**Regulated Chemicals on Campus**

There are two type of Regulated Chemicals or Materials, externally regulated and internally regulated.

Externally Regulated Materials

These materials are typically regulated by some external jurisdiction or act of legislation. They include but are not necessarily limited to:

* Designated Substances which include: Asbestos, Lead, Mercury, Isocyanates, Benzene, Vinyl chloride, Ethylene oxide, Coke oven emissions, Silica
* Controlled Substances
* Radioactive Material
* Biohazardous Material

These materials usually require an external license or permit to acquire, possess and handle or have specific legislative requirements (e.g. Designated Substances).

Please refer to the Designated Substances Standard information on these materials. For information on Radioactive material and Biohazardous material please see the appropriate sections of the Science Safety Website. Information on the Controlled Substances Act and Regulations can be found at the Government of Canada Website.

Internally Regulated Materials

These materials, while having no legislative requirement, are generally deemed by the OHS community to be very hazardous materials or require specialized equipment and processes when working with them. Acquiring and working with these materials requires notification of the Risk Management office and an agreement in writing that University accepted Standard Operating Procedures will be followed. These materials will be identified by the Science Safety Advisory Committee and the Joint Health and Safety Committee in consultation with the Dean of Science and the Environmental Health and Safety Officer.

The following materials are currently deemed as Internally Regulated Materials:

Hydrofluoric Acid

Perchloric Acid

Pyrophoric and Water Reactive Chemicals.

Dangerously reactive Chemicals (Vigorous Polymerizers, Vigorous Condensation, Vigorous Decomposition, and Chemicals that react with water to produce a lethal gas)

Poisonous and Corrosive Gases

Super Acids and Super Bases

SOPs for these materials have been created and can be downloaded from the Science Safety Website or by contacting the Risk Management office. It is the responsibility of the Supervisor/Principal Investigator to ensure they have had read/completed the SOP and have the EHSO authorization prior to acquiring the chemical in question. The table below lists the types of material with examples which are considered regulated chemicals at Trent University.

Table of Regulated Substances or Materials at Trent University

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| **Type or Name of Material** | **Examples** | **How Regulated** |
| Biohazardous Material  Human and Animal Risk Group 2 | Human and Animal Pathogens Risk Group 2 or 3. | Biosafety Work Permit and BSO Approval. See the Biosafety Program |
| Chemical Weapons and Precursors | Schedule 1, 2 and 3 materials of the Chemical Weapons Implementation Act | No Possession of Schedule 1 materials or import/export of Schedule 2 or 3 materials of the CWC implementation Act |
| Controlled Drugs and Substances (see the Act for a list of all materials) includes but is not limited to Narcotics | Controlled Drugs and Substances Act. | Possession or Acquisition License from Federal or Provincial Authority required. |
| Dangerously Reactive Chemicals | Vigorous Polymerizers, Self reactive under conditions of shock, increase in temperature or pressure, Vigorous Condensation, Vigorous Decomposition, Chemicals that react vigorously with water to release a lethal gas. | Completion of the Dangerously Reactive SOP. Read the SDS to determine if the chemical in question meets this requirement |
| Designated Substances | Acrylonitrile, Asbestos, Benzene, Coke Oven Emissions, Ethylene Oxide, Isocyanates, Lead, Mercury, Silica, Vinyl Chloride | Hazard Assessment to be performed for exposure (see assessment form) and if necessary a Hazard Control SOP. Read the Designated Substance SOP. |
| Explosives (as classified by Transportation Dangerous Goods) with the exclusion of liquid Picric Acid | See the Explosives Act and Regulations.  [www.nrcan.g.ca/explosives](http://www.nrcan.g.ca/explosives) | Not permitted on Campus without the written authorization of the V.P. Academic, EHS, and a License/Permit from Natural Resources Canada |
| Hydro Fluoric Acid (HF) | Hydro Fluoric Acid | EHS approval and completion and use of HF SOP |
| Perchloric Acid > 72.5% | Perchloric Acid greater than 72.5 % concentration | EHS approval and completion and use of Perchloric Acid SOP |
| Poisonous and Corrosive Gases | Ammonia, Hydrogen Chloride, Chlorine, Carbon Monoxide | EHS Approval and completion and use of Poisonous and Corrosive Gases SOP. |
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| Radioactive Material | Tritium, Carbon 14, Phospohorus 32 or any material identified by the Canadian Nuclear Safety Act and Regulations. | RSO authorization and Radioactive Work Permit. See the Radiation Safety Program |
| Pyrophoric and Water Reactive Materials | Alkyl lithium compounds, tert butyl lithium, lithium carbonyl, Group 1 Alkali metals, Metal powders (very fine particles), Metal hydrides, Non-Metal Hydrides, Non-metal alkyls | EHS approval and Pyrophoric and Water Reactive SOP completion and Use |
| Super Acids and Super Bases | Fluoroantimonic Acd, Trifluoromethanesulfonic acid, Anhydrous HF, Fluorosulphuric Acid, Lithium monoxicd anion (LiO-), Ortho diethnylbenzene diananion | EHS approval and Super Acid and Super Base SOP completion and Use. |