Craft

For regulatory purposes, small crafts are normally classed as pleasure crafts, however when they are used for filming they are considered working vessels and their use is governed by the Small Vessel Regulations. Please note small crafts present the greatest risk.

- Only the minimum number of people required should be in a small craft. The total number of people aboard shall never exceed the Safety Rating for the craft. The safety equipment onboard should meet the requirements as stated in the Small Vessel Regulations and the Canada Shipping Act.
- 11.3.2 If a small craft is being used as a camera boat or as a "picture boat", a second craft shall be in the immediate vicinity as a safety boat. The safety boat shall be in two-way communication with the ship / craft, shall have the capacity to accommodate its own crew plus the number of persons it is providing protection for, and be in two-way communication with the camera or "picture boat" and shore.
- 11.3.3 Flotation garments shall be worn by all people working in small craft in open water. A variety of flotation garments are described in Appendix A2.

11.4 Transfers Between Ships / Small Craft at Sea

11.4.1 Transferring between ships / small craft while at sea is hazardous for even the most experienced of seafarers. In situations where two or more vessels are to be used for filming at sea, it will always be preferable to have people board at dockside, then travel and return separately to disembark at dockside.

- 11.4.2 Transfers can be physically demanding and should only be undertaken by persons with demonstrated fitness and agility.
- 11.4.3 Transfers between ships and small craft shall only be undertaken with the supervision of the Ship's Master and shall use a Pilot's ladder. Persons shall have hands free to climb the ladder and be wearing an approved flotation device. Items that must be transferred shall be raised or lowered from the vessel with the higher freeboard, by rope and basket / bag.

12.0 Water Hazards¹⁷

The following procedures are recommended for all water work including ponds, rivers, lakes, swamps, bogs and oceans. Please note: when dealing with water hazards it is advisable to also reference Section 26 Underwater Stunts and Underwater Film Operations.

- 12.1 Water in large, controlled ponds located on studio property should be analyzed with written results available to production staff no later than 48 hours prior to production use. If results indicate unacceptable levels of contaminants, steps to eliminate them shall be taken. A second, independent analysis should be conducted, and results made available to the production staff no later than 24 hours before use.
- 12.2 When location filming is contemplated in still water areas such as swamps, bogs or ponds, the Producer shall determine the pollution or contaminant content through analysis of water samples. If results show unacceptable levels of contaminants, precautions should be taken (including the neutralization of hazards) or the location should be changed.
- 12.3 When filming in or on a body of water is contemplated, the Producer shall obtain all available knowledge from local Authorities as to currents, natural hazards, upstream configurations such as dams, waste disposal sites, chemical plants, dumpsites, flash-flood dangers, etc., prior to actual filming. Local Authorities should also be contacted to determine if any known hazards (such as sub-surface objects, underwater life or contaminants) exist.
- 12.4 If a safety hazard is found to exist, the Producer should inform all cast and crew and take precautions to minimize or eliminate the risk or relocate the shooting site.
- 12.5 When a worker is employed under conditions that expose him or her to a risk of drowning Sections 42 44 and 59 of the *Occupational Health and Safety Regulations* shall be adhered to.
- 12.6 When it is necessary for personnel to work in fast moving rivers, the

- flow speed of the water shall be tested, and downstream safety equipment such as ropes or nets shall be provided. Pickup personnel shall be stationed for emergency rescue. Emergency personnel with swift water training should be on site for assessment and rescue.
- 12.7 Where boating traffic is anticipated, all precautions (including those mandated by the appropriate Authorities) shall be enforced.
- 12.8 All personnel scheduled for water work should be notified in advance.
- 12.9 All personnel working in or around water should have the ability to swim and / or appropriate water safety devices shall be provided and should be made aware of safety assessment and precautions.
- 12.10 Diving personnel should reference Section 26 of these guidelines.
- 12.11 Water temperatures should be taken into consideration (especially during the colder seasons or when production companies are shooting at distant and / or upper elevations) because of the real possibility of hypothermia: a lowering of the internal body temperature to below 37 degrees Celsius, caused by exposure to cold. **Hypothermia can be fatal** (refer to Appendix A4).
- 12.11 Where necessary, the Producer should provide the required "wet" or "dry" suits for personnel required to work in the water. Appropriate safety measures and provisions for medical treatment should be readily available. Safety notices regarding the treatment for hypothermia should be attached to the Call Sheet.
- 12.12 All foreign objects that are potentially hazardous, other than those required for pictorial needs, should either be removed or identified and marked.
- 12.13 All personnel should be advised to keep potential contaminants away from the water (i.e. paints, thinners, repellant, gasoline and oils, etc.)
- 12.14 Post-immersion washing facilities should be available at all water use sites and used by all persons upon exiting the water.

- 12.15 No electrical source other than DC shall be utilized for production use in close proximity to water (including studio ponds, rivers, lakes, swamps, bogs and oceans) unless each AC source or unit or both, where necessary, is securely grounded with a Ground Fault Circuit Interrupter installed between any power source and a connected unit drawing from that source.
- 12.16 First aid personnel should be on site.

Transportation Safety¹⁸

13.0 Transportation

13.1 Regulations

- 13.1.1 All equipment and vehicles used in transporting equipment and / or personnel shall comply with all of the Highway Traffic Act, and commercial vehicles must display a current Safety Inspection sticker that is acceptable to the Newfoundland and Labrador Department of Government, Services and Lands.
- 13.1.2 All drivers of equipment and vehicles shall be experienced, qualified and licensed to handle such equipment and vehicles.
- Where it is necessary to transport explosives, chemicals or hazardous materials, the vehicle must display any Hazardous Material symbols required by Transport Canada under the *Transportation of Dangerous Goods Act (Canada)* and be under the control of a competent person.

13.2 Seat Belts and Harnesses

- 13.2.1 It should be the intent of all parties to provide for the safety of all personnel in the vicinity of moving vehicles.
- 13.2.2 When any automotive vehicle is used in action sequences, the vehicle should be equipped with seat belts or harness, or both where necessary. It is recognized that, in the case of exceptional circumstances (eg.: vintage or antique vehicles), it may not be feasible or practical to install seat belts and / or harness. Seat belt regulations only apply to vehicles manufactured after 1971, if fitted.

- 13.2.3 Any vehicle involved in a collision of any kind (eg.: sideswipes, t-bones, head-ons, all roll-overs and all jumps) should be equipped with 4- or 5-point harness for both driver and passenger(s) and should be inspected and approved by the Stunt Co-ordinator. No person shall modify a seat belt or vehicle in any way that reduces its restraining action.
- 13.2.4 All tow vehicles and equipment towed shall have hitches that meet the regulated standards as laid out in the License and Equipment Regulations of the Highway Traffic Act and should be inspected and approved.
- 13.2.5 All stop-arrest systems, tow rigs, etc. should be inspected and approved by the Key Grip.

13.3 Combustion Engines

- 13.3.1 Adequate ventilation shall be provided when internal combustion engines are to be operated inside buildings or enclosed structures.
- 13.3.2 Exhaust gases shall be vented to the exterior.

14.0 Insert Camera Cars 19

14.1 Vehicle Operations

- 14.1.1 An insert camera car shall be a vehicle that is specifically engineered for the mounting of cameras and other equipment for the purpose of photography of, or in, a stationary or moving vehicle.
 - Only such vehicles specifically engineered for this purpose should be used for this purpose. The use of any other vehicle for this purpose is not advised nor should it be considered grounds for ignoring these guidelines.
- 14.1.2 The camera car should be safety checked before and after use on a daily basis by competent personnel. Items such as brakes, tires, electrical system and towing equipment should be included in this check. A record of such checks should be kept and signed by the Operator.
- 14.1.3 Any rigging should be done in a safe manner by competent personnel.
- 14.1.4 An insert camera car used for night filming shall be provided with two portable tail lights which are affixed to the towed vehicle to provide rear lighting.
- 14.1.5 The maximum number of people on, or in, such vehicles should not exceed seven, unless the design of the vehicle clearly allows for more.
 - a placard stating the maximum number of people allowed should be clearly visible on the rear of the vehicle
 - in order to ensure clear lines of sight to the Operator, only he or she should be in the cab while the vehicle is in motion
 - any person not directly associated with the shot at

hand should not be allowed in or on the vehicle while in motion.

- 14.1.6 Any equipment not essential to the shot at hand should not be transported on or in the Camera Car.
- 14.1.7 Rear Towing: no person shall be on the tow-bar or the exterior of the towed vehicle, except a competent Stuntperson. An exception is when using any towed camera platform designed for such a purpose.

14.2 Communication

- 14.2.1 Any special communication used regarding the operation of a Camera Car (such as sound signals) should be announced at a meeting of all personnel involved prior to any use of the vehicle.
- 14.2.2 In the interest of uniformity throughout the industry, the following sound signals should be used by the operator of the vehicle:
 - prior to moving forward two short horn blasts
 - prior to back up three short horn blasts
 - emergency stop one long horn blast
 - at night when shooting in residential areas, alternative signals could be used.
- 14.2.3 Only one person should be in contact with the Operator, through a designated two-way channel. In the event of radio silence being imposed, another set of signals shall be used.
- 14.2.4 A "dry run" or "walk through" of any action should be conducted prior to rehearsal or filming with all personnel involved present. An understanding of any intended action, possible deviations and authority to abort should be made clear to all concerned.
- 14.2.5 A copy of these Guidelines should be kept in the glove compartment of any insert Camera Car.

15.0 Motorcycles²⁰

- 15.1 Extreme caution should be exercised at all times when motorcycles are being used. Only required personnel should be in the vicinity.
- 15.2 The Operator shall hold a current, valid motorcycle license.
- 15.3 The motorcycle Stuntperson should be experienced in and familiar with the techniques needed to safely perform the planned stunt.
- Protective equipment such as a helmet, gloves, and other clothing shall be worn at all times. Helmets shall be either CSA approved, British Lab approved, or Snell Memorial Institute approved. Where there are special costume requirements, every precaution should be taken (eg.: wearing protective clothing under the wardrobe).
- Ample time and discussion should be given during preproduction, between all concerned parties, as to what type of motorcycle will be needed to safely perform the required sequence. The specific motorcycle type should meet the needs of the specific motorcycle stunt.
- Before any stunt is to be performed, a meeting should be called for all personnel involved and they should be thoroughly briefed at a meeting on the site where the sequence is to take place. This meeting should include:
 - an "on-site walk-through" or a "dry run" with the Stunt Co-ordinator and all personnel involved in the event
 - the Stunt Co-ordinator should plan and explain acceptable avenues of escape to personnel involved in the event
 - an understanding of the intended action, possible deviations and authority to abort should be made clear.
- 15.7 If any "on the day" deviations of a planned stunt become

- necessary, another meeting should again be called for all personnel involved in the hazardous procedure to confirm everyone's understanding of and agreement to the change(s).
- 15.8 Motorcycles, ramps, and other equipment should be examined prior to use by the Stunt Co-ordinator and the Motorcycle Operator to determine that they are in safe operating condition.
- The sequence to be shot, including ramp jumps, "lay-downs", "end overs" and other potential hazards should be clearly set forth and discussed by all persons involved.
- 15.10 Medical providers with Advanced First Aid Certification should be present at all rehearsals and all performances involving motorcycle stunts and prepared to administer medical assistance on an emergency basis.

Special Safety Considerations

16.0 General Stunt / FX Provisions²¹

- 16.1 Stunts are to be performed only by competent stunt persons.
- 16.2 The designated Stunt Co-ordinator should:
 - have experience equal to or greater than that of the stunt person(s) involved in the scene
 - be responsible for the safety of the stunt
 - inspect and approve any gear, harnesses, etc. involved in the stunt
 - ensure that the stunt persons are competent to perform the stunt
- 16.3 All stunt persons should be notified reasonably in advance of their involvement in a stunt sequence.
- 16.4 Stunt persons shall wear protective equipment.
- 16.5 Wardrobe for persons involved in a stunt should be approved in advance by the Stunt Co-ordinator.
- 16.6 Prior to the performance of all stunts, dangerous work situations, or pyrotechnic effects, the Production Manager through the 1st Assistant Director should give notification to all Key personnel. The Call Sheet should also state that explosive or pyrotechnical special effects are to be utilized.

- 16.7 Before any stunt is to be performed, a meeting should be called for all personnel involved and they should be thoroughly briefed at a meeting on the site where the sequence is to take place. This meeting should include:
 - an "on-site walk-through" or "dry run" with the Stunt Co-ordinator and all personnel involved in the event
 - the Stunt Co-ordinator should plan and explain acceptable avenues of escape to personnel involved in the event
 - an understanding of the intended action, possible deviations and authority to abort should be made clear.
- 16.8 If any "on the day" deviations of a planned stunt or FX effect become necessary, another meeting should again be called for all personnel involved in the hazardous procedure to confirm everyone's understanding of and agreement to the change(s).
- 16.9 Medical providers with Advanced First Aid Certification should be present at all rehearsals and all performances involving stunts or any other potentially hazardous activities and prepared to administer medical assistance on an emergency basis.

17.0 High Falls - Use of Air Bags²²

- 17.1 The Supplier of any air bags should be given, by the Stunt Coordinator, information, in complete detail, respecting the type of stunt for which the air bag is to be used, the height of the jump, the weight going into the bag and a description of the area where the bag is to be used, in order that the proper bag is selected.
- 17.2 Fans shall be in safe and good mechanical condition.
- 17.3 The appropriate size of generator should be used to supply power to the fan.
- 17.4 If at all possible, the generator should be no more than fifty feet away from the fan. All electrical connections should be taped or sealed so that the connections cannot come loose or disconnect when the air bag is in use.
- 17.5 The vents and seams of the air bag should be inspected before each use.
- 17.6 All air bags should be of quality material and stitching.
- 17.7 Each air bag should be pre-tested prior to actual use with weights equal to or more than the weight of the person(s) performing the highfall. The test should be conducted at the actual site and from the height of the highfall.
- 17.8 Each air bag should be set up by a Stunt / Safety Person qualified in the set-up and safe use of air bags.
- 17.9 The Jumper and the Safety Person (mentioned in 17.8) should not be one and the same.
- 17.10 There should be designated spotters around each air bag to safeguard the Jumper and to ensure that the fans continue to be operational.

18.0 Smoke Inhalation Guidelines²³

- 18.1 When creating smoke on any set, the lowest concentration needed to achieve the desired effect should be used, subject to the condition that under no circumstances shall any person be exposed to a smoke concentration in excess of regulatory limits (refer to guideline 2.0).
- 18.2 When smoke is created on an interior set, the air shall be periodically ventilated or exhausted, vertically and laterally, and appropriate means to do so shall be provided. All personnel and animals shall be given a break away from the stage at appropriate intervals based on the smoke concentration. Air quality should be periodically tested for contaminant levels to determine ventilation requirements.
- 18.3 The only materials that are generally acceptable for use to produce special effects smokes and fogs are:
 - Propylene Glycol
 - Glycerol
- 18.4 The following materials may also be used for lighting effects, but only small amounts for brief durations. These chemicals may cause irritation and exposure levels shall be monitored.
 - Cryogenic gases (dry ice, liquid nitrogen)
 - Triethylene Glycol, Butylene Glycol, Polyethylene Glycol
 - propane rigs (oxygen depleting)
- 18.5 The following materials should not be used to produce lighting effect smokes and / or fogs on any production. In other countries, these substances are legally banned from use.
 - Petroleum Distillates or oil products, including food grade and medical grade mineral oil based products
 - carcinogenic or suspect carcinogenic chemicals (eg.: contact cement)
 - smokes from combustion
 - fumed and Hydrolyzed Chlorides (Ammonium Chloride, Titanium Tetrachloride, Zinc Chloride)

- Ethylene Glycol, Diethylene Glycol
- charcoal (produces carbon monoxide)
- 18.6 When creating smoke on interior sets, respirators approved by the National Institute for Occupational Safety and Health (NIOSH) or an equivalent approval agency, shall be provided. These respirators shall provide protection from all possible contaminants produced (eg.: dusts, mists, gases, and vapours).
- 18.7 When smoke is used on any interior set, all non-essential personnel should be removed from the set. Whenever possible, personnel should be removed from any dressing rooms located in the immediate vicinity.
- 18.8 When creating a fire at an exterior location, all reasonable precautions to prevent fire and smoke inhalation should be undertaken.

 Respirators appropriate for exterior smoke shall be available upon request.
- 18.9 When smoke is scheduled to be created on any set, prior notification as to use and type should be given to all personnel. Whenever possible, the Call Sheet should state that smoke is to be used and the person responsible for providing respirators should be designated.

19.0 Open Flames²⁴

Definitions

Open Flame burning gases or vapours of a fire that is visible as light in

various colours and that may come in contact with a solid,

liquid, or gas and possibly cause the material to ignite.

Pyrotechnics explosives classified as high hazard fireworks having a

practical use in the List of Authorized Explosives published

by Explosives Branch of Natural Resources Canada.

19.1 The Special Effects Co-ordinator and Stunt Co-ordinator should be consulted regarding all necessary fire prevention, medical and safety precautions which shall be undertaken on any set prior to the use of any open flame.

- 19.2 Appropriate Fire and Government Authorities shall be contacted for their approval, comments and / or requirements and conduct an onsite inspection prior to the use of open flames on a set.
- 19.3 When using pyrotechnics, the producer shall apply for Event Approval to use pyrotechnic special effects, including high explosives. The request must be presented to the Authority Having Jurisdiction (AHJ) preferably *ten working days* before the event.

Note 1: Shooting events which take place in St. John's must go through the Special Events Committee.

Note 2: Please refer to Pyrotechnic Special Effects Manual, Explosives Regulatory Division, Natural Resources Canada.

- 19.3.1 If the AHJ considers it necessary for Event Approval, you may be required to submit a Pyro Effects Plan. The contents of the Pyro Effects Plan are at the AHJ's_discretion.

 Typically, however, the plan will contain:
 - A sketch of the facility and stage
 - A list of all pyrotechnic special effects to be employed
 - The location of all pyrotechnic special effects
 - The nature of the pyrotechnic articles as functioned (descriptions of their height, range of effect or fallout, and duration)
 - The sequence of firing
 - A plan of the pyrotechnic storage area
 - The location of the audience
 - Exit locations
- 19.4 When torches, candles, fireplaces or other open flames are used, such uses must be under controlled situations with due regard for the safety of all involved.
- 19.5 All open flames shall be controlled by persons designated by the Producer. Designated persons must be equipped with and trained in the use of approved fire extinguishing equipment.
- 19.6 Flammable and combustible liquids and pyrotechnics shall be kept a safe distance from open flames. Continual ventilation shall be established before ignition and continued until clean-up and storage is completed.
 - Flammable and / or combustible liquids and pyrotechnics shall always be stored in approved containers.
- 19.7 Plans for all gas systems supplying open flames (including small propane rigs) shall be submitted to and approved by the Office of the Fire Marshall in accordance with applicable Statutes and Regulations, prior to any use on the set. This is to ensure the use of CSA approved materials (eg.: hose, clamps, in-line regulators, etc.) and that the operator is qualified. Plans shall indicate intended use (eg.: interior,

- exterior, FX, etc.).
- 19.8 Each propane tank shut-off shall be clearly labeled on / off, and shall be operated by a designated person who has a clear view of the propane flame at all times. Tanks should not be placed in an enclosed building.
- 19.9 All open flames shall be stationary and firmly secured.
- 19.10 All performers, including Stunt Performers, should be notified reasonably in advance of their involvement with open flame.
- 19.11 Any Stunt personnel directly involved with fire should wear protective fire equipment (ie: NomexTM or equivalent suits). All wardrobe to be used in any type of burn should be approved by the Stunt Co-ordinators and / or Special Effects Co-ordinator.
- 19.12 Water gel should be used at all times on all exposed areas of skin, including performer's hair if it is uncovered, in consultation with the Stunt Co-ordinator and Special Effects Co-ordinator. A performer should have the option of wearing a natural hair wig.
- 19.13 If the stunt is a "partial burn", there should be no fewer than two designated safety persons each equipped with and trained in the use of approved fire extinguishers. A "partial burn" is defined as follows:
 - When a Stunt performer carries an amount of fire limited to a restricted area of the body (ie: an arm, leg, portion of the torso) and does not inhibit the sight or breathing of the Stunt Performer.
- 19.14 If the stunt is a "full burn", there should be no fewer than three designated safety persons each equipped with and trained in the use of approved fire extinguishers. A "full burn" is defined as follows:
 - When a substantial part of the body is on fire or when the flames **could** reach or interact with the head area and **could** limit the sight or breathing of the Stunt Performer, or where breathing apparatus or eye protection is required.

- 19.15 Medical providers with Advanced First Aid Certification should be present at all rehearsals and all performances involving open flames and pyrotechnics.
- 19.16 A special note should be made in the safety section of the Call Sheet when fire stunts are performed.
- 19.17 If pyrotechnics are to be used on a set, the requirements of the Fireworks Act of Newfoundland and Labrador and the regulations of High Hazard Fireworks from Energy, Natural Resources Canada shall be followed.
- 19.18 Open flames and / or pyrotechnics shall not be permitted on sets that have an audience.
- 19.19 Adequate signage should be in place when using open flames/pyrotechnics.

20.0 Explosives and Pyrotechnics²⁵

Definitions:

Pyrotechnics explosives classified as high hazard fireworks having a

practical use in the List of Authorized Explosives published by Explosives Branch of Natural Resources Canada (federal

jurisdiction)

Blasting using a substance, including a detonator or primed

explosive, that is manufactured or used to produce an explosion by detonation or deflagration and that is regulated

by the Explosives Act, but does not include ammunition for

weapons or fireworks (provincial jurisdiction)

When using explosives and pyrotechnics please reference Sections 155-168 of the Occupational Health and Safety Regulations

20.1 Use of Explosives and Pyrotechnics

- 20.1.1 Prior to the performance of all dangerous work situations or pyrotechnic effects (eg: working with explosives, explosive devices, flammable or combustible liquids, gas or chemicals on any set), the Production Manager, through the 1st Assistant Director, shall give notification to all personnel. The Call Sheet should also state that explosive or pyrotechnical special effects are to be utilized.
- 20.1.2 Before any stunt is to be performed, a meeting should be called for all personnel involved and they should be thoroughly briefed at a meeting on the site where the sequence is to take place. This meeting should include:
 - an "on-site walk-through" or "dry run" with the Stunt Co-ordinator and all personnel involved in the event
 - the Stunt Co-ordinator should plan and explain acceptable avenues of escape to personnel involved in the event

- an understanding of the intended action, possible deviations and authority to abort should be made clear.
- 20.1.3 If any "on the day" deviations of a planned stunt or FX effect become necessary, another meeting should again be called for all personnel involved in the hazardous procedure to confirm everyone's understanding of and agreement to the change(s).
- 20.1.4 It is recognized that there can be unforeseen or unique situations which might require on-site judgement; such judgement must be made in the interest of safety of cast and crew.
- 20.1.5 Prior to and after any pyrotechnical effect, the Special Effects Co-ordinator shall remain on set at all times and be the final authority on all matters pertaining to safety.
- 20.1.6 The 1st Assistant Director or the Special Effects Coordinator, or both where necessary, shall clearly announce to all personnel the location of exits and escape routes. The escape route shall provide unobstructed passage to the exterior of the building, structure or work place.
- 20.1.7 Immediately prior to each take, the 1st Assistant Director should check the escape route in order to assure that it is, and will remain, accessible. Any person who is unsure of the designated escape route should check with the 1st Assistant Director and learn the escape route before entering the work area.
- 20.1.8 The 1st Assistant Director or FX Co-ordinator, or both where necessary, shall ensure that there is a clear fire route for emergency and firefighting vehicles at all times.

- 20.1.9 Only persons and crew necessary for the purpose of filming should be in the explosives area. The 1st Assistant Director or Special Effects Co-ordinator should ensure that before a special effect is performed that all other personnel are safely cleared away from the explosive area. Adequate signage is required at all times.
- 20.1.10 **No smoking** is permitted in the explosive area. "No smoking" signs shall be posted in all areas of the premises or locations where explosives and / or pyrotechnic devices are stored and handled.
- 20.1.11 After each shoot, no one shall go into the explosives area other than the Special Effects Co-ordinator until the Special Effects Co-ordinator deems it safe to do so.
- 20.1.12 No child under the age of 16 should be close to explosives nor should they be body squibbed, except for children who are designated as quailed Stunt Performers and for whom the signed authority of the Parent or Guardian has been previously obtained.

20.2 Transport and Storage and Disposal

- 20.2.1 Transportation and storage of explosives and / or pyrotechnic devices shall be governed by the provisions of all applicable Federal, Provincial and Municipal laws and the proper Authorities shall be notified when using explosives on the set.
- 20.2.2 Only qualified drivers shall transport explosives or hazardous productions. Transport vehicles shall display appropriate Hazardous Material symbols as required by Transport Canada (refer to *Transportation of Dangerous Goods Act*)
- 20.2.3 Explosives and/or pyrotechnic devices shall be disposed as per Pyrotechnic Special Effect Manual, Chapter 7 Disposal

(Natural Resources Canada) and the Occupational Health and Safety Regulation CNR 1165/96

20.3 Regulations

- 20.3.1 All explosives and explosive devices must be shunted.
- 20.3.2 Detonation of explosives shall be from a separate DC power supply.
- 20.3.3 When preparing pyrotechnics, radio transmissions of any kind including mobile phones in the area shall be turned off.
- 20.3.4 Any special effects personnel connecting, loading or firing a blast shall possess a Blasting Certification.

21.0 Use of Firearms²⁶

21.1 Summary of Regulations

The possession, handling, storage, transport and registration of all firearms, as well as prohibited weapons and devices, are regulated by the Federal Firearms Act and Regulations, including:

Storage, Display and Transportation of Firearms and Other Weapons by Business Regulations Firearms Licenses Regulations

Firearms Fees Regulations

Special Authority to Possess Regulations.

Regulated items include:

Non-restricted firearms (eg. Shotguns or rifles)

Restricted firearms (eg. Most handguns)

Prohibited firearms (eg. Automatic weapons)

Prohibited weapons (eg. Switchblades)

Prohibited devices (eg. Replica firearms)

Replica firearms are generally used in the entertainment industry, unless there is a compelling reason to use an authentic firearm (with blank ammunition). A replica firearm is defined as a device that is made to look identical to a real firearm, but which is not capable of firing a projectile that could cause serious bodily injury.

It is important to note that replica firearms are covered under the firearms act. Just because they might not injure, they are not to be treated casually, but shall be handled in accordance with regulations.

Any employee who handles any type of firearm covered by the Firearms Act, including replica firearms, must:

- have a valid Firearms Acquisition Certificate, or
- have a Possession and Acquisition License that allows them to acquire and possess restricted firearms and ammunition.

Actors under contract to the production (who are not considered employees) do not need to be licensed, but may handle firearms only under the direct supervision of a licensed individual, whether that individual is a Firearms Handler employed by the producer, or is from a licensed firearms supplier.

Producers must acquire a Firearms Business Licence before it can take part in any transactions involving firearms regulated under the Firearms Act, or if any of its employees have access to firearms without supervision of a licensed firearms supplier. They must also ensure employees handling firearms are appropriately licensed.

However, the producer does not require a licence if firearms are supplied by a licensed firearms supplier. In this case, the supplier would be responsible for ensuring compliance with all regulations and would remain responsible for the handling, storage and safe use of all firearms at all times.

If there is a licensed firearms supplier and the producer does not have a licence, an employee of the producer may not have access to firearms unless the supplier is supervising them. Also, employees handing firearms shall be in receipt of required licenses and authorizations.

If ammunition is required, blanks will be used, never live ammunition, and its use, transport and storage will comply with all regulations stipulated in the Firearms Act as well as the Federal Explosives Act.

Finally, in any particular location, municipal or provincial regulations or requirements for permits may apply.

21.2 The Firearms Handler

21.2.1 The Firearms Handler is the individual charged with responsibility for all firearms and their ammunition, including compliance with regulations for their possession, use, storage and transport.

In the case where firearms are provided by a licensed supplier, the Firearms Handler will be the supplier. If the producer has a Firearms Business Licence, they shall designate an employee as Firearms Handler and ensure that individual is appropriately licensed.

- 21.2.2 The Firearms Handler shall possess the licenses and authorizations required under the Firearms Act. In particular, the Firearms Handler shall possess: a valid Firearms Acquisition Certificate, or a Possession and Acquisition Licence.
- 21.2.3 The Firearms Handler should be familiar with:
 - all firearms being used and their respective safety requirements
 - loading, unloading, dismantling, cleaning and reassembly procedures
 - all requirements and regulations regarding the use, handling, transportation and storage of firearms, ammunition and black powder, including federal, provincial and municipal regulations.
- 21.2.4 The Firearms Handler is responsible for:
 - supervising the use of firearms by actors
 - checking firearms before and after each use
 - cleaning all firearms daily (after use)
 - keeping a daily inventory of all firearms in their care
 - compliance with all regulations regarding firearms, ammunition and black powder, their uses, storage and transport
 - ensuring that if employees are handling firearms that they

are appropriately

- 21.2.5 If the Firearms Handler is a licensed supplier, they are also responsible to: supervise any employee in handling of firearms, whether or not that employee is licensed.
- 21.2.6 Firearms should be removed from Actors or Stunt Performers between takes whenever possible and placed in the care of the Firearms Handler.

Any firearm not immediately required on set shall be unloaded, disabled or rendered inoperable by means of a locking device, and stored in a locked receptacle or room in accordance with regulations for that class of firearm. Replica firearms, even if they do not fire, still require safe storage in a locked room. Ammunition shall be stored in a locked container and in compliance with regulations.

- 21.2.7 The Firearms Handler should be allowed time:
 - to ensure compliance with any applicable safety requirement or procedure
 - to ensure that any Actor or Stunt Performer using a firearm is fully aware of the safety rules and procedures for the handling and firing of the firearm
 - to discuss with the Director and Assistant Directors the use of any firearms required
- 21.2.8 Firearms being transported shall be in the care of the Firearms Handler.
- 21.2.9 Firearms being transported shall be unloaded, disabled or rendered inoperable, and stored in a locked opaque container which is locked in a trunk or similar compartment of a vehicle so that the container is not visible from the outside. Ammunition shall also be locked in a container and locked in a vehicle in accordance with regulations. Replicas or other prohibited weapons and devices shall be locked in a container and vehicle in accordance with regulations.

21.3 Handling Firearms on Set

21.3.1 Firearms are dangerous and should be treated as loaded at all times.

Replicas should be treated as if they were authentic firearms that are loaded.

21.3.2 Live ammunition should **NEVER** be used.

Blanks can be as deadly as live ammunition and should be treated accordingly.

- 21.3.3 **Under no circumstances** should a firearm, weapon or device be pointed at anyone, including yourself.
- 21.3.4 **Never** indulge in "horseplay" while in charge of or responsible for any firearm, weapon, device or ammunition.
- 21.3.5 A "no smoking" rule shall apply to any area where firearms, ammunition or black powder is stored, and approved signs to this effect posted.
- 21.3.6 A firearm should never be put down anywhere but in its designated storage place. Never put a firearm down in such a way as to allow dirt or sand to enter it. Never discharge a firearm with dirt, sand or unapproved blockage (eg.: a "choke") in the barrel.

- 21.3.7 In the event of a misfire or jam, the firearm should be taken out of use. A qualified gunsmith should determine the cause, effect the repair and perform test discharges. The decision to resume use of the firearm should be solely that of the Firearms Handler.
- 21.3.8 No crew, cast or other personnel should be in the vicinity of a firearm being discharged without the minimum of approved eye and ear protection.
- 21.3.9 Plexiglass or Lexan (minimum) should be placed between any personnel and any firearm discharged in their vicinity.
- 21.3.10 All personnel should be given a verbal warning prior to the discharge of any firearm.
- 21.3.11 No firearm should be loaded (made "hot") until immediately prior to a take. If a delay of any kind ensues, the firearm should be unloaded. A "hot" firearm should not be in the possession of any Actor or Stunt Performer except during a take.

21.4 Ammunition / Firearms Specifications

- 21.4.1 All applicable Statutes and Regulations shall be adhered to in the transportation, handling and storage of all firearms, weapons and devices, ammunition and black powder.
- 21.4.2 Replica firearms should be used unless an authentic firearm is required.

- 21.4.3 In all situations which require an authentic firearm:
 - only a firearm which has been manufactured for this purpose by qualified personnel shall be used to fire a charge
 - no firearm which is to be discharged shall be modified in any way, unless the modification is performed by a qualified Gunsmith and with the approval of the Manufacturer. Y modification to a firearm that changes its class shall be reported to the Registrar.
- 21.4.4 Only the appropriate type of blank ammunition shall be used. Ammunition made specifically for theatrical use should be obtained in the correct load for the effect required.
- 21.4.5 Factory-loaded ammunition should not be tampered with.
- 21.4.6 Any safety guidelines or specifications laid out in handbooks supplied by the Manufacturer of a firearm should be made known and adhered to by all concerned.

22.0 Animal Handling²⁶

The safety of working animals and the persons working with such animals should be a primary concern. This guideline is intended as safety recommendations for the cast and crew on a production when working with or around animals. Specific regulations regarding animal safety and care can be found in other sources. The American Humane Association (AHA) guidelines are not in force in Canada but are generally accepted and observed in the absence of equivalent domestic guidelines.

- 22.1 Only designated Performers, Professional Trainers, Handlers and/or Wranglers should be allowed to work with animals on productions. Anyone not directly involved in the action involving the animals should **not** distract the animals. It is recommended that enough Wranglers be used to ensure that safe control of animals is maintained (i.e. 1 Wrangler/3 action horses). For each large undomesticated animal, such as a large cat or carnivore (mountain cat or larger) there should be two (2) handlers present.
- 22.2 Notice advising that animals are working should be given on the call sheet prior to shooting. A "closed set" notice should be posted on all stages or locations, where animals are working, and every effort should be made to maintain a closed set on locations where animals are working.
- 22.3 An easily accessible area should be available for loading and unloading animals. Horses should always be given a clear path to their holding area. The Assistant Directors should clear the set of all animals **first**, at lunch break or wrap, at which point people will then be cleared.
- 22.4 Once on set, at the animal handler's discretion, all nonessential personnel should be removed from the set during animal stunts or animal action, or whenever wild or exotic animals are performing.
- 22.5 Cast and crew will not be allowed to pet, fondle or play with animals off camera, if the handler believes it is not in the best interest of the animal, or believes it is unsafe.

- 22.6 As necessary for the concentration and safety of the animals, cast and crew should limit distracting motion, noise or smells, such as food, perfume or alcohol. In some cases, Craft services may need to be moved away from the animal action. Animal Handlers should provide the Producer with written pertinent instructions for each species and/or individual animal, as appropriate. These instructions should be attached to the call sheet.
- 22.7 An opportunity should be given to the trainer and Stunt Coordinator to address the cast and crew (including the parents or guardians of any children on the set) about safety precautions while animals are on the set. Safety precautions such as, but not limited to, maintaining a safe distance from wild or exotic animals, no personal pets, no feeding, no running and provisions for escape routes may be included. In the opinion of some trainers, the presence of menstruating women may cause reaction from animals such as large cats. The Trainer/Handler should be consulted in that regard.
- 22.8 The Trainer or person supplying the animal(s) is responsible for obtaining all necessary inoculations, permits, applicable licenses and medical safeguards.
- 22.9 The Trainer and/or Wrangler shall ensure that all animals required to work in a film/set location are well prepared for such situations. The Trainer/Wrangler should train and acclimatize the animals to filming conditions and be satisfied that the animals will perform in a manner conducive to the safety of the cast, crew and general public.
- 22.10 Where animals and Performers are working together in a scene which is deemed a stunt or dangerous situation, ample time should be given to allow the Handler, Stunt Coordinator, and the animals to become familiar with the routine and each other.
- 22.11 When an animal on set poses a potential hazard (horses, livestock, etc.), there should be a qualified first aid provider on set. Depending on the types of animals being used and the filming location, consideration should be given to providing onsite emergency medical transportation, with qualified medical personnel, up to and including life support, as necessary.

- 22.12 Equipment operated in conjunction with working animals should be in a safe operating condition as determined by the Trainer/Wrangler in conjunction with the property master. Basic animal safety equipment such as fire extinguishers, fire hoses and nets should be readily available.
- 22.13 All firearms, ammunition or explosives safety guidelines set out elsewhere in this document should be observed. Live ammunition should not be allowed on set. Only blank ammunition should be used. The level of blank ammunition loads and explosives should be determined in consultation with the Trainer or Wrangler, or both where necessary, and the firearms expert. All Trainers/Wranglers should be given notice prior to shots being fired or the detonation of explosions around performing animals
- 22.14 *Humane Canada*'s²⁷ position statement on the use of animals in entertainment opposes the administration of any drug for non-therapeutic purposes in order to alter the performance or behaviours of animals. Tranquillization or sedation of performing animals should be accomplished only where circumstances warrant, upon the advice of the trainer or qualified veterinarian.
 - 1. Some animals, such as reptiles should never be sedated. If appropriate, advice should be sought from a qualified trainer or veterinarian.
 - 2. Tranquillizers should not be used for the purpose of "calming" performing animals. A tranquilized animal is unpredictable.
 - 3. As a safety backup, consideration should be given to the availability of tranquilizing equipment. Potentially dangerous or complicated animal action should warrant the presence of a qualified veterinarian.
- 22.15 On any set, stage or location, best efforts shall be made to secure scenery and props where animals will perform. Objects such as ladders or pedestals that easily tip over can startle animals.
- 22.16 When using horses on set:
 - 1. Horses being used on a production should be properly shod for the working surface (e.g. borium, rubber shoes, etc.)

- 2. All hitch rails should be fastened in the ground so that the tugging of a frightened horse cannot pull it loose (i.e. sleeve installation). On a stage, hitch rails should be bolted or fastened in a rigid manner.
- 3. Under no circumstances should horse falls be accomplished by tripping or pitfalls.
- 4. No one should ride horses "off camera" except for those designated by the Trainer/Wranglers.
- 5. Under no circumstances should spurs be worn by any Actor or Extra without the prior approvals of the Stunt Coordinator and or the Trainer/Wrangler.
- 22.17 Helicopters should remain at least fifty (50) feet away from any animal. Please also refer to **24.0 Helicopters**.
- 22.18 In productions involving large numbers of animals (e.g. historic reenactments), a responsible "chain of command" should be established to coordinate the work during the production. The designated "commander" (appointed by the Producer) of each unit should be directly responsible for the conduct of the people and the care of the horse/livestock under his or her care.
- 22.19 Animal actors brought to a location can be affected by indigenous pests; this could range from distraction to life threatening situations or the transmittal of diseases between pests and animals. Notification of the potential existence of indigenous pests in the area being filmed should be provided to the Trainer/Wrangler/Supplier of animal actors.

For more information on animal handling or specific guidelines on animal safety in film and television production, please consult an organization such as the Ontario Society for the Prevention of Cruelty to Animals (SPCA), the American Humane Association (AHA) or Newfoundland and Labrador Society for the Prevention of Cruelty to Animals (SPCA).

23.0 Skydiving²⁶

The following recommendations apply where skydiving will be used in filming. The term "Parachutist" refers to a Parachutist who has a current and valid certification card issues by a nationally or internationally recognized certification organization such as the Canadian Sport Parachuting Association.

- 23.1 Transport Canada shall be contacted to determine what type of endorsement or certification Parachutists involved in the scene are required to possess. The Canadian Sport Parachuting Association's determinations and suggestions should also be sought.
- 23.2 An *Application for Authorization to Conduct Parachute Descents* form shall be filed with Transport Canada prior to any skydive, and be accompanied by proof of consent of the owner(s) of the area to be used as a "drop zone", as well as Municipal authorities (if applicable). Transport Canada should be contacted, in writing, at least two weeks prior to any filming involving skydiving.
- 23.3 When certification information is obtained, a designated Skydiver Coordinator shall be named. This person shall:
 - have an endorsement or certificate equal to or greater than that of any Parachutist(s) involved in the scene
 - be responsible for the safety of the skydive, as well as securing proper authorization from Transport Canada
 - ensure the pilot is endorsed for skydiving and the plane meets all applicable Transport Canada regulations.
- 23.4 Prior to the jump, ample time should be allotted for the skydiver and Co-ordinator to evaluate the safety of all equipment, props, wardrobe, etc. to be used or worn by the Parachutist during the jump. Final approval for these items rests with the skydiver.
- 23.5 There should be a "dry run" on the ground, at either the landing site or drop zone, prior to takeoff. It shall be the skydiver's responsibility to evaluate mitigating factors such as location, weather, communication

- and security at the time of the skydive and give final approval for the jump to occur. Before each jump, ample time should be allotted to thoroughly brief all persons involved. Final approval of the jump rests with the skydiver.
- 23.6 Medical providers with Advanced First Aid Certification shall be present at all rehearsals and all activities involving skydiving and be prepared to administer medical assistance on an emergency basis.
- 23.7 The transportation of items considered to be of a dangerous nature (such as firearms and pyro) must be approved by the Dangerous Goods division, Air Carrier Branch, Transport Canada. Taking off and landing in a built up area requires prior authorization from Transport Canada.
- 23.8 This Guidelines should be referred to on the Call Sheet whenever skydiving is scheduled.

24.0 Helicopters²⁶

- 24.1 The helicopter pilot is the final authority concerning all helicopter operations. If in doubt, ask the pilot through the 1st Assistant Director. All final decisions regarding the helicopter, its aerial traverse and hovering positions rest with the pilot.
- 24.2 If the helicopter is to be functional, the pilot shall ensure the helicopter meets all pertinent Transport Canada regulations and that all pertinent documentation has been filed with the appropriate Federal, Provincial and Municipal authorities.
- 24.3 Plot plans and graphics detailing landing and take off areas, intended flight paths, designated emergency landing sites, locations of squibs (and type of explosives to be used) should be complied by the Department Heads involved and approved by the pilot prior to filming.
- 24.4 All Guidelines relating to stunts, firearms, pyro, etc. will be fully observed.
- 24.5 Prior to take off, the pilot shall review the craft's safety features and discuss emergency contingency procedures will all persons involved. Ample time should be allotted for the pilot to evaluate the fitness of the helicopter, accessory equipment and passengers prior to each run.
- 24.6 The landing and take off areas should be cleared of debris and, where necessary, wet down. However, in the case of combined vehicle / helicopter stunts, the ground should only be wet down if this is acceptable to both the Stunt Co-ordinator and pilot.
- 24.7 Single channel, dedicated two-way communication between ground and helicopter shall be established and maintained at all times. During operation of the helicopter, only one ground contact person shall be used to relay information.
- 24.8 There shall be no smoking within 50 feet of the helicopter.

- 24.9 All personnel shall remain at least 50 feet away from the helicopter unless they are required to approach the craft.
- 24.10 No person or animal should walk under the rear or "tail" section of a helicopter.
- 24.11 All crew and cast involved should be aware of the proper procedures for working around helicopters, such as:
 - leave and approach helicopters from the front, with your eyes and head forward. Always use extreme caution when working around a helicopter especially when the helicopter's engine is running.
 - carry all equipment parallel to the ground at waist level or below, within 50 feet of a helicopter
 - never extend any equipment vertically (such as cameras, light or grip stands, sound booms, etc.) into the rotor blades of a helicopter
 - never, under any circumstances, throw or leave anything (such as rolls of tape, clothing, paper, tools, etc.) within 50 feet of a helicopter
 - always protect your eyes as well as you do your equipment whenever a helicopter is landing or lifting off.
- 24.12 Crews filming from helicopters over large bodies of water should always wear survival suits.
- 24.13 The transportation of items considered to be of a dangerous nature (such as firearms and pyro) must be approved in advance by the Dangerous Goods Division, Air Carrier Branch, and Transport Canada¹. Taking off and landing in a built up area requires specific authorization from Transport Canada. Transport Canada should be contacted, in writing, at least two weeks prior to any filming involving a helicopter.

Dangerous Goods Division, Air Carrier Branch, Transport Canada P.O. Box 42, Moncton, NB E1C 8K6 (506) 851-7131

- 24.14 Camerapersons hanging out of a helicopter with the door off shall wear a seat belt and a safety harness. The camera should be secured separately from the cameraperson.
- 24.15 This Guideline should be referred to on all Call Sheets, whenever helicopters are to be used.

25.0 Fixed-Wing Aircraft²⁶

- 25.1 All flights must conform with Transport Canada regulations. All certificates and / or waivers must be in effect and available for on-site inspection. The pilot must obtain proper certificates and / or waivers before operating an aircraft in the situations outlined below. Transport Canada should be contacted, in writing, at least two weeks prior to any filming involving an aircraft.
- 25.2 Except where necessary for take off or landing, the operation of an aircraft below the following altitudes is prohibited, without prior approval from Transport Canada:
 - Over Populated Areas: over any area of a city, town or settlement, or over any open air assembly of persons, an altitude of 1,000 feet above the highest obstacle within a horizontal radius of 2,000 feet of the aircraft
 - Over Other than Populated Areas: an altitude of 500 feet above the surface, except over open water or sparsely populated areas. In that case, the aircraft may not be operated closer than 500 feet from any person, vessel, vehicle or structure.
- 25.3 Before a stunt or sequence is to be performed, all persons involved shall be thoroughly briefed. There should be a "dry run" on the ground at the site, and:
 - the persons necessary for filming will be briefed as to any potential hazards and safety concerns prior to the filming
 - a pre-planned stunt shall not be changed in any way without the authorization of the pilot and the Aerial Co-ordinator, if any.
 - if there is a question (as determined by the pilot) as to the safety of any aerial filming sequence involving low, over-the-camera shots, a locked-off camera should be used.
- 25.4 Only persons and crew necessary for the purpose of filming will be in the area. All other personnel are to be at least 500 feet away from the path of the flying aircraft.

- 25.5 Single channel dedicated two-way communication between ground and the aircraft shall be established and maintained at all times. During the operation of the aircraft, only one ground contact person shall be used to relay information.
- 25.6 Where required by the appropriate regulatory agency, there will always be an Aerial Co-ordinator on the ground when an aircraft is in the air of taxiing. An Aerial Co-ordinator will be appointed by the designated Chief Pilot.
- 25.7 Aircraft engines shall not be started and the aircraft shall not taxied in spectator, cast or crew areas until appropriate measures have been taken to prevent hazardous conditions for spectators, cast and crew.
 - cast, crew and equipment shall be protected from debris thrown back by airplanes taxiing, taking off or landing
 - if an aircraft is being filmed with the engine running, adequate safety precautions shall be taken in connection with activity in front of the aircraft.

Whenever an aircraft engine is running, a licensed person should occupy the Pilot's seat and be in control of the aircraft. The aircraft should be anchored against forward movement.

- 25.8 There shall be no smoking within 100 feet of the aircraft or support vehicles.
- 25.9 A plane shall be certified if it is to fly with the door removed. When filming with the plane's door removed, the Cameraperson(s) shall wear seat belt(s) and safety harness. The camera should be secured separately from the Cameraperson.

- 25.10 Aircraft structures can be damaged easily while on the ground. The Pilot's permission should be obtained before pushing, handling, sitting on or in, or laying any objects of any kinds on an aircraft.
 - if a foreign object falls into or against an aircraft, report it immediately to the Pilot or Aerial Co-ordinator
 - never allow cast or crew to occupy an aircraft while its engines are started or running, unless the Pilot is in full control
- 25.11 Each end of an operational runway or landing area should be cleared prior to take-off and landing. Appropriate safety precautions should be taken as to the placement of camera equipment when filming the take-off or landing.
- 25.12 Acrobatic maneuvers shall be conducted in a direction which will most nearly parallel the boundaries of the designated cast, crew and / or equipment area, or in a direction away from such an area.
- 25.13 Crews filming from aircraft over large bodies of water should always wear survival suits.
- 25.14 This Guideline should be referred to on all Call Sheets, whenever aircraft are to be used.

26.0 Underwater Stunts and Underwater Film Operations²⁸

This Guideline recognizes the CSA Z275.2-92 Occupational Safety Code and Amendments for diving operations. This guideline applies to all diving operations conducted in relation to underwater stunts and underwater work during film operations. The following definitions apply in this Guideline.

Buddy System the system of assigning diving partners who are

responsible for maintaining effective communication

with each other and rendering assistance when

necessary

Competent qualified because of knowledge, training and

experience to carry out assigned duties and in accordance with the CSA Z275.4-97 Competency Standards for diving operations. Standard for

discipline (category F)

Diving Supervisor the individual who, because of his / her diving

qualification and experience, is responsible for a particular diving operation. **The diving supervisor**

shall not dive.

Dive Team a minimum of three personnel involved in a diving

operation

Free Swimming diving without a lifeline or surface tether

Hyperbaric Chamber a pressure vessel and associated equipment designed

to subject humans to greater-than atmospheric

pressure

Lifeline a rope or other material of sufficient strength to

recover and lift a diver and his / her equipment from the water; proper construction and materials should be

ensured

SCUBA Self-Contained Underwater Breathing Apparatus

Stand-by Diver

a diver who is trained to operate at the depths and in the circumstances in which the diver in the water is operating; primary function of the Stand-by Diver is to render assistance in the event of emergency

26.1 Diving Regulations and Safety Measures

- 26.1.1 A competent Diving Supervisor shall be assigned to supervise each dive. His / her duties shall include, but not be limited to, the following:
 - planning the dive(s)
 - briefing the crew, including emergency procedures that are to be followed in the event of a malfunction of the equipment or system
 - ensuring that all necessary equipment is provided and in good operating condition
 - maintaining the site diving log supervising the entire diving operation
 - reviewing divers' logbook
- 26.1.2 The competence of all diving personnel shall be in accordance with CSA 2275.4 97acceptable to the Regulatory Authority. Such competence shall consist of:
 - the successful completion of an approved course
 - previous training or experience
- 26.1.3 For each diving operation where the planned depth does not exceed 36.5m (120 ft.), a minimum dive team of **four** shall be present in the following capabilities:
 - two shall be divers, one of whom shall be a stand-by diver
 - one shall be a diver's tender
 - either the diver's tender or the stand-by diver shall be

designated as the Diving Supervisor

- 26.1.4 The tender shall meet the minimum qualifications necessary to be designated as a diving supervisor
- 26.1.5 Each diver and diver's tender shall be certified in cardiopulmonary resuscitation, basic First Aid and trained in the treatment of near-drowning victims.
- 26.1.6 A dressed, stand-by diver shall be present at all times when diving operations are in progress.
- 26.1.7 Except in the case of accident or unavoidable circumstances, a diver shall not be permitted to remain at any depth longer than the maximum time planned for that depth during that dive.
- 26.1.8 A diver shall not be permitted to dive unless a signed statement issued by a recognized diving physician is presented, stating that the diver has received a comprehensive physical examination during the preceding 12 months and has been found to be free of any medical condition that would prohibit the type of diving for which the diver is to be employed.
- 26.1.9 Medical standby shall be confirmed and arranged. A physician shall be available during diving operations and for 24 hours afterwards to provide medical assistance in the event of an emergency.
- 26.1.10 When the diver shows any indication of pressure-related illness or requires therapeutic recompression for any reason, treatment shall be initiated, and the physician shall be alerted immediately.

- 26.1.11 Diving operations, repetitive dives and the treatment of divers shall be in accordance with the US Navy or the DCIEM decompression tables.
- 26.1.12 Before commencing a diving operation, the Diving Supervisor shall ensure that all diving plant and equipment, including umbilicals, winces, cables, hyperbaric chambers, etc. used in connection with the diving operation are in operating condition.
- 26.1.13 The Employer or the Diving Co-ordinator shall ensure that there is a second source of power for the diving system in the event of failure of the primary source.
- 26.1.14 When diving operations are in progress, warning devices shall be displayed as follows:
 - buoys, flags, lights, lamps, or flares to define the limits to be kept clear of by any equipment other than that connected with the diving operation
 - in navigable water, flags and lights in accordance with the requirements of the Regulatory Authority

Warning Signals - Divers Down

By Day International Code Alpha and / or any locally recognized signal (Divers' red and white flag)
By Night Vertical lights in a red-over-white position indicating underwater operations (this is an international code)

26.1.15 An effective two-way means of communication between the underwater site and the person in control of equipment that may assist the diving operation must be provided.

26.1.16 A lifeline tended from the surface shall be used at all times in diving operations under ice, or where potentially hazardous situations such as water currents, low visibility and adverse weather conditions exist.

26.2 SCUBA Diving

- 26.2.1 Breathing mixture shall have an air purification certification
- 26.2.2 A diver using SCUBA shall not use explosives
- 26.2.3 A diver using SCUBA shall limit depth of dives to not exceed 40 metres (130 feet).
- 26.2.4 A diver using SCUBA shall use the buddy system. The buddy system shall consist of two free-swimming divers, each of whom shall:
 - be responsible for the other's safety
 - be familiar with the operation of all equipment worn or employed by the buddy and be prepared to correct in case of malfunction
 - maintain constant visual contact with the other during the dive (monitor the actions and conditions of the buddy)
 - know the hand signals being used and acknowledge each signal as given; failure to acknowledge shall be considered an emergency
 - not leave the other except in the case of an emergency requiring the assistance of one of them
 - abort the dive immediately if one becomes separated from the other(s) or one of them aborts the dive

- 26.2.5 When it is unsafe to use the buddy system, a lifeline tended at the surface or tethered to an identifiable float located on the surface shall be used and visually monitored from a location that will allow for immediate assistance to be rendered to the submerged diver in the event of an emergency.
- 26.2.6 Each diver employing SCUBA should be equipped with two (2) functioning demand regulators and shall use an octopus rig when diving in excess of 60 feet.
- 26.2.7 Effective two-way communications with the surface (ie: float, lifeline, voice communication, etc.) shall be used when it does not interfere with the operations and at all times during solo diving.
- 26.2.8 No diver shall undertake to dive in a contaminated environment unless the diver's competence to engage in such work is in accordance with CSA Z 2275.4 and CSA 2275.2.
- 26.2.9 It is the Producer's responsibility to ascertain that the working area is not contaminated.

26.3 Actors Involved in Underwater Work

- When an actor is required to perform underwater work, it is essential that appropriate safety measures be implemented. A dedicated dive team should accompany the actor. Warm up vehicles and changing areas should be immediately available, as well as shower facilities.
- 26.3.2 It is recommended that medical assessments be made to ensure physical fitness for the rigors of underwater work. Work underwater involves physical and physiological stresses that can rapidly deplete reserves in an individual having a poor physical fitness level. It is necessary, therefore, that all divers have a good to excellent exercise

tolerance.

The middle ear, the sinuses and the lungs are air-containing spaces in the body. The pressure in them must be equal to the surrounding pressure in order to prevent tissue damage. This means that the diver cannot be suffering from respiratory infections, cold, flu, etc.

Due to shooting demands and wardrobe restrictions, the risk of hypothermia should be monitored closely.

Appendices

A1 First Aid Kits

A1.1 #1 First Aid Kit

Where there is only one worker employed at a workplace, the Producer shall provide not less than one #1 First Aid Kit, which shall contain the following:

Equipment

1 Safety Oriented Emergency First Aid Manual

1 First Aid record book

12 safety pins

1 blunt nose splinter tweezers

1 pair of 10 cm (four-inch) scissors

Dressings (each item individually wrapped to maintain sterility)

2 sterile bandage compresses, 10 cm x 10 cm (4" x 4")

12 sterile adhesive dressings, 2.5cm x 7.5cm (1" x 3")

12 sterile pads, 7.5cm x 7.5cm (3" x3")

4 - triangle bandages, 95 cm x 95 cm (40" x 40")

Adhesive Tape

1 roll – 1.25 cm x 2.3 m (11/2" x 2.5 yds)

Antiseptic

100 ml (4 oz) bottle peroxide, or in below freezing temperature, 1 100 ml bottle of alcohol-based antiseptic cleansing agency for wounds (ie: Isopropyl Alcohol 70%)

A1.2 #2 First Aid Kit

Where there are more than one and less than fifteen workers employed on any one shift at a workplace, the Producer shall provide not less than one #2 First Aid Kit, which shall contain the following:

Equipment

1 Safety Oriented Emergency First Aid Manual

1 First Aid record book

12 safety pins

1 blunt nose splinter tweezers

1 pair of 10 cm (four-inch) scissors

Dressings (each item individually wrapped to maintain sterility)

2 sterile bandage compresses, 10 cm x 10 cm (4" x 4")

16 sterile adhesive dressings, 2.5cm x 7.5cm (1" x 3")

16 sterile pads, 7.5cm x 7.5cm (3" x3")

6 - triangle bandages, 95 cm x 95 cm (40" x 40")

Adhesive Tape

1 roll - 2.5 cm x 5 m

Antiseptic

100 ml (4 oz) bottle peroxide, or in below freezing temperature, 1 100 ml bottle of alcohol-based antiseptic cleansing agency for wounds (ie: Isopropyl Alcohol 70%)

A1.3 #3 First Aid Kit

Where there are more than fifteen, but less than two hundred workers employed on any one shift at a workplace, the Producer shall provide not less than one #3 First Aid Kit, which shall contain the following:

Equipment

1 Safety Oriented Emergency First Aid Manual

1 First Aid record book

12 safety pins

1 blunt nose splinter tweezers

1 pair of 10 cm (four-inch) scissors

Dressings (each item individually wrapped to maintain sterility)

6 sterile bandage compresses, 10 cm x 10 cm (4" x 4")

32 sterile adhesive dressings, 2.5cm x 7.5cm (1" x 3")

32 sterile pads, 7.5cm x 7.5cm (3" x3")

6 - triangle bandages, 95 cm x 95 cm (40" x 40")

Bandages

2 rolls of adhesive tape, 2.5 cm x 5 m (11/2" x 5 yds) tubular finger bandage with applicator, .01 size x 4.5 m (.01 size x 4 yds)

10 finger tip dressings

10 knuckle pad dressings

Antiseptic

100 ml (4 oz) bottle peroxide, or in below freezing temperature, 1 100 ml bottle of alcohol-based antiseptic cleansing agency for wounds (ie: Isopropyl Alcohol 70%)

A1.4 First Aid Room

Where there are more than two hundred workers employed on any shift at a workplace, the Producer shall provide a First Aid Room which shall contain the following:

Furnishings

Hot and cold water

Permanent sink installations (knee or elbow controls preferred)

1 refuse pail with cover

1 treatment chair with arm rests

1 bed with pillows, sheets and blankets, the whole to be covered with a plastic sheet

1 cabinet suitable for storing dressings and instruments

Equipment

1 advanced First Aid Safety Oriented Manual, current edition

1 First Aid record book

1 pair bandage scissors, 13.9 cm ((5.5")

1 dressing forceps, 12.5 cm (5")

1 blunt nose splinter tweezers

12 safety pins

2 wash basins (stainless steel or polypropylene)

1 nail brush

1 package paper towels

1 package of disposable paper cups

1 eye lamp

1 cold sterilizer or equivalent, with a supply of non-rusting germicidal solution to keep instruments sterile

1 kidney basin, (stainless steel or polypropylene)

1 carrying stretcher with 3 blankets

1 set of wooden or air splints, assorted sizes

3 splints – x-ray transparent or equivalent

1 emergency first aid kit (No 3) and flashlight for use outside the first aid room at the scene of the accident

Any other supplies the first aid attendant in consultation with the physician considers necessary.

A2 Flotation Garments

All flotation garments, PFDs, or work-suits must be Coast Guard approved. The need for hypothermia protection varies by season. The following explains the primary characteristics of Personal Flotation Devices (PFDs), Life Jackets, Anti-Exposure Work Suits, and Immersion Suits. It is excerpted from information supplied by Mustang Engineered Technical Apparel Corporation, Richmond, British Columbia.

A2.1 Personal Flotation Devices (PFDs)

A PFD, in its most basic form, is a sleeveless torso vest with a minimum level of buoyancy. It is not a life jacket and, therefore, does not guarantee self-righting or keeping the head clear of the surface in other than calm conditions. It will keep the wearer at the surface and provides a reasonable level of protection for an experienced swimmer in all but rough conditions. Its value to a non-swimmer is limited to reasonably calm conditions where rescue is at hand.

In the basic configuration, it provides no significant hypothermia protection and should not be relied upon for survival in water temperatures lower than about 15 degrees Celsius, unless there is rescue available within about 30 minutes.

A2.2 Life Jackets

There are three types of life jackets in the Canadian standards. The Small Vessel Regulation Life Jackets, the Canadian Steamship Regulation Life Jacket, and the SOLAS Life Jacket.

A Life Jacket by definition should provide an unconscious person self-righting and a guaranteed floating position that allows for breathing. The Canadian life jackets address these characteristics in various degrees; the small vessel life jacket to a limited extent; the standard life jacket for the most part; and the SOLAS life jacket in all respects.

Life Jackets provide no hypothermia protection at all. Their advantage over basic PFDs is that they will protect against early drowning much better, particularly in heavy seas. This is important to note because research shows that most victims who drown prior to suffering the effects of hypothermia do so within six minutes of immersion.

A2.3 Anti-Exposure Work Suits

The anti-exposure work suit has the same minimum buoyancy requirements as a PFD. In practice, however, it tends to have more because of technicalities in the standards. It has good hypothermia protection which should allow for about two hours survival in 0 degrees Celsius water and increasing to about 6 hours in 15 degree Celsius water.

A2.4 Immersion Suits

Immersion suits provide excellent buoyancy and hypothermia protection. There have been cases of survival in extremely cold water and rough conditions for periods of up to and, in rare cases, greater than 24 hours.

A3 Bio-mechanics of Lifting

Most back injuries result from improper lifting. According to the principle of bio-mechanics, the worst lifting situation occurs when the body is extended over the load: the lower back becomes a fulcrum supporting the weight of the body plus the load. Twisting in this position invites injury. Keep your back upright to shift weight onto the powerful leg muscles and reduce the lever effect.

Get a Firm Footing

Keep your feet apart for a stable base, point toes out.

Bend Your Knees

Do not bend at the waist. Keep the principles of leverage in mind at all times.

Tighten Stomach Muscles

Abdominal muscles support your spine when you lift, offsetting the force of the load. Train muscle groups to work together.

Lift With Your Legs

Let the powerful leg muscles do the work of lifting, not your weaker back muscles.

Keep the Load Close

Do not hold the load away from your body. The closer it is to your spine, the less force it exerts on your back.

Keep Your Back Upright

Whether lifting or putting down the load, do not add the weight of your body to the load. Avoid twisting: this can cause injury.

A4 Adverse Weather Conditions

Know the difference between heat exhaustion and sunstroke prior to attempting treatment!

Become familiar with the symptoms of Sunstroke and Heat Exhaustion. The treatment for each of these ailments is different. Knowing the difference could mean life or death.

A4.1 Heat Exhaustion

Symptoms - the first signs of heat exhaustion are dizziness, weakness, headache, blurred vision, nausea, and staggering. The face becomes pale, there is profuse sweating, the pulse is weak, and breathing is shallow. The person may become unconscious.

Treatment - when someone shows symptoms of heat exhaustion, immediately remove that person to a place where the air is circulating freely. Make the person lie down and keep him or her warm.

If the victim is conscious, add a teaspoon of salt to a pint of cool water and give to the victim in small sips at frequent intervals. If the heat exhaustion symptoms persist, call a doctor.

Avoiding Heat Exhaustion - keep in good physical condition and stop to rest often when you begin to feel tired or faint. Increase dietary salt and fluids when working in extremely hot weather. Consult a physician first.

A4.2 Sunstroke

Symptoms - the victim develops a severe headache, the face is red, the skin is hot and dry, there is no sweating, and pulse is strong and very rapid. The person has a high fever (up to 105 degrees).

Treatment - get the victim to professional medical treatment as soon as possible. In the meantime, place the individual in the shade. Loosen their clothing and cool the victim with the best means available.

If the individual's temperature starts to drop, cover them with a light blanket so that the sudden change in body temperature will not cause shivering or convulsions.

Avoiding Heat Stroke - drink water, lemonade or citrus fruit juices. Wear clothing that is light weight, well-ventilated and loose. Replace the body salts lost through perspiration by making sure your salt and fluid intake is adequate.

A4.3 Hypothermia

Hypothermia is a major life threatening emergency which kills up to 900 people each year in North America. Most cases occur in temperatures between -1 and +10 degrees Celsius. It can kill a vigorous, healthy person in less than four hours.

Symptoms - a drop in body core temperature results in partial or total loss of consciousness, slowed or arrested respiration, and slowed, irregular and ultimately arrested heartbeat.

Treatment - respiration must be ensured by airway maintenance. The arrested heart should be restarted. Replace wet clothing, wrap in blankets, etc. with a companion for extra warmth. The body will attempt to converse heat by drawing blood away from the extremities and to the body core, to protect the vital organs.

Do not, therefore, rub the extremities or subject the casualty to unnecessary exercise. This would cause the cold blood to flow to the inner body, further reducing core temperature.

When exposure to cold has been prolonged and the effects are severe, very little time should be spent trying to warm the person at the site. **Obtain medical aid as quickly as possible.**

Avoiding Hypothermia - rest well, eat well, wear warm layered

clothing. Change out of sweaty clothes because water draws warmth away from the body faster than air.

Be alert to windchill conditions. A one-degree Celsius air temperature (34 F) with a 40 km (25 mph) wind, can be as cold as -14C (+7F) with no wind!

During cold weather, two light wool shirts are better than one heavy one for warmth. Layering is the best way to dress so that as you warm up, you can remove clothing to keep comfortable.

A4.4 Frostbite

Symptoms - frostbite leaves firm, cold and white areas on exposed skin. Mild cases may cause peeling / blistering in 24 to 72 hours (similar to mild or severe sunburn). In more serious cases, skin may become blotchy red, swollen and painful on rewarming. The severity of injury is determined by the extend and conditions of exposure.

Treatment - shelter the person from extremes of weather. Provide warmth and hot drinks. Loosen tight clothing, boots, etc. Protect damaged areas with warm, dry covering or by applying body heat.

Do not apply direct heat, cold water or snow. Do not rub frozen areas. Obtain medical aid as quickly as possible.

Avoiding Frostbite - preventative measures, although obvious, are often ignored. Warm, multi-layered clothing with good hand and foot protection should be worn. Avoid constricting wrist bands and tight footwear. Warm headgear is particularly important since much heat is lost through the unprotected head.

Stay dry. Fatigue, hunger, fear, alcohol and windchill (among other factors) increase the risk of injury. Watch each other for white spots in rosy cheeks, etc.

A5 Underwater Stunts and Underwater Film Operations

A5.1 Log Book

Each diver shall maintain a log book that shall record the following information:

- type of diving apparatus used
- gas media breathed
- time diver left surface
- bottom time
- maximum depth obtained
- time diver left bottom
- time diver reached surface
- surface interval, if a repetitive dive was undertaken
- decompression table and schedule used
- date
- remarks (name of Producer, unusual incidents, etc.)

A5.2 Equipment

As a **minimum**, each diver shall use the following equipment:

- open circuit SCUBA, complete with demand regulator and tank with quick-release harness and reserve device or bail-out system
- face mask
- suitable knife
- weight belt with quick-release closure
- submersible pressure gauge
- exposure suit or protective clothing appropriate for the condition of work and the temperature of the water
- if free swimming, a manually inflatable buoyancy device
- underwater watch for elapsed time indicator
- a device for summoning aid and receiving a recall from the surface while submerged
- a rescue beacon or strobe when SCUBA diving operations are to be carried out during the hours of darkness.

A6 Agencies and Government, Regulations and Standards

A6.1 Agencies

British Lab – Safety Certification

Canadian Sport Parachuting Association

Canadian Standards Association (CSA) – Safety Certification

National Institute for Occupational Safety and Health (NIOSH) – Safety Certification

Newfoundland and Labrador Society for the Prevention of Cruelty to Animals (SPCA)

Snell Memorial Institute – Safety Certification

St. John Ambulance – First Aid Certification

A6.2 Local and Provincial

Local Hydro Authorities

Local Fire Authorities

City of St. John's, Special Events Advisory Committee, Department of Recreation

Government of Newfoundland and Labrador:

Department of Labour – Occupational Health and Safety Act and Regulations

Workplace Hazardous Materials Information System (WHMIS)

Fire Code

Fireworks Act

Temporary Workplace Traffic Control Regulations

Department of Government Services and Lands – Vehicle Safety Inspection Sticker

Government of Nova Scotia:

Threshold Limit Values for Chemical Substances and Physical Agents and Biological Exposure Indices.

A6.3 Federal

Canadian Electrical Code

Canadian Fire Code

Hazardous Products Act

Controlled Products Regulations

Natural Resources Canada, Explosives Branch - High Hazard

Fireworks Regulations, List of Authorized Explosives,

Explosives Act, Pyrotechnic Special Effect Manual

Transport Canada – Air Carrier Branch, Dangerous Goods Division Transportation of Dangerous Goods Act

Highway Traffic Act

Small Vessel Regulations

Canada Shipping Act

Coast Guard

Application for Authorization to Conduct Parachute Descents

Notification Regarding Planned Airplane and Helicopter Flights

Firearms Permits

A7 Film & Television in a Global Pandemic *COVID-19*

With the emergence of Public Health Orders being released by the *Department of Health and Community Services for Newfoundland and Labrador* becoming a part of our daily lives, this section is here to express the importance of maintaining a safe and healthy working environment. This shared goal can only be achieved through the participation, support and commitment of the Producers, Unions, and every employee, at all levels of the production.

Following the regulations and procedures for the Province, as defined by the Office of the Chief Medical Officer, Producers will implement COVID-19 Health & Safety protocols and procedures that ensure a safe and healthy working environment. These COVID-19 Health & Safety protocols and procedures will be approved by the applicable stakeholders.

It is each individual's responsibility and duty to comply with those protocols and procedures, not only for the individual's own protection, but also for the protection of others.

Endnotes

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OCCUPATIONAL HEALTH AND SAFETY ACT

- 4. Employers' general duty
- 5. Specific duties of employers

OCCUPATIONAL HEALTH AND SAFETY REGULATIONS

14. General duties of employers

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OCCUPATIONAL HEALTH AND SAFETY ACT

- 5.1 Supervisors' general duty
- 5.2 Specific duties of Supervisors

OCCUPATIONAL HEALTH AND SAFETY REGULATIONS

14. General Duties of employers

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OCCUPATIONAL HEALTH AND SAFETY ACT

- 6. Workers' general duty
- 7. Specific duties of Workers
- 8. Imminent danger
- 9. Duty of principal contractor

OCCUPATIONAL HEALTH AND SAFETY REGULATIONS

- 17. General duties of workers
- 19. Co-ordination of work
- 21. Appointment of qualified coordinator

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OCCUPATIONAL HEALTH AND SAFETY ACT

- 37. Committees,
- 38. Membership of committees,
- 38.1 Committee Training,
- 39. Duties of committees,
- 40. Meetings of committee,
- 41. Worker representative,

- 42. Election of representative,
- 42.1 Workplace designate,
- 42.2 Order re: worker designate,
- 43. Posting name
- 44. Duties of representative

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25. Operations of committees, representatives and designates

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OCCUPATIONAL HEALTH AND SAFETY ACT

- 45. Right to refuse work
- 46. Report to supervisor
- 47. Report to division
- 48. Duty of worker

OCCUPATIONAL HEALTH AND SAFETY REGULATIONS

5. Right to refuse work

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OCCUPATIONAL HEALTH AND SAFETY FIRST AID REGULATIONS

Found online at: assembly.nl.ca/Legislation/sr/Regulations/rc961148.htm

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OCCUPATIONAL HEALTH AND SAFETY REGULATIONS PART VII, Personal Protective Equipment

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OCCUPATIONAL HEALTH AND SAFETY REGULATIONS PART VIII, Machinery and Equipment

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OCCUPATIONAL HEALTH AND SAFETY REGULATIONS PART XV, Rigging

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OCCUPATIONAL HEALTH AND SAFETY REGULATIONS

PART XXIV, Woodworking and Wood Products Manufacturing, Sections 471. – 473.

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OCCUPATIONAL HEALTH AND SAFETY REGULATIONS PART XI, Scaffolds, Stages and Work Platforms

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OCCUPATIONAL HEALTH AND SAFETY REGULATIONS

PART XII, Powered Mobile Equipment
PART XIV, Cranes, Hoist and other Lifting
PART X, Fall Protection

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OCCUPATIONAL HEALTH AND SAFETY REGULATIONS PART XXVI, Electrical Operations

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OCCUPATIONAL HEALTH AND SAFETY REGULATIONS

PART VI, Occupational Health Requirements PART VII, Personal Protective Equipment

WORKPLACE HAZARDOUS MATERIALS INFORMATION SYSTEM (WHMIS) REGULATIONS under the OCCUPATIONAL HEALTH AND SAFETY ACT

Found online at: http://www.assembly.nl.ca/Legislation/sr/Regulations/rc961149.htm

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OCCUPATIONAL HEALTH AND SAFETY REGULATIONS

PART XII, Powered Mobile Equipment
PART VI, Occupational Health Requirements
PART X, Fall Protection
PART XVI, Traffic Control

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OCCUPATIONAL HEALTH AND SAFETY REGULATIONS

PART XXIII, Diving and other Marine Operations
PART VII, Personal Protective Equipment
PART XIII, Transportation of Workers
PART V, General Health and Safety Requirements, Sections 38. – 41.

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PART VI, Occupational Health Requirements
PART V, General Health and Safety Requirements, Sections 38. – 41.

PART XXIII, Diving and other Marine Operations PART VII, Personal Protective Equipment

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OCCUPATIONAL HEALTH AND SAFETY REGULATIONS PART XIII, Transportation of Workers

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PART XII, Powered Mobile Equipment PART XV, Rigging

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OCCUPATIONAL HEALTH AND SAFETY REGULATIONS PART VII, Personal Protective Equipment

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PART VII, Personal Protective Equipment PART V, General Health and Safety Requirements, Sections 38. – 41.

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PART X, Fall Protection

PART V, General Health and Safety Requirements, Sections 38. – 41.

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PART VI, Occupational Health Requirements PART VII, Personal Protective Equipment

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OCCUPATIONAL HEALTH AND SAFETY REGULATIONS

PART V, General Health and Safety Requirements, Sections 38. – 41. PART XX, Fire Prevention and Control

PART VII, Personal Protective Equipment

WORKPLACE HAZARDOUS MATERIALS INFORMATION SYSTEM (WHMIS) REGULATIONS under the OCCUPATIONAL HEALTH AND SAFETY ACT

Found online at: http://www.assembly.nl.ca/Legislation/sr/Regulations/rc961149.htm

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OCCUPATIONAL HEALTH AND SAFETY REGULATIONS

PART XIX, General Blasting

PART XX, Fire Prevention and Control

PART V, General Health and Safety Requirements, Sections 38. - 41.

WORKPLACE HAZARDOUS MATERIALS INFORMATION SYSTEM (WHMIS) REGULATIONS under the OCCUPATIONAL HEALTH AND SAFETY ACT

Found online at: http://www.assembly.nl.ca/Legislation/sr/Regulations/rc961149.htm

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OCCUPATIONAL HEALTH AND SAFETY REGULATIONS

PART V, General Health and Safety Requirements, Sections 38. – 41.

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HUMANE CANADA

Found online at: https://www.humanecanada.ca/animals in entertainment ps

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OCCUPATIONAL HEALTH AND SAFETY REGULATIONS

PART V, General Health and Safety Requirements, Sections 38. -41.

PART XXIII, Diving and other Marine Operations