The Town of Fort Frances	**SECTION** HEALTH AND SAFETY
STANDARD OPERATING PROCEDURES **POLICY**	**REVISED** July 2004
Resolution No.	Supercedes Resolution No.
Policy Number 5.22	**PAGE 1 of 4**

1. PURPOSE:

To provide a procedure for developing Standard Operating Procedures for the operation of equipment.

2. RESPONSIBILITY:

The workplace supervisor / Manager is responsible for ensuring that Standard Operating Procedures are written for each critical piece of equipment at the workplace and that the employees who operate the equipment are trained in these procedures.

3. PROCEDURES:

A. GENERAL

i. Each workplace will review the various equipment used at their facility and from this will develop a list of critical equipment (i.e. tractor, chipper, zamboni, etc.).

ii. A Standard Operating Procedure will be developed for each of these critical pieces of equipment.

ii. All employees that operate a piece of critical equipment will be trained in the Standard Operating Procedure.

B. STANDARD OPERATING PROCEDURE FORMAT:

i. Each Standard Operating Procedure should consist of the following sections:

(a) EQUIPMENT

(1) Brand name, Type, Model number
(2) Suppliers name and address
(3) Specific Machine Requirements (i.e. temperature, humidity requirements)

(b) MATERIALS

List of materials that are consumed in the operation of the equipment such as compressed air, gasoline, etc.

(c) PRE-START UP INSPECTION CHECKLIST

A circle check is to be performed prior to starting up the equipment. A checklist of items, specific to each piece of equipment, will be used to ensure completeness.

The checklist will identify:
(1) the frequency (daily, weekly, seasonally, etc.)
(2) what items are to be checked
(3) what remedial action is taken when a problem is identified
(4) the operator who performs the checklist and the date it is performed

The checklist items may include such things as:
(1) all guards in place
(2) all manufacturers safety features are intact and operational
(3) there is no excessive wear
(4) everything is fastened together properly/nothing is broken
(5) all mounts secured
(6) gauges: pressure, temperature, etc.
(7) no personnel can be endangered by start-up.

(d) SAFETY PRECAUTIONS

List the safety precautions that the employee should take while running the equipment, or working in the area, in order to prevent injury to him/herself or others. Include information concerning potential of which he/she should be aware. Some areas of concern which may be included are:
(1) electrical grounding.
(2) high voltage
(3) radiation
(4) danger of burns from hot or very cold items
(5) extreme heat
(6) flying sparks
(7) explosive materials
(8) hot liquids
(9) acidic or caustic substances
(10) skin irritants or drying agents
(11) toxic fumes
(12) flammable fumes or liquids
(13) high pressure areas
(14) sharp edges or grinding wheels of machines
(15) dangerous moving parts of machinery
(16) equipment shields
(17) excessive noise
(18) oil on floor
(19) pits or holes to avoid
(20) pinch points

Information about what to do in emergency situations (i.e. location of first aid station, emergency stopping, etc.) may also be included in this section.

(e) PERSONAL PROTECTIVE EQUIPMENT (PPE)

This section should list all the personal protective equipment that must be worn when operating the specific equipment and may include items such as:

(1) head protection (hard hat, sun exposure)
(2) eye protection (safety glasses, face shield)
(3) hearing protection
(4) respiratory equipment (filters, SCBA)
(5) protective clothing and gloves
(6) foot protection
(7) skin protection

(f) PREVENTATIVE MAINTENANCE & CRITICAL SPARE PARTS

This section will document what preventive maintenance is to be performed on equipment. A checklist of items, specific to each piece of equipment, will be used to ensure completeness and may parallel the type of list typically found in an owner's manual. The qualifications of the inspector/testor (i.e. Automotive Mechanic, Electrician, etc.) that are required, are to be identified in this section of the procedure.

A maintenance checklist will identify:

(1) the frequency (daily, weekly, seasonally, etc.)
(2) what items are to be checked
(3) what standards are to be met
(4) the results observed
(5) the remedial action taken when a problem or deviation is identified
(6) the operator who performs the checklist and the date it is performed.

Some maintenance activities may not be performed on a fixed time schedule, but rather when certain conditions are observed. For these cases, the procedure should identify:

(1) the condition/signal which triggers the maintenance
(2) what activity is to be performed
(3) the action taken

From critical equipment, where minimum downtime has a serious effect on the operation, a list of essential spare parts will be developed and maintained (i.e. standby generator).

(g) OPERATION

This section explains in detail how to operate the equipment. It should be as complete and as easily understood as possible. Starting with the first step, all steps of the operation are listed sequentially and explanation given for how, as well as what, things are to be done. The instructions should be stated as simply and concisely as possible, assuming that the operator has no prior knowledge of the equipment/process. Illustrations should be provided, where appropriate, to complement the written instruction.

(h) SHUTDOWN

This section should explain the steps to follow for 3 types of shutdown situation:

(1) Emergency Shutdown
(2) Regular Shutdown
(3) Long Term (Storage) Shutdown

The steps listed for each type of Shutdown are to be in the order that they are to be carried out. Shutdown includes both shutdown of equipment and clearing the work area. Emptying containers or tanks of liquid, purging lines, etc. are part of the process.

(i) ILLUSTRATIONS

This section should include any prints, drawings, schematics or illustrations that can further clarify the written procedures.

C. AUDITS:

i. The Standard Operating Procedure shall be reviewed on a periodic basis, but minimum once annually, to:

(a) ensure the procedure is being applied consistently.
(b) determine if the operator(s) understand the procedure(s).
(c) allow for feedback and suggestions for improvements.

ii. If an accident occurs while using the equipment, the Standard Operating Procedure should be reviewed by the Joint Health & Safety Committee, as part of their accident review and analysis.

iii. If the accident is attributed to failure to follow the Standard Operating Procedure:

(a) The Supervisor should document this infraction and take the necessary action to enforce the procedure.
(b) The Joint Health & Safety Committee should include an audit of the specific Standard Operating Procedure on their subsequent Workplace Inspections, to observe compliance.