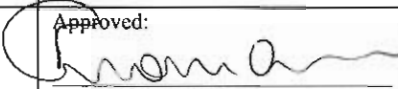
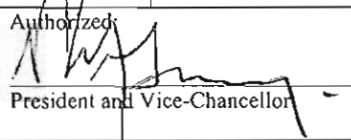
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<p>Submitted: Risk Management Support Group</p>	<p>Approved:  Interim Vice President, Administration</p>	<p>Authorized:  President and Vice-Chancellor</p>

1 PURPOSE

- 1.1 To ensure the safety of all McMaster University staff, visitors, contractors and students.
- 1.2 To ensure the safe operation of all McMaster University machinery and equipment.
- 1.3 To comply with the Occupational Health and Safety Act and Regulations.

2 SCOPE


- 2.1 All equipment owned by McMaster University used by staff, visitors, students and workers. This includes but is not limited to mobile equipment, production and research equipment, maintenance equipment and tools.

3 RELATED DOCUMENTS

- 3.1 The Occupational Health and Safety Act, R.S.O. 1990, Industrial Establishment Regulation 851, and Construction Projects Regulation 213/91
- 3.2 McMaster University Workplace and Environmental Health and Safety Policy RMM #100.
- 3.3 McMaster University Risk Management System, RMM #101.
- 3.4 McMaster University Safety Orientation and Training Program, RMM #300.
- 3.5 Contracting Work Safety Program-Due Diligence Program, RMM#111.
- 3.6 Standard Operating Procedures (SOPs) Program, RMM#301.
- 3.7 Lockout/Tagout Program for The Control of Hazardous Energy Scaffolds/ Suspended Scaffolds and Powered Platforms Safety Program, RMM#306.
- 3.8 Scaffolds and Powered Elevated Work Platforms Program, RMM#307.
- 3.9 Electrical Safety Program, RMM#316.
- 3.10 Care and Control of Golf Carts & Other Off Road Vehicles Program, RMM#318.
- 3.11 University Owned, Leased or Rented Vehicle Program, RMM#904.

4 DEFINITIONS

- 4.1 **Qualified Inspector** – An individual who has intimate knowledge of the operation of a piece of equipment who, based on their training, experience and knowledge, is in a position to determine if the equipment is in suitable operating condition.
- 4.2 **Preventive Maintenance** – An equipment maintenance strategy based on measuring and adjusting, parts replacing, overhauling, or remanufacturing an item at a fixed interval, regardless of its condition at the time.

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- 4.3 **Employer** – Person who employs one or more workers or contracts for the service of one or more workers and includes a contractor or subcontractor who performs work or supplies services and a contractor or subcontractor who undertakes with the owner, constructor, contractor or subcontractor, to perform work or supply services.
- 4.4 **Supervisor** – Person who has charge of a workplace or authority over a worker.
- 4.5 **Worker** - A person who performs work or supplies services for monetary compensation.
- 4.6 **Mobile Equipment** – Defined as but not limited to: forklifts, cranes, scissor lifts, motor vehicles, boom trucks, loaders, jumbos, skidders, and grounds keeping equipment.
- 4.7 **Production Equipment** – Defined as but not limited to: lathes, drill presses, saws, punch, drill, brake presses, and conveyor systems.
- 4.8 **Other Industry Specific Equipment** – Defined as but not limited to: kettles, paving machines, and diamond drills.
- 4.9 Acronyms:
- CSA – Canadian Standards Association
 - ULC – Underwriters’ Laboratories of Canada
 - CJHSC – Central Joint Health and Safety Committee
 - JHSC – Joint Health and Safety Committee
 - EOHSS – Environmental & Occupational Health Support Services
 - RMSG – Risk Management Support Group
 - FHSc – Faculty of Health Sciences Safety Office

5 RESPONSIBILITIES

5.1 Role of Senior Managers (Deans, Chairs, Directors):


Senior Managers shall:

- provide the direction and resources necessary to support the preventive maintenance program; and
- ensure that employees under their direction are aware of and comply with the ‘Approval Authorities for Construction and Maintenance Projects’ policy and other related University policies.

5.2 Role of Supervisors (Academic and Administrative):

Supervisors shall:

- maintain a current list of equipment for their area;
- from the list determine the equipment in the workplace that requires preventive maintenance. Supervisors should consider equipment that requires scheduled servicing;

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- ensure that there exists a schedule for preventive maintenance along with a list of qualified inspectors that will be performing the inspections and/or workers who will be performing the preventive maintenance work;
- keep a record of the preventive maintenance along with the qualified inspector and worker who were involved with the preventive maintenance;
- review any deficiencies;
- noted any recommendations on form;
- assign person to perform corrective measures;
- set a timeframe for corrective measures; and
- follow-up on corrective actions.

5.3 Role of Individuals (Faculty, Staff, Students and Volunteers):

Individuals shall:

- work with equipment in a safe manner to ensure that no undue damage is caused to either themselves or the equipment; and
- report any damage or existence of hazard to their supervisor.

5.4 Environmental & Occupational Health Support Services and Faculty of Health Sciences Safety Office as appropriate:

EOHSS and/or FHSc safety office shall:

- assist departments in setting up preventive maintenance activities as requested; and
- update the Preventive Maintenance Program on a scheduled basis.

5.5 Role of Contractors:

Contractors shall:

- work in compliance with the OHS Act and McMaster University RMM Programs and
- perform preventive maintenance duties as contracted for McMaster University and its various departments.


5.6 Role of Joint Health and Safety Committees:

JHSCs shall:

- review the effectiveness of the preventive maintenance program during inspection, as it relates to compliance with safety standards and legislative requirements.

5.7 Role of Central Joint Health and Safety Committee:

The CJHSC shall:

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- review the Preventive Maintenance Program on a scheduled basis.

6 PROCEDURAL GUIDELINES

6.1 Maintaining a preventive maintenance inventory and schedule

- Supervisors will review mobile equipment, production equipment, other industry specific equipment and maintenance equipment under their authority and determine if there is a requirement for a preventive maintenance schedule for this equipment based on best practices, as well as manufacture's recommendations and industry standards, and legislative requirements. If it is determined that equipment needs to be on the preventive maintenance program then the supervisor will complete the form in Appendix C or the equivalent electronic version for their preventive maintenance inventory list record.
- The supervisor will then assign the preventive maintenance of the equipment to a schedule and assign a qualified inspector to perform the preventive maintenance activities. If a qualified inspector does not exist, than one will be trained or purchased through contract or purchase order from a contractor external to the department or university.
- EOHSS or the FHSc safety office should be consulted in all instances where a question arises as to the need for such preventive maintenance.
- Should a department and/or supervisor choose to keep records electronically, EOHSS or FHSc safety office as appropriate should be consulted to review the data base and records to ensure compliance with this Preventive Maintenance Program.

6.2 Records

- Recording all completed and all missed preventive maintenance is imperative for a successful preventive maintenance program.
 - The Qualified Inspector will complete the preventative maintenance record found in Appendix A or equivalent electronic version of Appendix A when performing preventive maintenance activities.
 - Should remedial action beyond the ability of the Qualified Inspector be required, then completion of follow-up inspector's recommendations form found in Appendix B or equivalent electronic version of Appendix B will also be required. It is the responsibility of the Supervisor to keep permanent records of all preventive maintenance records.
 - Should a department and/or supervisor choose to keep records electronically, then EOHSS or FHSc as appropriate should be consulted to review the data base and records to ensure compliance with this Preventive Maintenance Program.
 - Records of preventative maintenance shall be kept for 7 years.
-



Appendix A

Preventative Maintenance Record

Date	Inspector's Name

Item being Inspected: _____

Description of work performed:

Are there any deficiencies with the item being inspected: Yes No

If yes please describe:

Recommendations for correcting the deficiencies (if applicable):

Inspector's Signature:

Appendix B

Follow-up of Inspector's Recommendations

(To be filled out by the individual responsible for remedial actions taken)

Date	Name

Item being followed up on:

Date of Initial Inspection: _____

Recommendations given by the Inspector:

Action(s) taken to correct the deficiencies:


Date of corrective actions (as mentioned above): _____



Appendix C

Inventory List Sample

<u>Items that require servicing, adjusting or replacing of their components</u>	<u>Frequency of servicing, adjusting or replacing of components</u>	<u>Manufacture's Standards to be met</u>	<u>Industry Standards to be met</u>	<u>Legislated Requirements</u>	<u>Location of Item in Facility</u>
1.					
2.					
3.					
4.					
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6.					
7.					
8.					
9.					
10.					
11.					

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- keep a record of the preventive maintenance along with the qualified inspector and worker who were involved with the preventive maintenance;
- review any deficiencies;
- noted any recommendations on form;
- assign person to perform corrective measures;
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- assist departments in setting up preventive maintenance activities as requested; and
- update the Preventive Maintenance Program on a scheduled basis.

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Contractors shall:

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- The supervisor will then assign the preventive maintenance of the equipment to a schedule and assign a qualified inspector to perform the preventive maintenance activities. If a qualified inspector does not exist, than one will be trained or purchased through contract or purchase order from a contractor external to the department or university.
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6.2 Records

- Recording all completed and all missed preventive maintenance is imperative for a successful preventive maintenance program.
 - The Qualified Inspector will complete the preventative maintenance record found in Appendix A or equivalent electronic version of Appendix A when performing preventive maintenance activities.
 - Should remedial action beyond the ability of the Qualified Inspector be required, then completion of follow-up inspector's recommendations form found in Appendix B or equivalent electronic version of Appendix B will also be required. It is the responsibility of the Supervisor to keep permanent records of all preventive maintenance records.
 - Should a department and/or supervisor choose to keep records electronically, then EOHSS or FHSc as appropriate should be consulted to review the data base and records to ensure compliance with this Preventive Maintenance Program.
 - Records of preventative maintenance shall be kept for 7 years.
-

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Appendix A

Preventative Maintenance Record

Date	Inspector's Name

Item being Inspected: _____

Description of work performed:

Are there any deficiencies with the item being inspected: Yes No

If yes please describe:

Recommendations for correcting the deficiencies (if applicable):

Inspector's Signature:

Appendix B

Follow-up of Inspector's Recommendations

(To be filled out by the individual responsible for remedial actions taken)

Date	Name

Item being followed up on:

Date of Initial Inspection: _____

Recommendations given by the Inspector:

Action(s) taken to correct the deficiencies:

Date of corrective actions (as mentioned above): _____

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10.					
11.					