

The CHIMERA Manual For General Users





CHIMERA Manual For General Users

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THE CHIMERA ONLINE MANAGEMENT SYSTEM



The CHIMERA Online Management System is an interface that enables the user access to crucial inventory information. This system provides easy access to reports, inventory management tools, hazard signs, and safety data sheets among other functions.

Reports

The online reporting functionality in CHIMERA is one of the most important features provided in the software. Various reports have been created to meet the needs of federal, state, and local regulators, as well as the needs of CHIMERA users.

These reports include but are not limited to:

*The products that are in the inventory *Hazards associated with each product *NFPA ratings *P-Codes *IFC minimum permit quantities

To find out more about each report simply hover over the report with the mouse to find a summary of what the report provides. Users are also able to make a customized report which is detailed on page 10.

Reports



Inventory Management

The online Inventory Management interface is where users will be able to add, remove, edit, and transfer inventory.



The add inventory function enables users to input inventory when received and to add new chemicals that are missed by receiving during inventory. Users that wish to take advantage of this function need to request barcodes that they can apply on their own. For more information about adding inventory see page 13.



The remove inventory function enables users to remove barcodes or static products from their inventory. The user can scan (if a barcode scanner is available) or hand type individual barcodes for chemicals that are no longer in the inventory. This function helps in maintaining as close to real-time inventory as possible.



The edit inventory function allows the user to change the listed quantity on each container, assign a cost, a location, change the container type, modify comments, and add an expiration date to each individual product.



The transfer function is another tool that enables users to maintain an up-to-date inventory. This function allows users to transfer chemicals either to or from their inventory. The user will select the new storage destination then input the barcode number(s), either by hand or by scanning, for all chemicals that need to be transferred. When transferring statics, you will select the building, room and location (optional) where you want them to be transferred to, then you will select the building and room where the statics are currently located.



The inventory update function allows users to update previously entered barcodes and statics. This function will update the building, room, date, and storage location (optional) of previously entered inventory. When transferring statics, you will select the building, room and location (optional) where you want them to be transferred to, and then you will select the building and room where the statics are currently located.



The reconcile inventory function is another tool that can be used to maintain an up-to-date inventory. This function removes all the non-inventoried products in a building/room before a chosen date, i.e. the date that area's inventory started. Any chemical that were inventoried before that date will be removed from the live inventory.



The full-room transfer function allows users to transfer an entire room's inventory into another room. Input the source building and room, where inventory currently is, and then the destination building and room and click transfer.

Hazard Signs



A hazard sign is used to assist first responders by providing them with quick access to the chemical hazards located within the area of interest, as well as other useful hazard information, including radioactive and biohazards.

The chemical hazard information is obtained from each room's inventory, while the biohazard and radioactive hazards are managed through their respective Regulator Tool. The remaining information can be updated by either the CHIMERA administrators or faculty/staff members who have been granted access to the hazard signs tool. This information includes department data, lab director information, and the lab name. After the annual inventory has been completed, hazard signs are printed and distributed by building once a year. The user can also print out their own hazard signs any time they wish. Further information about hazard signs can be found in the Hazard Signs Manual at the end of this manual.

Searches

CHIMERA users can locate chemicals by product name, part number, CAS number, and by manufacturer through the searches provided. Users are also able to search for specific barcodes which will provide the location information, possible SDS's, and the cost per unit if the information was provided.

A search that users may find useful is the Chemshare search. The Chemshare search is an optional function that users must opt into. Participants in Chemshare are able to search any Chemshare user's inventory for a product and CHIMERA will provide contact information for those who have that product in their inventory.

To participate in Chemshare, users must opt in while creating their account. If the user already has an account and would like to participate in Chemshare, they should contact their CHIMERA administrator.

Safety Data Sheets (SDS)

A safety data sheet (SDS) is a form containing data about the properties of a substance. In accordance with Hazcom 1910.1200, an SDS must be available for every chemical located on campus. These forms also provide crucial information that is used for reports that are required to be submitted to federal, state, and local regulators.

Through CHIMERA, we can provide any user on an authorized network access to all of the SDSs in the system.

When searching for a specific SDS, a user has much of the same functionality that they would have using a normal search tool. If the user was looking for a Fisher brand acetone, they could type "acetone AND fisher" and a list of results will appear.

A user simply needs to click on the name of the product that they are interested in viewing the SDS, and the file will be downloaded or open in the browser.

acetone AND fisher	Search
--------------------	--------

Product Name(Click Here For SDS)	Manufacturer	\$ Product#
1,1,1,5,5,5-Hexafluoroacetylacetone	Fisher Scientific	99898
1,3-Dichloroacetone 0	Fisher Scientific	100607
2,4-Pentanedione 0	Fisher Scientific	9514
2-Fluorophenylacetone 0	Fisher Scientific	96620
3-Pentanone 0	Acros Organics	54131
3-Pentanone 0	Eastman Kodak Company	71619
4-Methoxyphenylacetone 0	Fisher Scientific	96471
Acetone	Fisher Scientific	78274
Acetone®	Fisher Scientific	108173

Users might also want the ability to search and view associated synonyms, part numbers, CAS numbers, and in some cases UPC barcode numbers. If multiple products appear after a search,



bers, and in some cases UPC barcode numbers. If multiple products appear after a search, the user can select the information graphic and view additional information that has been entered for each product. This ability is very helpful on products that may have an SDS that was used as a substitute.

Safety Inspection Software (SIS)

The Safety Inspection Software (SIS) enables users to conduct and track safety inspections, safety equipment inspections, and fume hood inspections.

Safety Inspections

The safety inspection tab is where users can go to submit, edit, and/or view safety inspection reports.

Users with Inspection Admin approval (see manage users) have access to the administrative functions of the SIS Inspection system. These users can create new inspection types, edit the structure of existing inspection types, edit inspectors and contacts, edit locations and department information, and view various reports by date, category, or issue. These users can view any inspection report that has been submitted, not just the reports the user has submitted.

Users with Inspection approval (see manage users) can submit a new inspection report for any of the previously set up safety inspection forms. Users are also able to edit, view, and follow-up on any inspection that the user has submitted.

Safety Equipment

The safety equipment tab is where users can manage various types of safety equipment such as fire extinguishers, AED's, showers, eyewashes, etc.

Users with Safety Equipment Admin approval (see manage users) have access to the administrative functions of the SIS Safety Equipment system. These users are able to approve service requests, manage inspection concerns, conduct inspections and manage safety equipment.

Users with Safety Equipment approval (see manage users) can conduct inspections and view various reports including: inspection reports, inventory reports, service reports, and pending inspections reports.

Fume Hoods

The fume hood inspection tab is where users can go to manage fume hoods. Fume hoods can be viewed based on type, location, and status.

Users with Fume Hood Inspection approval (see manage users) can add new fume hoods and edit existing fume hoods. Users are also able to conduct inspections and view when an inspection of a fume hood is needed.

INVENTORY EQUIPMENT

Personal Protective Equipment

As a safety-oriented program, it is <u>CRUCIAL</u> to wear appropriate PPE while doing chemical inventory. Not only will it protect those who are completing the inventory, it also sets an example for faculty, staff, and students throughout campus. PPE includes but is not limited to: Lab coats, gloves, and eye protection.

Computers

Laptops or PCs are the core of the inventory program, as they are used to complete the physical inventory.

Barcodes

The barcodes we recommend, to be used for all laboratory chemicals are made with a chemical resistant polyvinyl compound. These barcodes are formatted to provide a unique number for each lab chemical inventoried. This method is used to help facilitate accurate chemical tracking. See sample below:



Barcode Scanning Equipment

At UNLV, we use a, pre-programmed, barcode scanner that is used while doing inventory. However, CHIMERA will accept any barcode scanner that submits and enters barcodes.



The Symbol LS4278, is a Bluetooth scanner which reports back to its assigned field laptop. This scanner is used for scanning UPCs from "Static" chemicals. The LS4208 corded USB scanner can also work in this capacity.

THE PHYSICAL INVENTORY PROCESS

Suggested Inventory Process

- Physical Inventory
- Upload Inventory
- Data Clean



The Inventory Routine

Preparation

The daily inventory preparation is crucial to completing the assigned tasks in a timely manner. A team member should make sure that all PPE (eye protection, gloves and lab coat), inventory

equipment, building maps, and appropriate keys are collected and ready to go prior to the scheduled departure time.

Chemical Handling & Reading

The team member who is reading should handle each chemical with care and always use <u>TWO</u> hands while using appropriate PPE. When reading the chemical information, make sure to take as much time as necessary to read all the information correctly. Incorrect or incomplete information results in "Go-back" visits.

Barcode Process for Laboratory Chemicals

To maintain continuity, the CHEM ID barcode should always be applied on the left-hand side of the product label.



In the instance that a container is too small, the barcode should be cut down to fit onto an acceptable location taking care not to cover up any hazardous information.

Sealed Containers

While going through inventory, one might find a new laboratory chemical that is in a sealed metal can or a sealed plastic bag. In this instance, the teams' job is still to assign the product a barcode during the inventory process. However, the team member must attach the barcode with a second note that notifies the end user to apply the barcode when they remove the product from the sealed container. Note the example:



The Difference between Barcode and Static Chemicals

CHIMERA has two separate chemical categories which are used during inventory: barcode and static.

Barcode Chemicals

A barcode chemical is any laboratory chemical that is not in a single use container. In theory, products that should be around for more than a single year period should be barcoded.

Static Chemicals

A static chemical is considered anything that a barcode chemical is not. This includes one-time use products, gas cylinders, non-laboratory chemicals, and all other chemicals that the team is uncertain how to classify. It has been best stated, "When in doubt, static it out."

Infrequent Issues

Unknown Chemicals

Occasionally, teams may find chemicals that are old or are unfamiliar with the manufacturer. When this occurs, it is best to take pictures of the container, making sure to get all the information from the container. This may mean taking several pictures of the same container. By taking the picture while out in the field, you will hopefully prevent the team from going back later to investigate.

Chemical Spills or Broken Containers

In the rare occasion that there is a chemical spill or broken chemical container, the inventory team should call the Hazardous Material Safety Technician for assistance. This is to assure proper clean up and disposal is conducted.



CHIMERA Hazard Sign System Staff User Guide



CHIMERA Staff Manual Table of Contents

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Introduction

The purpose of this manual is to provide you, the end user, with a complete guide to the Hazard Sign System within CHIMERA. This system is designed to allow you to design your own hazard sign layouts that are used in conjunction with your inventory data in order to create completely custom hazard signs. Here you can find step by step procedures for accomplishing specific tasks, as well as explanations and descriptions for all associated tools. Images are included where possible to clarify certain operations.

What is it?

The Hazard Sign System (HSS) is designed with the various needs for hazard placarding in mind. Different institutions and localities may have diverse and wide ranging requirements as to what must be included in a hazard placard, including NFPA information and warning symbols to name a few. Additionally, you as the end user may have a preference as to how these different placard elements are arranged on the sign. It is with this is mind that HSS has been designed to be customizable while still correlating to the hazard data present within your CHIMERA inventory.

Target Audience

This version of the manual is intended for users who have staff privileges.

Getting Started

<u>First Steps</u> To begin, HSS can be accessed via the main navigation bar, pictured below:



This will bring you to the main interface for HSS:

Hazard Signs	0
Building:	
Select a building	~

It is from here that you will be able to accomplish the vast majority of tasks involving HSS, including generating signs, designing/managing layouts, and editing specific room information.

Edit Room Info

Much of the content that appears on hazard signs is set on a room by room basis. This can include safety notification symbols as well as hazard warning symbols. The majority of this information is set through the Edit Room Info function. If your institution is new to CHIMERA, or if you did not use CHIMERA's previous 'NFPA Signs' feature, you will need to set this information initially. This can be done by a system administrator or by a 'Staff' user with access to the rooms which need to be set up. The following is a breakdown of the process by which users can update rooms:

1. Select the desired building:

Hazard Signs		8
Building:		
Select a building		~
	Ę.	

2. Select the desired room from the list that appears:

Hazard Signs		0
Building:		
CHE: Chemistry		~
Room:		
Please Select		~
Generate	5	

3. After you have selected a room, the 'Edit Room Info' button will appear. Click this button to begin setting up the room:

Hazard Signs	0
Building:	
CHE: Chemistry	~
Room:	
105	Edit Room Info
Generate Generate Custom	Û

4. A new tab will open to the 'Edit Sign Info' page:



A number of options are available to be changed in the upper portion of the page, as illustrated in the screenshot above. The bottom section of the page contains a preview of how the sign will appear when it is generated by HSS. This preview shows the bounding boxes used by the different layout elements, even if they are hidden. By enabling and disabling different options, you can see different elements appear and disappear in the preview.

5. The minimum needed to set up a room so it can be properly used by HSS is the 'Number of Signs' field, circled in red in the image above. This number determines the number of signs that will be generated when the 'Entire Building' option is selected on the previous page. If this number is not set, or is set to 0, signs for the room in question will not appear in the 'Entire Building' print out.

- 6. Any other details should be set for the room as well, including which notification symbols should appear, controlled by the checkboxes in the Options section, as well as the Lab Name, Department, and Director information associated with the room, changed via the 'Edit Room Info' button. For a detailed description of all the settings and options available, see the corresponding section regarding the Edit Room Info page.
- 7. When the desired changes have been made, make sure to click 'Save Changes' at the bottom of the page.

This process will need to be repeated for each room that will have a hazard sign. Signs can always be generated for a specific room, but to take full advantage of HSS and the 'Entire Building' option for the bulk printing of hazard signs, setting up these options (the 'Number of Signs' at a minimum) is required.

Generating Signs

The generation of Hazard Signs is the main purpose of HSS, and can be done on a room by room basis, or a building by building basis, provided the setup described in the previous section has been completed and you or the user has access to an entire building. Below is the process for generating signs:

1. Select the desired building:

Hazard Signs		0
Building:		
Select a building		<u> </u>
	R	

2. Select the desired room. This can be 'Entire Building' to get the signs for a whole building, or a single room that you would like the sign for.

Hazard Signs		0
Building:		
CHE: Chemistry		~
Room:		
Please Select		~
	R	
Generate		

3. Select 'Generate' to create and download the requested signs.

Hazard Signs	8
Building:	
CHE: Chemistry	~
Room:	
Entire Building	~
Generate	

HSS also supports the generation of custom signs on a room by room basis. The changes made for these 'custom' signs are not saved and are only reflected on the downloaded sign. Below are the steps for generating a custom sign:

1. Select the desired building:

Hazard Signs		0
Building:		
Select a building		~
	R	
	\mathcal{N}	

2. Select a room. Generation of custom signs is only available for one room at a time.

Hazard Signs		8
Building:		
CHE: Chemistry		~
Room:		
Please Select		~
Generate	5	

3. After selecting a room, the 'Generate Custom' button will appear. Click this button to be taken to the sign customizer:

Hazard Signs	8
Building:	
CHE: Chemistry	~
Room:	
105	Edit Room Info
Generate Custom	



4. A new tab will be opened to the Custom Sign Generator:

The Custom Sign Generator shows a preview of the generated sign, with elements that would normally be hidden faded out. Elements can be enabled or disabled by clicking on them. The content of the NFPA diamond can be modified as well by clicking on it.

5. After you have made the desired changes, click the Download PDF button at the bottom of the page to get your customized sign:



Printing Signs

After generating your signs, it will be time to print them. There are a number of things to keep in mind when printing:

• It is important when printing signs that you select 'Actual Size' or equivalent in your PDF software to ensure the measurements given are correct. Do not select 'Fit' or 'Shrink oversized pages' as this may result in sign dimensions being different than those listed on the layout.

Copies: 1	Print in gra <u>v</u> scale (black and white)
Pages to Print	Co <u>m</u> ments & Forms
®≜II	Document and Markups
○ Current page	Summarize Comments
O Pages 1	Summarize Commen <u>t</u> s
More Options	Document: 8.5 x 11.0in
Page Sizing & Handling Size Poster Multiple Eit Actual size Shrink oversized pages Custom Scale: 100 Choose paper source by PDF page size Print on both sides of paper Orientation: Auto portrait/landscape Portrait Landscape	8.5 x 11 Inches
	< Page 1 of 1
Page <u>S</u> etup	Print Cancel

• Due to the range of customization possible with hazard sign layouts, as well as the range of available printers, you may find that, when printed, some signs have content cut off. This occurs if the printer you are using does not support page margins small enough to fit the selected layout size. This problem can be corrected by an administrative user.

Page Information

Introduction

You will encounter a number of different pages/functions during your use of HSS. This section contains in-depth explanations for said pages, including the functions of specific buttons and instructions for the general usage of the page itself.

Custom Sign Generator

Introduction

The custom sign generator is intended to give the user more flexibility with the hazards/information displayed on the sign. It allows the user to enable or disable certain elements, as well as change the values of the NFPA diamond. *Any changes made in the custom sign generator are not saved, and are only reflected on the downloaded sign.*

Page Breakdown



- 1. This is the sign preview area. Here you can see how the sign will appear when generated. A faded element indicates that it will not appear on the final layout.
- 2. In this example, there is an NFPA diamond present in the layout. Clicking on the NFPA diamond will open the NFPA Sign customization dialog:

	NFPA Sign Warning: Changing the NFPA sign values is not recommended, as the pre-generated values are derived from hazard information based on the inventory present in the selected room. By changing these values, you are acknowledging this.		
	Enter new value	s for your NFPA sign:	
aç		Health:	
		Fire:	0 🗸
_		Reactivity:	0 🗸
		Water Reactive:	
		Oxidizer:	
-			
			Ok

- 3. Values changed in this dialog will be reflected on the NFPA diamond after clicking 'Ok'.
- 4. The faded elements are form symbols which have been disabled due to the settings associated with the room. By clicking on these elements, you can toggle them to be enabled, so they will display on the downloaded sign pdf. Clicking them again after they have been enabled will disable them.
- 5. After you have made all of your desired customizations, click the 'Download PDF' button in order to get the PDF copy of your sign.

Edit Room Info

Introduction

The Edit Room Info page is the main location for changing options associated with specific rooms in your institution. See the 'Getting Started' section for information on accessing this page.

Page Breakdown



1. This is the options section. Here you are able to make changes to the data associated with the room, such as the symbols shown on the sign, the text shown on the sign such as Lab Name, Directors, and Department (4), as well as the sub rooms associated with the room (2).

The check boxes listed here control the symbols that appear on the sign, if they are available in the selected layout. These symbols are:



It is important to note that even if the options for these symbols are set on the Edit Room Info page, they will only appear on hazard signs if they are already present in the layout used by said signs.



2. Clicking the 'Edit Sub Room' button will open this dialog:

A sub room is defined as a room within a room. So for instance, if your institution has a lab with an interior chemical storage room, we would consider this a sub room. Using this form, you can add the sub room to the greater exterior lab by typing the room number into the box above under 'Add Rooms' and clicking 'Add'. The inventory of a sub room that you have added will be included when the sign's hazard information is calculated. This allows the sign posted outside the exterior lab door to reflect not only the hazards of the lab itself, but also those within the interior chemical storage room (the added sub room). To remove a sub room, select the desired room from the list under 'Remove Rooms' and click remove.

- 3. The number of signs option is the only required option for the room to be available for batch sign generation. By setting the value to 1 or greater, the room will start being included when the 'Entire Building' option is selected while generating signs. The number of signs generated directly corresponds to this number, as the name implies. If you had a room with 2 doors needing hazard signs, you would set this number to 2. If at any point you find that a room no longer needs hazard signs simply set this value to 0 and they will no longer be included in the 'Entire Building' generation. Even if this value is set to 0, signs can still be generated on a room to room basis.
- 4. Clicking the 'Edit Room Info' button will open this dialog:



The sections, in order, are 'Lab Name', 'Department', and 'Directors'. These correspond to the text elements of the same name found in the Hazard Sign Designer. Each text box corresponds to its own line within its respective layout element. *Note: If a room's options have not been previously set, the 'Lab Name' field will default to the room number.*

5. This is the preview area for the sign associated with the room being edited, and reflects the hazard values of the room at the time the page is loaded. Blank boxes indicate the location of layout elements that are not currently active on the sign. Elements will appear and disappear as options are changed on this page.

6. Clicking the 'Save Changes' button will, as the name suggests, save any changes made to the options associated with the room. It is important to click this button after making any changes. Changes made without clicking this button will not be saved.

7. Clicking the 'Change Default Sign' button will open this dialog:

00	Select a sign:		t
	Standard 8x8	~	
-		Done	_

Select a layout from the list and click 'Done' in order to change which layout will be used for this room. This default will take precedence over (and is distinct from) any defaults set for your institution. So if your institution's default layout was the 'Standard 8x8' listed above and you selected the 'Standard 8.5x11' for this room, the 'Standard 8.5x11' would be used when signs are generated for the entire building.

Hazard Signs

Introduction

The Hazard Signs page is the main portal to all HSS functionality.

Page Breakdown

Hazard Signs	0
Building:	
CHE: Chemistry	1~)
Room:	
105	2 - Edit Room Info
4 5	3
Generate Generate Custom	

- 1. This is the building select box. This list will contain all buildings you have access to. If you are logged in as an Administrative user, you will have access to every building in your institutions CHIMERA system.
- 2. This is the room select box. Here you will see a list of rooms you have access to. If you are logged in as an Administrative user, you will have access to every room associated with the selected building. Additionally, if you are an administrator, or have access to the whole building, you will be given the option 'Entire Building'. Selecting this option will allow you to generate the signs for the entire selected building. See the 'Getting Started' section in order to learn more about generating signs.
- 3. Clicking the 'Edit Room Info' button will open a new tab to edit the information associated with the selected room. Note that this button will only appear if you have a specific room selected. This button will not appear if you select 'Entire Building'. For more information on the Edit Room Info page, see the associated section above.
- 4. Clicking the 'Generate' button will generate the sign(s) for the selected room(s). This will either be a single room or the 'Entire Building' option. A loading bar will appear after selecting generate. After a period of time, variable based on the number of signs being generated, the loading graphic will disappear and your browser will download the generated signs.
- 5. Clicking the 'Generate Custom' button will open a new tab to the 'Custom Sign Generator' page associated with the selected room. The 'Generate Custom' button will only appear if you have a specific room selected. This button will not appear if you select 'Entire Building'. For more information on the Custom Sign Generator page, see the associated section above.