

Principal Investigators, Laboratory Managers and Laboratory Community-

Environmental Health & Safety (EH&S) is pleased to introduce new procedures for the purchasing of household freezers and refrigerators to be used in the laboratory setting. Improper storage of flammable materials in household refrigerators creates a safety concern as they are not designed to industrial specifications, and often contain unprotected internal wiring and components that are capable of acting as incidental sources of ignition, thus greatly limiting their capability for safe chemical storage. When flammable materials are stored in a household unit, flammable vapors can accumulate and ignite if an internal mechanism such as an interior light or a fan motor causes a spark; for this reason, no matter the quantity, concentration or duration of storage, no flammable liquids may be kept in refrigerators or freezers that are not designed and rated as either “explosion proof” or for the storage of “flammable materials.”

Laboratory purchasing protocols of household refrigerators and freezers at the Morningside Campus will undergo the following changes, **effective early January 2012 and include:**

- All household refrigerator purchase orders will require EH&S approval.
- For approval, the lab must complete a [Memorandum of Understanding \(http://www.ehs.columbia.edu/Refrigerator.pdf\)](http://www.ehs.columbia.edu/Refrigerator.pdf) that acknowledges the prohibition of storing flammable materials in refrigerators or freezers that are not rated for flammable storage or explosion proof. The completed form includes a purchase order requisition number, building, room number, and signature of the purchasing Investigator.
- The completed form should be sent to your Research Safety Specialist to prompt consultation, issue the approval in the Financial Front End System, and provide appropriate safety signage for the new unit.

Feel free to contact your [Research Safety Specialist](#) with any additional questions or concerns regarding hazardous materials storage, laboratory refrigerator purchases, or other matters requiring consultation.