Appendix A Designated Substance Assessment Form

RECORD OF DESIGNATED SUBSTANCE ASSESSMENT

SUBSTANCE:	Mercury
DATE REVIEWED BY JHSC:	

COMPANY: McMaster University
DEPARTMENT OPERATIONS: Mechanical Engineering
LOCATION(S): John Hodgins Engineering rm.183
ASSESSMENT PREPARED BY: Ron Lodewyks JOB TITLE: Technical Services Coordinator DATE PREPARED: July 20, 2009

APPLICATION – WORKSHEET 1: IS THE DESIGNATED SUBSTANCE PRESENT?

1. Do any material safety data sheets from your suppliers indicate the presence of the substance?

YES [x] NO [ ]

2. If substance is present, indicate the department where it is used, nature of the use (i.e. Direct or Indirect) and the quantity used per month or year:

Product Name	Department	How Used? Direct/Indirect	Quantity Per Month/Year
Mercury	Mechanical Engineering	Storage	as required for filling manometers. it is not anticipated that new mercury will be required. used mercury is captured and stored (for disposal if necessary)

CONCLUSIONS

Read statements and check applicable box:

[ ] Substance not present anywhere in workplace; regulation does not apply.
No Assessment needed. (**Note:** Although you do not need to proceed further, you should retain this worksheet on record. e.g. auditing purposes)

[x] Processes / activities have been identified where substance present.
Proceed to Worksheet 2.

APPLICATION – WORKSHEET 2: IS WORKER EXPOSURE LIKELY?

1. In what form does the substance enter the plant? liquid

   Product title: Mercury

   Type of Container: Glass jars and thermometers, these are contained by a plastic tray and housed in a locked cabinet

   Size of Container: 4 x 500 ml
   4

2. Is this form altered during use or in the operation? YES [ ] NO [x]

   If YES, indicate altered form:

3. Is there a possibility of the substance being released into the workspace environment during normal use? YES [ ] NO [x]

   If YES, indicate the stage of the operation or areas where this can occur:

4. If YES to Question 3, specify the job functions and approximate number of employees who might be exposed:

Job Function	**Number of Employees**

5. If YES to Question 3, indicate how workers could be exposed:

   Inhalation [ ] Ingestion [ ] Skin Absorption [ ]
   Skin Contact [ ] Other _____

6. If NO to Question 3, is there a likelihood of escape due to leaks, accidents, etc.?

   YES [ ] NO [x]

7. Are workers likely to be exposed? YES [ ] NO [x]

CONCLUSIONS

Are there any activities/situations where exposure by any route is likely?

YES [ ] NO [x]

If NO, no further action is necessary. Date completed July 20, 2009

If YES, an assessment is necessary – **proceed to Section III**.

Note: If protection against exposure has been left up to some engineering control measure which can fail, or deteriorate for any reason, or to a work hygiene practice, an assessment is necessary – **Proceed to Section III**.

ASSESSMENT – WORKSHEET 3: PROCESS DESCRIPTION

NAME OF PROCESS: _____

Process Flow	Description	Likely Exposure Yes/No
1.		
2.		
3.		
xx.		

ASSESSMENT – WORKSHEET 4: EXISTING CONTROLS

Process Flow Stage	Control Description	Problems/Recommendations
1	**Engineering Controls:**	
	Work Practices:	
	Hygiene Facilities and Practices:	
	Training Information:	
	Personal Protective Equipment	
	Emergency Procedures/Equipment	

Process Flow Stage	Control Description	Problems/Recommendations
2	**Engineering Controls:**	
	Work Practices:	
	Hygiene Facilities and Practices:	
	Training Information:	
	Personal Protective Equipment	
	Emergency Procedures/Equipment	

Process Flow Stage	Control Description	Problems/Recommendations
3	**Engineering Controls:**	
	Work Practices:	
	Hygiene Facilities and Practices:	
	Training Information:	
	Personal Protective Equipment	
	Emergency Procedures/Equipment	

ASSESSMENT – WORKSHEET 4: EXISTING CONTROLS (cont.)

Process Flow Stage	Control Description	Problems/Recommendations
	Engineering Controls: **Work Practices:** **Hygiene Facilities and Practices:** **Training Information:** **Personal Protective Equipment** **Emergency Procedures/Equipment**	

.

ASSESSMENT – WORKSHEET 5: JOB EXPOSURE ANALYSIS

Process Flow Stage	Job Title	Total Number of Employees	Tasks Where Exposure Likely	Duration Hrs per Week	PPE Req'd to be Used
1					
2					

CONCLUSIONS
Jobs/tasks to be noted during walk-through survey:

ASSESSMENT – WORKSHEET 6: HEALTH EFFECTS

1. Any reported health effects? If so, describe.

2. Any current Medical Program? If so, describe.

3. Previous exposure monitoring effects? If so, describe.

CONCLUSIONS				
Health effects known at this stage:	YES	☐	NO	☐
Further information required:	YES	☐	NO	☐

ASSESSMENT – WORKSHEET 7: FLOOR PLAN

LOCATION: **DATE:**

DIMENSIONS: L W H

WORK STATION – enter number from job title – Worksheet 5

EXPOSURE SOURCE – enter number from Process Flow – Worksheet 3

VENTILATION – enter L for local exhaust and G for general ventilation.

ASSESSMENT – WORKSHEET 8: WALK THROUGH

Evidence of Contamination:

Hygiene Facilities and Work Practices:

Ventilation Systems:

Storage Facilities:

ASSESSMENT – WORKSHEET 8: WALK THROUGH (cont.)

Dispensing Procedures:

Housekeeping:

Personal Protective Equipment:

Emergency Facilities / Procedures:

ASSESSMENT – WORKSHEET 9: WALK THROUGH CONCLUSIONS

1(a). Were any areas found where controls are required or where existing controls may require improvement?

YES ☐ NO ☐

1(b). If YES, indicate the areas where the controls may be required or where existing controls may require improvement.

AREA	SUGGESTED IMPROVEMENTS

2(a). Personal exposure monitoring is required: YES ☐ NO ☐

2(b). If YES, indicate where:

3. Indicate any workers for whom medical testing and/or examinations may be required.

CONCLUSION – WORKSHEET 10: IS A CONTROL PROGRAM NECESSARY?

☐ CONCLUSION A: NO WORKER'S HEALTH MAY BE AFFECTED.

☐ CONCLUSION B: A WORKER'S HEALTH MAY BE AFFECTED.

OVERALL CONCLUSION
A control program is necessary YES ☐ NO ☐
Improvements needed in existing program:

DATE: _____ **SIGNED:** _____