

# **DEPARTMENT SAFETY REPORT**

Date: \_\_\_\_\_

Supervisor: \_\_\_\_\_

Researcher: \_\_\_\_\_

Signature: \_\_\_\_\_

Laboratory Room #: \_\_\_\_\_

Title of Project: \_\_\_\_\_

**(If applicable): The existing safety report is still current and nothing has changed since the report was submitted.**

Researcher Signature: \_\_\_\_\_

Supervisor Signature: \_\_\_\_\_

<b>TYPE OF HAZARD</b>	<b>APPLICABLE (YES OR NO?)</b>
Fire/Explosion	
Toxic	
Radioactivity	
Electrical	
High Pressure	
Mechanical	
Falling Objects	
High Temperature	
Other (list)	

# HOW TO WRITE A DEPARTMENT SAFETY REPORT

Materials Science and Engineering requires all those involved with experimental research to file with the Department office an up to date Laboratory Safety Report. Before you commence any new experimental project, you must prepare a safety report. Forms are available from the Departmental Office. Failure to file a Safety Report may result in Laboratory privileges being revoked.

The Laboratory Safety report is made of a cover page and the applicable detailed content of safe work practices **specific** to your work. Complete this page selecting all of the hazards applicable to your work. If the list does not cover a hazard you have, there is space to add those hazards. Please be very **specific** about the safety precautions you describe, relating safety procedures about what could happen doing your research. When the content of your report is complete prepend the content with this cover page have your supervisor review and sign the report. Then give the finished report to Ed McCaffery JHE-248 x24985.

Note: The laboratory safety report is **not** meant to be a detailed description of your experimental procedure it is meant to explain your understanding of how to do your **specific** research without injury to yourself or anyone else.

Please be specific to the work that you are doing and avoid the temptation to write a general handbook on working safely in the lab. You need to look at the hazards that your work inherently has and decide what it is that you need to do to prevent injury. Also, just as important to detail that you understand what you should do if something goes wrong.

Content:

The content of the report should essentially be comprised of a document that will answer 2 questions.

- FIRST, what do you need to do to prevent yourself and others from being effected/hurt by the hazards in your work?

With relation to the hazards listed on the cover page. You need to explain what would be best practices when working with your materials.

If there are Toxic hazards what do you need to do to prevent exposure. Do you need to work in a fume hood? Do you need a breathing apparatus, simple mask or one with specific filters? Do you need glasses or goggles or face shield, protective clothing, if gloves what kind?

Please note that the least effective prevention of exposure to a hazard is to put protective equipment on the person. It is always best practice to find other means when possible to prevent exposure to hazards. You should show as best you can that you understand what are appropriate safe practices to follow in doing your research.

- SECOND, what do you do when you are inadvertently exposed to a hazard?

This one is often neglected in the report but is just as important. After all the precautions you have put in place you still come in contact with the hazard.

For example you have mixed your chemicals and it has ignited into a flame. What do you do? Do you lock the door and run and pull the fire alarm. Do you extinguish the flame with a dish, or fire extinguisher (do you know which kind of extinguisher)? Do you stand by as the fire will be short lived and wait for it to finish? Are the fumes from a fire of this type a new hazard? What do you tell the firemen can they enter the room safely now that your experiment is in flames?

What if you get some on your skin or in your eyes? Do you simply rinse with water, or do you soak in a basin? Do you know where the nearest eye wash/safety shower station is? Should you seek medical attention?

What about the timing of your response to an exposure. How quickly do you need to respond is it immediate danger or can you take care of it after lunch? Where is the nearest fire extinguisher? Where is the nearest phone to contact campus security by dialing 88?

It is important that you try your best to answer the questions of what you should do if your precautions fail to keep the hazard away. It is a challenge to predict the unexpected yet knowing what you are working with and knowing what you need to protect yourself it should not be too much of a stretch to consider what happens when these precautions fail.

Once you have been exposed you may not have time to sit down and carefully read the Material Safety Data Sheet to determine your next step. Neither is it in your best interest to assume you can ask someone else what to do now that this chemical has splashed in your eyes.

Once the cover page is completed and signed, the content is reviewed by your supervisor. Attach the cover page to the content and give this to Ed McCaffery JHE-248.