FDN(wh)YMe? COLUMBIA UNIVERSITY Environmental Health and Safety

As an aid to laboratories in avoiding FDNY Violation Orders (VO) and Summonses (SUM), EH&S distributes monthly FDNY inspection findings which resulted in a VO or SUM citation to an actual laboratory on either the Morningside or Medical Center campus. These real-life scenarios are meant to assist the research community in ensuring that such conditions do not exist in Columbia University laboratories.

July, 2021 – Compressed Gas Cylinder Safety: Signage and Securing

The Fire Department of the City of New York (FDNY) commonly issues violation orders (VO) to laboratories

for failure to secure compressed gas cylinders, as well as for the lack of door signage indicating hazards associated with compressed gas cylinders within the laboratory.

Since the contents of a compressed gas cylinder are highly pressurized, they have the potential to become projectiles if they fall and a valve breaks off. The cylinders also have considerable weight, and can cause damage and injury if they fall on laboratory personnel. As a result, it is mandatory to properly secure compressed gas cylinders to prevent any possibility of falling. Cylinders should be secured to something sturdy such as a wall or an immovable laboratory bench with the means of non-combustible restraints such as straps or chains. A cylinder rack or barricade (as shown in image to the right) made specifically for storage of compressed gas cylinders can also be used. A handcart designed and designated for cylinder transport should always be used when moving between laboratories or buildings to minimize the risk of the cylinders dropping.



According to FDNY regulations, appropriate door signage should be present in laboratories that use compressed gas cylinders to indicate associated hazards. For inert gases such as nitrogen or argon, the door signage can simply read "Compressed Gases". If the chemical contents of the compressed gas



cylinders have additional hazard characteristics such as flammability, reactivity, corrosivity, or toxicity, these should be categorically indicated on laboratory doors as well.

EH&S is actively working to provide guidance and resources to laboratories to ensure appropriate door signage is available. These resources will include compressed gases hazard identification stickers, or guidance on incorporating hazard identification information as part of the existing door signage. Door signage documents can be found under the "forms" tab EH&S' website at the at following link: https://research.columbia.edu/environmental-healthsafety-documents. Please direct all guestions about compressed gas cylinder usage, safety, or any other FDNY compliance related questions to

labsafety@columbia.edu.