

DEPARTMENT OF CIVIL ENGINEERING

Name of SOP	Jar Test Apparatus
Effective Date	August, 2007
Author	Anna Robertson
Reason for SOP	Risk of injury due to rotating equipment
Approved by (supervisor)	
Date reviewed (by JHSC)	

Definitions

Terms	
Acronyms	RMM – Risk Management Manual JHSC - Joint Health and Safety Committee EOHSS - Environmental Occupational Health & Safety Service

Requirements

Applicable OSHA regulations and / or codes of practice.
<ol style="list-style-type: none"> 1. OSHA code. 2. McMaster University Risk Management Policies
Training and competency.
<ol style="list-style-type: none"> 1. Training provided by technical staff 2. Competency is shown by individual after training

Description of the Task

Location and time of work	JHE220, during undergraduate labs and research
Individuals and skills required	Students, staff
Equipment and supplies required	Jar test apparatus, polyelectrolyte solution, glassware
Personal protective equipment required	Safety glasses
Sequential steps to complete work safely.	
<p><u>CAUTION</u> Ensure that all loose clothing is pinned back and long hair is confined.</p> <p style="text-align: center;"><u>Pre start checks</u></p> <ol style="list-style-type: none"> 1. Inspect power cord to be certain it is free of defects and is plugged in. 2. Ensure that the paddles move freely. <p style="text-align: center;"><u>Start up</u></p> <ol style="list-style-type: none"> 1. Place samples to be tested in supplied jars, turn stirrer on, and add calculated dose of polyelectrolyte. 2. Once required stirring time is complete, turn stirrer off. 3. Remove samples from jars for analysis as required by experiment. 	

General safety instructions:

Keep long hair and loose clothing away from impellers.

Contingency Plan and Reporting**Accident/Injury response**

1. Apply first aid as required
2. Notify Civil Engineering staff immediately
3. For all injuries, complete an "Injury/Incident Report" and provide a copy to the Chair and to EOHSS.
4. In case of critical injury, call security (dial 88)
5. In case of critical injury notify EOHSS immediately, ext 24352.

Spill Response

1. All waste generated must be disposed of as instructed by staff.
2. In case of accidental spill, notify staff immediately.
3. Follow spill procedures.

Equipment shutdown

1. Turn off switch on front of equipment and unplug.

Environmental Responsibilities**Waste disposal procedures**

1. All waste generated must be disposed of as instructed by staff.

Building air quality

1. There is no impact on building air from this experiment.

References (OHSA/regulations, EPA and municipal environmental regulations, McMaster University Program/Policy, Material Data Sheets (MSDS))

1. RMM Policy #300 Safety Orientation and Training Program
2. RMM Policy #301 Standard Operating Procedure
3. RMM Policy #304 Persons Working Alone
4. RMM Policy #309 Laboratory Safety Manual
5. RMM Policy #506 Hazardous Waste Management
6. RMM Policy #1000 Reporting and Investigating Injury, Incidents and Occupational Disease

Distribution

1. Laboratory safety binder
2. Technical Staff of Civil Engineering
3. Civil Engineering Safety Committee
4. Civil Engineering Chair
5. Faculty of Engineering JHSC