## GUIDELINES FOR PREVENTING FDNY LABORATORY SAFETY VIOLATIONS

| VIOLATION                                   | PREVENTIVE MEASURES  |
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| CHEMICAL MANAGEMENT                         |  |
| Labels – Missing or illegible               | Ensure that all containers are appropriately labeled, including water. Label templates and printing tutorial – <u>https://research.columbia.edu/labeling-laboratory-containers</u>   |
| Peroxide formers – Test and label           | Write the opening date on all peroxide forming chemicals. Ensure that opened peroxide-forming chemicals are properly tested or disposed at 6 month date from opening.  |
| Expired                                     | Submit a hazardous waste pickup request to have expired chemicals removed - <u>http://vesta.cumc.columbia.edu/ehs/wastepickup/</u>   |
| Refrigerated storage of flammable materials | Store flammable materials (with a flash point <100 F) in an explosion- or flammable- proof refrigerator.   |
| Segregation                                 | Properly segregate in cabinet by product compatibility - <u>https://</u><br>research.columbia.edu/sites/default/files/content/EHS/Lab%20Safety/chemSegChart.pdf  |
| Glass bottles stored on floor               | Move bottles from floor or provide secondary containment.  |
| Storage in fume hoods                       | Remove all chemicals from fumehood unless highly toxic or in active use.   |
| Acids                                       | Line metal surfaces with plastic sheeting or place chemicals in plastic container/tub.<br><i>Nitric Acid</i> - Place in separate plastic container/tub.<br><i>Perchloric Acid</i> - Label cabinet where stored as "Perchloric Acid" and label fume hood "No heating of Perchloric Acid in hood". |
| CYLINDER STORAGE                            |  |
| In corridors (LN2)                          | Place all LN2 cylinders inside lab or equipment room immediately upon delivery from vendor.  |
| Unsecured                                   | Request chain, strap or floor base holder installation by Facilities or purchase cylinder cart.  |
| Label                                       | Ensure empty cylinders are labeled as "Empty" or "MT" Also re-label with contents if vendor installed label is not clearly visible when cylinder is stored or in use.  |
| Flammable gas                               | Keep cylinder 10 feet away from laboratory exits.  |
| Protective caps                             | Place protective caps on cylinders when not in use. Contact the vendor if the cylinder arrives without a protective cap.   |
| HOUSEKEEPING                                |  |
| Clutter                                     | Promptly remove all empty cardboard boxes, packing materials and wood shipping crates. Contact facilities by phone or place work order on-line.  |
| Storage on shelves                          | Keep all storage items in labs:<br>18" below ceiling in sprinklered labs;<br>24" below ceilings in non-sprinklered labs<br>Store all chemicals below eye level   |
| Aisle clearance                             | Maintain 36" wide aisles within the lab  |
| Self-closing lab door                       | Contact Facilities to arrange for door repair, if lab entrance door does not close and latch on its own. Maintain small door leaf closed and latched at all times.   |

| Emergency shower blocked, obstructed or inoperable               | Inform Facilities of the problem; remove obstruction.   |
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| Eyewash device   | Test eyewash weekly and report any malfunction to Facilities  |
| Blocked or obstructed lab<br>entrance/exit door or any safety    | Remove anything that is blocking an entrance or exit to a laboratory.   |
| Signs and placards missing<br>from Lab                           | Inform EH&S of missing signs.   |
| Fire extinguishers   | Notify EH&S if fire extinguisher is discharged, gauge not in the green area, or plastic test seal around handle is missing    |
| CERTIFICATE of FITNESS (C14)                                     |   |
| No Certificate of Fitness (COF) holder e.g., C14, present in lab | Qualified lab personnel to take the COF exam on campus. A copy of the certificate should be placed on the door of laboratory. |