The Institutional Animal Care and Use Committee (IACUC)

Gas Anesthetics Disposal

As with other forms of anesthesia, you may not use expired gas anesthesia. Please check all bottles for expiration date. Waste gas anesthesia, whether expired or not, should not be allowed to "off-gas" through a hood and into the atmosphere. Instead, a request should be put in for the Department of Environment, Health, and Safety (EHS) to remove the bottle/canister. These requests can be submitted online.

The use of ether as an anesthetic must be scientifically justified and approved by the IACUC prior to use. As a bottle of ether empties and more "headspace" is created, the potential for explosive peroxide formation increases. Fortunately, ether does not readily form peroxides unless it's concentrated by evaporation, and most ether solutions have inhibitors that should keep peroxide formation low (at least until the expiration date). In some instances, expired bottles may require high hazard remote opening and deactivation prior to disposal. Based on the potential hazard, always date the bottle of ether when opened and dispose of the ether in one year. Environmental Affairs personnel may pick up expired bottles of ether, if an online request is submitted.

Bottles of ether that are empty but not expired can be disposed of by the user after triple-rinsing and defacing the label. For empty expired bottles, please submit an EHS request in order to safely dispose of them. Bottles of other gas anesthetics that are empty may also be triple-rinsed and disposed of.

Carcasses of animals that have been anesthetized with ether should be allowed to vent in a fume hood before they are bagged for disposal. Carcasses of animals that have been anesthetized with other gas anesthetics (isoflurane,) may be disposed of immediately.

Please let EHS dispose of waste anesthetic gases, whether they are expired or not. Do not "off-gas" waste anesthetic gases through the hoods to the atmosphere.

Disclaimer: if your experimental procedure requires a significant deviation to this Standard Operating Procedure (SOP), please amend your application(s) to include Addendum 8.0 Request for Exception to Policy and indicate the following: a description of the exception; the rationale (provide scientific justification and/or justification based on animal welfare); the potential adverse effects/clinical signs resulting from the exception; and specify which (and the total number of) animals in the approved protocol that will be affected. The IACUC will review your request at the next monthly meeting.

Approved May 20, 2005, Revised August 12, 2011