1.0 Scope and Application:

1.1 This standard operating procedure applies to all laboratories in Weill Hall and outlines the requirements necessary to ensure that Weill Hall chemical inventories stay below the requirements outlined in our Facility Management Plan.

2.0 Purpose:

2.1 Weill Hall received a variance on its Building Permit which requires the facility to maintain the quantities of Class I flammable liquids and flammable gases below the quantities shown in the tables below:

Control Area Location	Number of Control Areas Permitted	Percent of Maximum Allowable	Amount of Class I Flammable Liquids permitted per Control Area (gallons)
Basement	3	75%	540
1st Floor	4	100%	720
2nd Floor	3	75%	540
3rd Floor	2	50%	360
4th Floor	2	12.5%	90
Penthouse	2	12.5%	90

Table 1: Allowable Class I Flammables per NYSBC and NYSFC

Control Area Location	Number of Control Areas Permitted	Amount of Flammable Gas permitted per Control Area (cubic feet)
Basement	3	3000
1st Floor	4	4000
2nd Floor	3	3000
3rd Floor	2	2000
4th Floor	2	500
Penthouse	2	500

Table 2: Amount of flammable gas permitted per NYSFC Table 2703.8.3.2.

2.2 This chemical inventory is required:

2.2.1 To allow reporting to safety officials to document conformance to the variance conditions for the storage of flammable gases and Class I liquids as shown in Tables 1 and 2 above.

2.2.2 To permit emergency responders to understand the hazards that might be present in specific locations of the building, if response is necessary.

2.2.3 To facilitate the overall goal of limiting the storage of hazardous chemicals as a step toward improving environmental and life safety; and

2.2.4 With the advent of rules generated by the Department of Homeland Security, to conform to laws involving the tracking of certain chemical inventories that could be considered potential security risks.

3.0 Responsibilities:

3.1 **Principal Investigators/Lab Managers–** Ensure that this procedure is followed in order to accurately maintain chemical inventories.

3.2 **Facility Safety Committee –** the Facility Director will coordinate with the Safety Committee to conduct periodic inventory checks to ensure this procedure is being followed and that Weill Hall is maintaining its chemical inventories within the required limits.

4.0 Procedure:

4.1 Weill Hall will use the Vertere software system to manage its chemical inventory.

4.1.1 This software is licensed by Cornell University and only requires a web browser interface accessible at: http://vertere.rmps.cornell.edu

4.1.2 This inventory system will treat all containers as full until the substance is completely used up. There will be no attempt to track consumption of chemicals until the container is completely empty.

4.1.3 Weill Hall will maintain an inventory on all of the following types of substances used within the facility. Additional substances may be entered in the system, but are not required:

4.1.3.1 Flammable liquids

4.1.3.2 Flammable gases

4.1.3.3 Health Hazard 3 or 4 items

4.1.3.4 Substances found on the Department of Homeland Security's list.

4.2 Weill Hall Facilities Services will administer the Vertere software system, which includes the following duties:

4.2.1 Supplying pre-printed bar-code labels

4.2.2 Adding/removing system users (inventory managers, view-only users, etc.)

4.2.3 Adding/removing system locations (labs, lab support rooms, etc.)

4.2.4 Providing Vertere system training and instruction manuals to users

4.3 Principal investigators/Lab managers will use the Vertere system to maintain an inventory of these substances as follows:

4.3.1 When new chemicals meeting the above criteria are delivered to the lab, the lab manager or designee will:

4.3.1.1 Apply one of the pre-printed bar-code labels supplied by Weill Hall Facilities Services

4.3.1.2 Enter the chemical into the Vertere system using the "Add" function

4.3.1.3 Store the chemical in an approved storage location as defined in Cornell's Laboratory Safety and Chemical Hygiene Manual.

4.3.2 Custom mixtures may be added to the Vertere system using the instructions in Section 3.8 of the Vertere Enterprise System User's Guide.

4.3.3 If a chemical storage location is changed, the lab manager or designee will use the "Transfer" function in Vertere to ensure accurate location records are maintained.

4.3.4 Once a tracked chemical container is emptied, the lab manager or designee will:

4.3.4.1 Remove the Vertere bar-code label and apply it to a disposal tracking sheet maintained by the Lab Manager. It is recommended that this sheet be kept on a clip board with ready access to any lab personnel that may dispose of chemical containers.

4.3.4.2 Use the "Dispose" function in Vertere to remove the chemical from inventory.

4.3.4.3 Remove or cover the manufacturer's container label and then either dispose or recycle the empty container as appropriate.

5.0 References:

5.1 Weill Hall Facility Management Plan

5.2 Cornell's Laboratory Safety Manual and Chemical Hygiene Plan found at the following web site: (http://www.ehs.cornell.edu/LRS/LSM.cfm)

5.3 Vertere Inventory Manager Enterprise Edition User's Guide

5.4 Department of Homeland Security Chemicals of Concern