

**ASSESSMENT OF OCCUPATIONAL EXPOSURE TO HAZARDOUS CHEMICALS IN  
ANIMAL LABORATORY**

The use of hazardous chemicals including but not limited to: **antineoplastic drugs, materials that are highly toxic, corrosive, known or suspected carcinogens, reproductive or developmental toxins**, must be assessed before permitted for use in animal protocols. It is the responsibility of the Principal Investigator to identify and help to minimize the risk of exposure to hazardous chemicals to the staff.

Please fill out the table below for hazardous chemical substances that you are going to use for you animal protocol and send it to [zanetapolis@cunet.carleton.ca](mailto:zanetapolis@cunet.carleton.ca) for evaluation and approval.

Name: \_\_\_\_\_ Lab location: \_\_\_\_\_ PI: \_\_\_\_\_

AUP number (if already given) \_\_\_\_\_

**1. Substance information**

Chemical name: \_\_\_\_\_ CAS number: \_\_\_\_\_

Hazard class<sup>1</sup>: Carcinogen  Reproductive toxin  High acute toxicity

Route of administration: \_\_\_\_\_

Route of excretion\*: \_\_\_\_\_

Washout period\*: \_\_\_\_\_

Concentration of the chemical agent (dose and the duration of treatment) \_\_\_\_\_

**2. Procedure**

Briefly describe how the hazardous chemical will be used<sup>2</sup>:

Method of preparation (i.e. solutions, mixtures pure material):

Are animals going to be transported between rooms before the end of wash out period? YES  NO



### 3. Exposure Controls

What engineering controls are you going to use <sup>3</sup>?

Fume hood  BSC

#### 3.1 Personal Protective Equipment (PPE) (Check all that apply)

Safety glasses

Gloves (type \_\_\_\_\_ )

Lab coat

N95 respirator

*N95 users must be fit tested within the last 2 years*

Other \_\_\_\_\_

### 4. Decontamination and disposal

Are cage liners needed YES  NO

Neutralizing agent\* \_\_\_\_\_

Is the chemical harmful to aquatic life? YES  NO

\* Provide supporting literature

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#### ADDITIONAL INFORMATION

For purposes of this form, a hazardous substance refers to the agent that is known or suspected human carcinogens, reproductive toxins, and substances with acute toxicity. Each research lab must complete this form and have it approved by EHS prior to their initial use.

1. Carcinogen: if on IARC, ACGIH or NTP list

Reproductive toxin: mutagens, teratogens, embryo- toxins

High Acute Toxicity: oral LD50  $\leq$  50 mg/kg, skin LD50  $\leq$  200 mg, air LC50  $\leq$  200 ppm or  $\leq$  2 mg/l.

2. Briefly describe the part of the experimental procedure that involves the substance, with particular attention to how the chemical will be manipulated.

3. A fume hood should be used for chemicals that may produce vapors, mists, or fumes, or if the procedure may cause generation of aerosols