



**ENCOMP SOL**  
Integrating Information for Public Safety.™

**HAZARDOUS  
MATERIALS  
MANAGEMENT  
SYSTEM  
INTERNET VERSION  
USERS MANUAL**

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About the Hazardous Materials Management System

Welcome to the Electronic Hazardous Materials Management System (HMMS).

This program is designed as a user-friendly access to facility information for effective data storage, inquiry, and report generation that is necessary for quick and efficient response in the event of the release of a hazardous material.

**NOTE: If you need assistance at any time you may contact Encompso staff at 877 655-6952. Encompso staff is also available to accomplish the data entry for your facility, which will provide you with a complete turn key system. Fees are generally based on the number of chemicals in the inventory. Staff will ensure that the Management System is provided to the proper response agencies in a format they can use. The Hazardous Materials Management System is free to all response agencies in your jurisdiction.**

System Requirements

HMMS runs efficiently on any computer that is capable of running an Internet browser or a system with access to the Internet web.

Logging In

After receiving your secure user name and password you can login and begin data entry.

To login you must access the Encompso secure web site at <https://ssl.encompso.com/login.html> and the following will appear:



Welcome!

Encompso Web Interface:

Please enter your facility code:

Next

Hosted by: [Planetary Data Systems](#)  
Last Modified: 11-04-2002

Enter in the facility name that was provided by the Encompso staff.

**Next**

Select **Next** and the following will appear:

The screenshot displays the Encompso Web Interface. On the left, there is a navigation menu with a diamond-shaped graphic divided into four colored sections: red (top, labeled '1'), yellow (right, labeled '3'), blue (left, labeled '4'), and white (bottom, labeled 'OXY'). The red section is labeled 'Federal', the yellow 'Industry', the blue 'State', and the white 'Local'. Below the diamond, the text 'Integrating Inform For Public Sa' is visible. On the right, a 'Welcome!' message is shown above the 'Encompso Web Interface:' label. Below this is a horizontal line and the text 'Please enter your facility code:'. A 'Next' button is positioned to the right of the input field. Overlaid on the interface is a 'Connect to ssl.encompso.com' dialog box. This dialog box contains a 'User name:' field with a dropdown menu showing 'ecsadmin', a 'Password:' field with masked characters, and a checked checkbox for 'Remember my password'. 'OK' and 'Cancel' buttons are at the bottom of the dialog.

Enter your secure User Name and Password. This information is provided by the Encompso staff and must be entered in lower case letters. Click on OK, and your HMMS will load and default to the Facility Information Page. **You should be prompted to change your password to one you can easily remember. See Getting around in the HMMS below.**

### **Getting around in the HMMS**

The following Icons appear at the top of each screen page of the EMPS.



**Home Icon** – Select this Icon to return to the Login Screen. If you have multiple facilities to manage, Select the **Home** Icon to return to the **Login Screen**, enter the new facility name, select **NEXT**, the user name and password will not be required.



**Facility Information** (This is the default page.)



**Contacts Page** - Provides Information for Owner, Technical, Public, Emergency, and Other personnel contacts



**Building Information** – Specific building features, floor plans, roof plans and building maps. All buildings, including multi-floors shall be identified in this section



**Chemical Inventory Information** – All chemical specific data, including MSDS's



**Process Information** – Identification and description of all processes and functions



Vulnerability Analysis Information



Emergency Plans Information



Employee Training Information



Clean-Up Contractor Information



NRT One Plan Information



Reports Information

Hazardous Materials Inventory Statement (HMIS)

HMMS Complete Report (HMMP)

NRT One Plan Full Report

SARA Tier II Information Report



Admin: Delete records - **Used by the System Administrator to delete records, image files or MSDS's.**

If you are the **System Administrator** you can [Add Users](#) by assigning User Privileges to personnel within your organization or company.

Select [Add Users](#) from the Administer User Privileges section:

**Administer Resources in**

Show users:

Show Resources:

Add User:

[RealmAdmin](#) [ResAdmin](#)

To change your password select [realm](#) from the users window:

ecschem users			
	Users	Records	
1	ecsadmin	<a href="#">realm</a>	<a href="#">resources</a>

[RealmAdmin](#) [ResAdmin](#)

Enter your new password, and then select the USER\_PRIV icon:

## Hazardous Materials Management System

**Update Realm Record**

Realm: **ecschem** Username: **ecsadmin**

New password:

New Privilege:

Set Identity:  (record # from the user profile)

[RealmAdmin](#) [ResAdmin](#)

To add new users, Select Add User:

### Administer Resources in

Show users:

Show Resources:

Add User:

[RealmAdmin](#) [ResAdmin](#)

The New User Box will appear. Enter a New User Name and provide a Password

### New User:

**Add a user in (Requires ADR privilege)**

Realm:

Username:

Password:

Privilege:

[RealmAdmin](#) [ResAdmin](#)

Select the drop down (GET – access) menu next to Privilege: You can assign any necessary privileges. All personnel assigned to the company may have a username and password issued, and can be assigned one of three different access levels. All that is required for Users to view the plan is access to the Internet.

### New User:

**Add a user in xxx (Requires ADR privilege)**

Realm:

Username:

Password:

Privilege:

[RealmAdmin](#) [ResAdmin](#)

**Note: GET - access is VIEW - User can only look at Information in the Realm**

Select the privilege you want to assign then select  to add or update the user privileges.




**Attachment Icon** - Used to attach maps, images, or photos, and other items to pages as necessary. Maps, images, or photos should be saved and/or converted to .jpg, .gif, or .png format prior to uploading to planning system. Image size should be limited to **9" x 6"** or **900 pixels x 600 pixels**, to properly print on 8.5" x 11" paper. **Do not use the .bmp format.** Text files should be converted and attached as .pdf files.

Data Entry


Facility Information

**NOTE:** Each time you make a change or update a page you must select the **SAVE** icon prior to leaving the page or the data you entered will be lost.

Attached to facility record: **Site Information** 

**Icons located on pages are used by Responders to access information quickly**

Name	Environmental Compliance Solutions Chemical, Co.		
Address	1900 W. Chandler Blvd, PMB 165		
City	Chandler	County:	Maricopa
State	AZ	Zip:	85248 Country: USA
E-mail	info@encompsol.com		
Phone	602-705-2653	Fax:	480-659-6704
Parent Company	ECS Chemical	Phone #	602-705-2653
Facility Use	Chemical Distribution/Repackaging		
Description of our Inspection Program	Daily, the facility is walked and inspected for any unusual circumstances. Each "sweep" is documented, along with any unusual circumstances		
FireDiamond	4 - 3 - 2	Oxidize & No Water	
Employees	31	Operating Hours	6a-5p/5p-4a
Shifts	2	Times	6a/5p
Latitude	33.201846	Longitude	-111.958598
Oil Storage Start-up Date	n/a	D & B Number	008101011
EPA ID	AZT01010101	NAICS/SIC Code	5169
Other IDs	Fire Dept HMMP Permit**KEYBOX @ FT DOOR - SEE		
<b>Record</b>	<b>SAVE</b>		

Select  to add maps, images, or photos. Maps, Images, or Photos should be saved in the .jpg, .gif, or .png format. **Do not use the .bmp format.** Text files should be converted and attached as .pdf files.




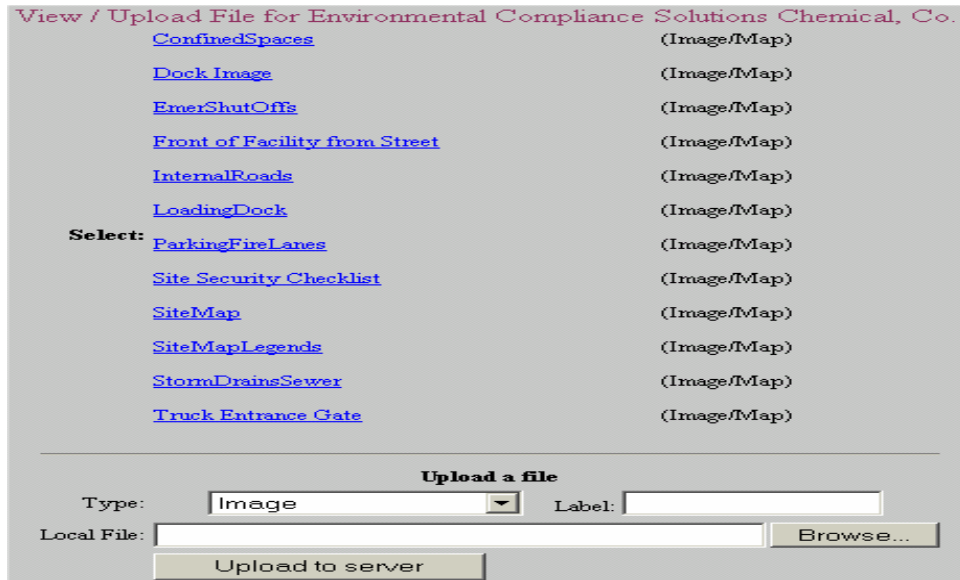
## Hazardous Materials Management System

You will need to select a Type: **Image, HTML/Plain Text File, .PDF File**, then enter a **Label Name** for your **Image**. This is the name of **Image** that will appear next to Select on the window.

Select the **Browse...** button to locate the **Image** on your computer you want to upload. Once the **Image** is selected, click on the **Upload to server** button to load the **image**, the **Image** may take a few seconds to load, depending on your Internet connection speed.

When the **Image** upload is finished another window appears informing you the upload was successful.

Close the window. When you open the  window again you will notice the image name appears next to **Select** in the window. You may add as many images as you like. To select an uploaded image double click on the blue image name next to **Select** on the window and it will load for you. You may add, as many images as necessary, keeping the image size to 9" x 6", or 900 pixels x 600 pixels.



View / Upload File for Environmental Compliance Solutions Chemical, Co.:



- [ConfinedSpaces](#) (Image/Map)
- [Dock Image](#) (Image/Map)
- [EmerShutOffs](#) (Image/Map)
- [Front of Facility from Street](#) (Image/Map)
- [InternalRoads](#) (Image/Map)
- [LoadingDock](#) (Image/Map)
- Select:** [ParkingFireLanes](#) (Image/Map)
- [Site Security Checklist](#) (Image/Map)
- [SiteMap](#) (Image/Map)
- [SiteMapLegends](#) (Image/Map)
- [StormDrainsSewer](#) (Image/Map)
- [Truck Entrance Gate](#) (Image/Map)

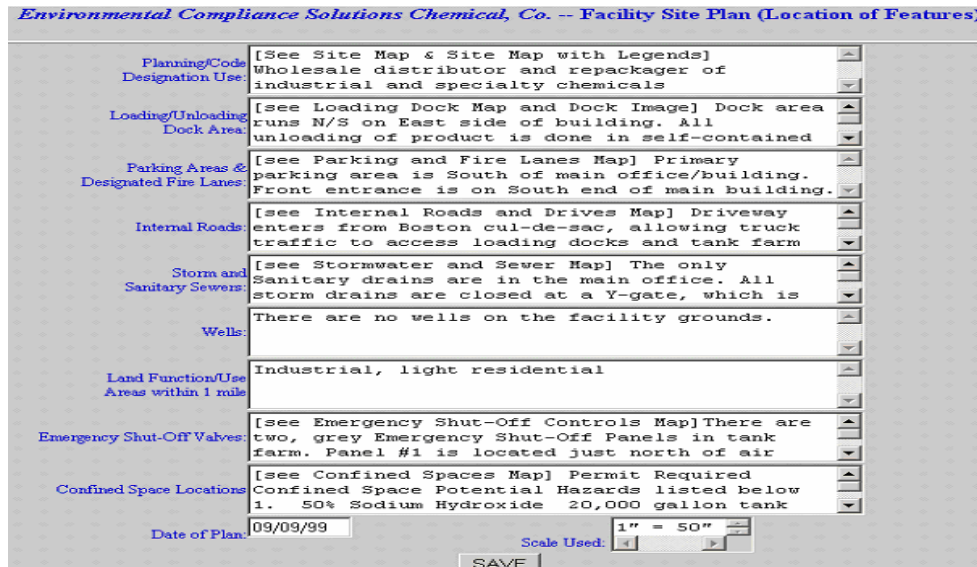
**Upload a file**

Type:  Label:

Local File:

## Site Information

Select  from the facility page to complete the necessary site planning information. Enter all information that applies to your facility. If the information does not apply enter N/A for not applicable. Don't forget to select  at the bottom of the page when finished.



**Environmental Compliance Solutions Chemical, Co. -- Facility Site Plan (Location of Features)**

Planning/Code Designation Use:	[See Site Map & Site Map with Legends] Wholesale distributor and repackager of industrial and specialty chemicals
Loading/Unloading Dock Area:	[see Loading Dock Map and Dock Image] Dock area runs N/S on East side of building. All unloading of product is done in self-contained
Parking Areas & Designated Fire Lanes:	[see Parking and Fire Lanes Map] Primary parking area is South of main office/building. Front entrance is on South end of main building.
Internal Roads:	[see Internal Roads and Drives Map] Driveway enters from Boston cul-de-sac, allowing truck traffic to access loading docks and tank farm
Storm and Sanitary Sewers:	[see Stormwater and Sewer Map] The only Sanitary drains are in the main office. All storm drains are closed at a Y-gate, which is
Wells:	There are no wells on the facility grounds.
Land Function/Use Areas within 1 mile:	Industrial, light residential
Emergency Shut-Off Valves:	[see Emergency Shut-Off Controls Map] There are two, grey Emergency Shut-Off Panels in tank farm. Panel #1 is located just north of air
Confined Space Locations:	[see Confined Spaces Map] Permit Required Confined Space Potential Hazards listed below 1. 50% Sodium Hydroxide 20,000 gallon tank
Date of Plan:	09/09/99
Scale Used:	1" = 50"

## Contact Information

Select the Contact Icon and a New Contact page appears. Select a Contact Role from the drop down menu and complete the necessary information. For Emergency Contact be sure to enter the Priority in the order that you want the Emergency Contacts notified in the event of an emergency. A minimum of three emergency contacts is recommended. **Don't forget to select the Save button at the bottom of the page prior to adding another entry.**

Once all the data is entered you may select any of the contacts by clicking on the contact name at the top of the form. The following information will appear:

## Building Information

The first time you open the Building Information page, you may start entering data. Start by completing the Building Name. The Building Information page is self-explanatory. The numbers before each data box allows you to expand the box in the event there are large amounts of text. Text data may be copied and pasted from documents in your database. Prior to entering additional buildings select the Save button at the bottom of page.

To enter additional buildings select New Building from the drop down menu and complete all necessary information. Don't forget to select the Save button at the bottom of the page. You may also attach maps, images, or photos by selecting the paper clip icon. See Facility Information from information on attaching maps, images, or photos. Maps, Images, or Photos should be saved in the .jpg, .gif, or .png format. **Do not use the .bmp format.** Text files should be converted and attached as .pdf files.

The Facility Information page is self-explanatory. There are several drop downs and you can copy and paste data from other documents.

**Note:** There are **Twenty-Three** (23) sections assigned to this window for each building on your site to complete.

## Chemical Inventory

The chemical inventory is most time consuming and requires the most attention of all the data entry pages. Emergency responders in the event of an emergency will use this area, along with site maps, the most. Proper Storage, Use, and Handling of hazardous chemicals are very important. **Your Hazardous Materials Inventory Statement and Tier II reports are generated by this data input. Remember the more accurate and up to date information emergency responders have the better they can serve your facility and the community.**

When you first open the Chemical Inventory page you can start entering data. The Inventory Number can be any number or alpha sequence you want. You may also use a purchasing number, however if the chemicals is stored, used, or handled in multiple locations you will need an alpha code after the number. The Chemical Inventory is very important as its use relates to the chemical with proper Storage, Use, or Handling location information.

### Chemical Inventory Information

Inventory Number  Optional

Chemical Name

CAS Number

Storage, Use, or Handling Area:  (select)

[Edit or Add location](#)

(This will open a new window. When you are finished reload this page.)

Hazard Classifications are found on the MSDS  
If the Hazard Class is not listed LEAVE BLANK

Physical state  (v)

Form  (v)

Tier II Chemical \*

Trade Secret

Concentration  %

Specific Gravity

Density  lb/cf (optional)

\* If this is a Tier II chemical you must enter a CAS number and complete the chemical data specific worksheet.

**Quantities:**

Unit of measurement  (v)

Stored:

Open system:

Closed system:

Total: Auto Totals

Avg. daily amt:

Waste:

Days on Site:

**Fire Code Hazard Class:**

-  -

(Health) (Fire) (Reactive)

(v)

**Hazards:**

Fire

Release

Reactive

Delayed risk

Immediate risk

Extremely Hazardous

If several chemicals are stored, used, or handled in one location, you can select the same location for the multiple chemicals.

Once you've entered chemical data and have selected **Save**, the window expands so that additional information may be added for the chemical, such as, [Chemical Data Specific information](#), [Physical and Health Hazard information](#), [Chemical Activity and Use](#), [MSDS's](#), [Components](#), and a [Paper Clip Icon](#) for attaching Maps, Text Files or Images.

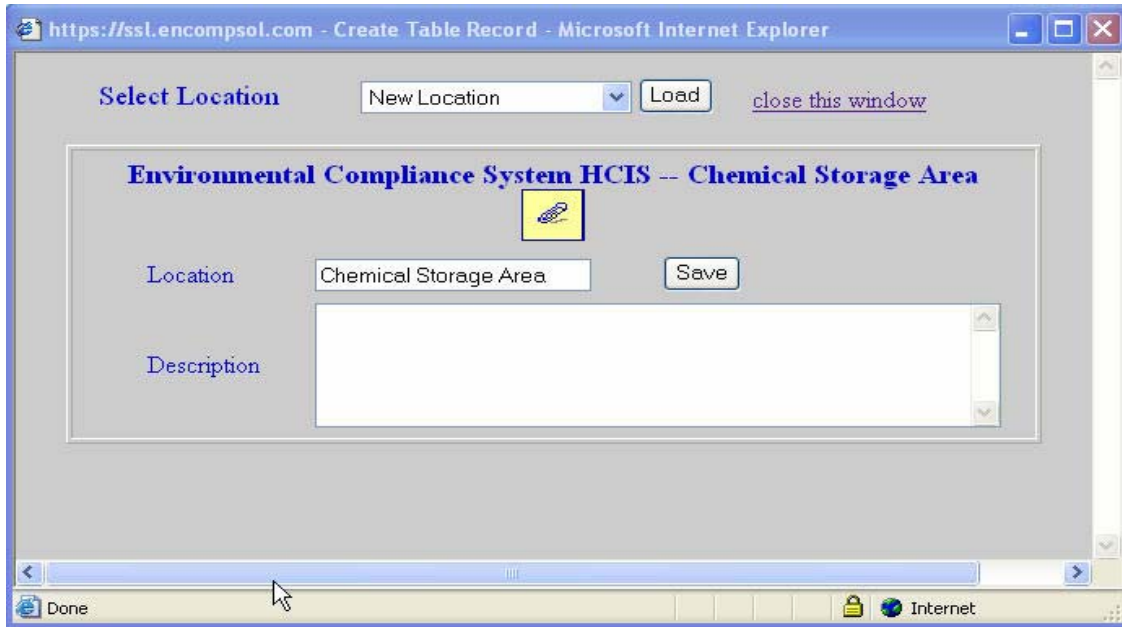
# Hazardous Materials Management System

## Chemical Storage Locations

Double click on **Edit or Add Locations**, a window will appear. Enter a location and select **Save**.

The paper click Icon will appear indicating you now can attach a Location Image or Map. (Please refer to Pages 6 and 7 for this data entry function). If several chemicals are stored, used, or handled in one location, you can select the same location for the multiple chemicals.

This function needs to be completed for each location.



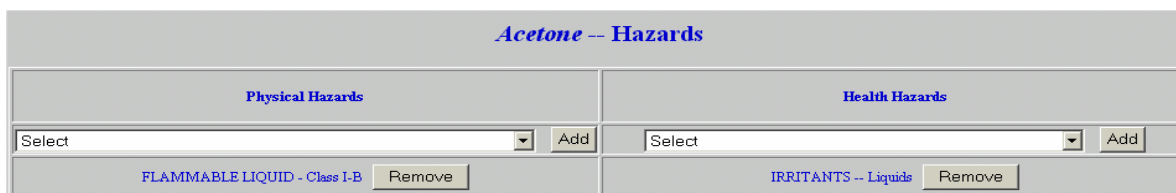
## Chemical Data Specific information:

Enter all necessary information, drop down menus are provided to meet requirements of the SARA Tier Two reports.

<b>Chemical Data Specific</b>	<b>Physical and Health Hazards</b>	<b>Chemical Activity and Use</b>	<b>MSDS</b>	<b>Components</b>		
<b>Icons appear after a chemical is entered and SAVE is selected</b>						
<b>Chemical Inventory Information</b>						
Inventory Number	965344	Storage, Use, or Handling Area: Corrosive Store Room				
Chemical Name	Acetic acid	(select) <a href="#">Edit or Add location</a> (This will open a new window. When you are finished reload this page.)				
CAS Number	64-19-7					
Physical state	Liquid	<b>Quantities:</b>				
Form	Pure	Unit of measurement	ga	<b>Fire Code Hazard Class:</b>		
Tier II Chemical *	<input type="checkbox"/>	Stored:	4.0	3	- 0 - 0	
Trade Secret	<input type="checkbox"/>	Open system:	0.0	(Health)	(Fire)	(Reaction)
Concentration	99.7 %	Closed system:	0.0	Total: 4.0 ga (35 lbs)		
Specific Gravity	1.051	Avg. daily amt:	2.0	Waste: 0.0		
Density	lb/cf (optional)	Days on Site:	365	<b>Hazards:</b>		
* If this is a Tier II chemical you must enter a CAS number and complete the chemical data specific worksheet.			Fire <input type="checkbox"/>			
			Release <input type="checkbox"/>			
			Reactive <input type="checkbox"/>			
			Delayed risk <input type="checkbox"/>			
			Immediate risk <input checked="" type="checkbox"/>			
			Extremely Hazardous <input type="checkbox"/>			
<b>SAVE</b>						

## Hazardous Materials Management System

### Physical and Health Hazard information.



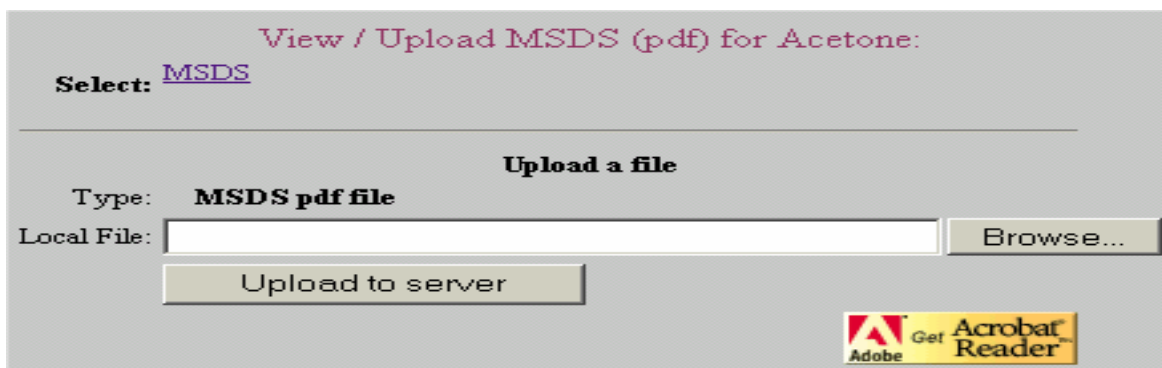
Hazardous Chemicals can have more than one Physical or Health Hazard. Select all that apply by clicking the drop down (Select) arrow. All hazards provided are in accordance with the Fire Code. To determine exact Hazards information, refer to the Chemical MSDS.

### Chemical Activity and Use

Fill in the necessary information. To add Suppliers select Edit from the window and add all chemical suppliers. If the supplier provides more than one chemical, the supplier only has to be entered once.

### MSDS

Select MSDS to insert a PDF MSDS file. The PDF format is very secure and prevents unauthorized changes to the MSDS. Uploading MSDS's is similar to uploading images. Click on **Browse...** to locate the PDF MSDS file on your computer, select it, then click on **Upload to server**.




### Components

Select COMPONENTS to add chemicals that are mixtures. The information may be found on the MSDS in the Hazardous Ingredients or Components Section of the form.

Component	CAS Number	% Concentration	Specific Gravity	EHS	Tier II?	
Phenol-Formaldehyde	28064-14-4	100%	1.22			<a href="#">edit</a> <a href="#">delete</a>
		%		<input type="checkbox"/>	<input type="checkbox"/>	<b>Save</b>


### Attaching Map Images to the Chemical

To add maps, images, or photos for chemical location, use, or handling, select the  icon from the window, click on **Browse...** to locate file, give the location a label, and click on **Upload to server**. Maps, Images, or Photos should be saved in the .jpg, .gif, or .png format. Images should be sized to 9" x 6" or 900 pixels by 600 pixels. **Do not use the .bmp format.**

## ***Process Information***

When you first open the window a process may be added. For additional processes select New Process. Complete all necessary information. Select **list** from the yellow bar in the middle of the window to view all chemicals in the inventory. The chemicals can be copied and pasted for the process, enter the quantity of the chemical used in the process and select Save.

Attaching Images to the Process

To add maps, images, or photos for chemical process, select the  icon from the window. Maps, Images, or Photos should be saved in the .jpg, .gif, or .png format. **Do not use the .bmp format.**


## ***Vulnerability Analysis Information***

Select the **Click here if vulnerability analysis is not required:**  icon if a Vulnerability Analysis is not required for your facility.

If a Vulnerability Analysis is required complete the following:

Worst Case and Most Credible Case Vulnerability Analysis is only required for exterior storage of hazardous chemicals. You can use ALHOA and RMP programs to assist in determining the analysis. Usually one chemical needs to be calculated. Complete all necessary data.

### **Attaching Images to the Vulnerability Analysis**

To add maps, images, or photos for the Vulnerability Analysis, select the  icon from the window. Maps, Images, or Photos should be saved in the .jpg, .gif, or .png format. **Do not use the .bmp format.**

**Usually a circle is added to a map to showing the Most Credible and Worst Case Zones.** It is recommended that a **BLUE** circle be used for the Most Credible Case and a **RED** circle be used for the Worst Case Zones. You may contact Encompsol Technical Support for assistance at 1-877-655-6952.

## ***Emergency Planning Information***

Complete the necessary information for each area in the window. If an area does not apply please enter N/A. Documents from other databases may be copied and pasted in the areas. Select Save at end of the page. Facility Emergency Response Plan may be attached in this section in a PDF or HTML format.

## ***Employee Training Information***

Complete the necessary information for each area in the window. If an area does not apply please enter N/A. Documents from other databases may be copied and pasted in the areas. Select Save at end of the page.

## ***Chemical Clean-up Contactor***

Complete the necessary information for each area in the window. Complete any information that may apply to waste disposal methods.

## ***NRT One Plan***

Complete the information the plan. Instructions for completing the plan can be found in the Federal Register.

## Reports

Reports may be viewed or printed. The following is a list of reports generated by the HMMS.

Hazardous Materials Inventory Statement (HMIS)

HMMS Complete Report (HMMP)

NRT One Plan Full Report

SARA Tier II Information Report

The program generates SARA Tier Two reports as a service. Checking the Tier II Chemical box on Chemical Inventory page will place this chemical on the report.

Enter the Reporting Year in the box provided and the Tier Two report will be generated for you. You may print the report, sign and date it, and mail to the required agencies. To view the report select:

SARA Tier Two: Reporting Year

**NOTE: At any time you need assistance you may contact the Encompsol Staff at 602 705 2653. . Encompsol staff is also available to accomplish the data entry for your facility which will provide you with a complete turn key system. Fees are generally based on the number of chemicals in the inventory. Staff will ensure that the Management System is provided to the proper response agencies in a format they can use. The Hazardous Materials Management System is free to all response agencies in your jurisdiction.**

Attached are three Appendixes:

The **Appendix A** provides definitions of the physical and health hazardous as required in the Fire Code.

Appendix B and C attachments are symbols that be copied and pasted on your Images or Maps

**Appendix B** is a list of all possible Hazard Classification Symbols.

**Appendix C** has symbols that can be copied and pasted onto the facility and building maps.

## APPENDIX A

### PRODUCT CLASSIFICATION DEFINITIONS

NOTE: FOR CLASSIFICATION OF AEROSOLS – SEE LAST PAGE

#### EXPLOSIVE

- (a) A chemical that causes a sudden, almost instantaneous release of pressure, gas, and heat when subjected to sudden shock, pressure, or high temperatures.
- (b) A material or a blasting agent that is commonly used or intended to be used for the purpose of producing an explosive effect.

#### BLASTING AGENT:

Any material or mixture consisting of a fuel and oxidizer intended for blasting not otherwise classified as an explosive, in which none of the ingredients are classified as explosives, provided that the finished product as mixed and packaged for use or shipment cannot be detonated by means of a #8 test blasting cap when unconfined. Materials or mixtures covered in Transportation regulations shall be included in this definition.

#### HIGH EXPLOSIVES:

Generally any explosive with a detonation rate of 2000 yards per second or greater.

#### LOW EXPLOSIVES:

Generally any explosive with a detonation rate less than 2000 yards per second.

#### COMPRESSED GAS:

- (a) A gas or mixture of gases having, in a container, an absolute pressure exceeding 40 psi at 70 Degrees F. or,
- (b) A gas or mixture of gases having, in a container, an absolute pressure exceeding 104 psi at 130 degrees F. regardless of the pressure at 100 degree F. or,
- (c) A liquid having a vapor pressure exceeding 40 psi at 100 Degrees F. as determined by the Fire Code.

#### INERT GASES:

Helium, neon, argon, krypton, xenon, and radon; also known as the noble gases.

#### FLAMMABLE GAS:

Any gas, which is flammable in mixture of 13% or less flammable range with air, or has a flammable range with air of at least 12%, regardless of the lower limit.

#### FLAMMABLE MATERIAL:

- (a) Any material that will readily ignite from common sources of heat.
- (b) Any material that will ignite at a temperature of 600 F or less.

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### FLAMMABLE LIQUID:

Any liquid having a flash point below 100 degrees F. and having a vapor pressure not exceeding 40 pounds per square inch (absolute) at 100 degrees F. Class I liquids shall include those having flash points below 100 degrees F. and may be subdivided as follows:

- CLASS I-A: shall include those having flash points below 73 degrees F. and having boiling points below 100 degrees F.
- CLASS I-B: shall include those having flash points below 73 degrees F. and having a boiling point at or above 100 degrees F.
- CLASS I-C: shall include those having flash points at or above 73 degrees F. and below 100 degrees F.

### COMBUSTIBLE LIQUIDS:

Any liquid having a flash point at or above 100 degrees F. subdivided as follows:

- CLASS II: Liquids shall include those having flash points at or above 100 deg. F. and below 140 deg. F.
- CLASS III-A: Liquids shall include those having flash points a (or above 140 degrees F. and below 200 F.
- CLASS III-B: Liquids shall include those liquids having flash points at or above 200 degrees.

### FLAMMABLE SOLID:

A solid substance, other than one, which is defined in this article as a blasting agent, or explosive, that is liable to cause fire through friction or as a result of retained heat from manufacture, or which has an ignition temperature below 212 degrees F. or which burns so vigorously or persistently when ignited so as to create a serious hazard. Finely divided solid materials, which when dispersed in air as a cloud, may be ignited and cause an explosion is flammable solids.

### ORGANIC:

Any chemical or compound with a formula containing the element Carbon.

### INORGANIC:

Any chemical or compound with a formula containing NO CARBON.

### OXIDIZERS:

Any chemical or compound, other than a blasting agent or explosive as defined in this article, that initiates or promotes combustion in other materials, thereby causing fire either of itself or through the release of oxygen or other gases.

- CLASS 4 An oxidizing material that can undergo an explosive reaction when catalyzed or exposed to heat, shock, or friction.
- CLASS 3 An oxidizing material that will cause a severe increase in the burning rate combustible material with which it comes in contact.
- CLASS 2 An oxidizing material that will moderately increase the burning rate or which may cause spontaneous ignition of combustible material with which it comes in contact with.
- CLASS 1 An oxidizing material whose primary hazard is that it may increase the burning rate of, combustible material with which it comes in contact.

## Hazardous Materials Management System

### ORGANIC PEROXIDE:

Flammable compounds which contain the double oxygen or peroxy (-O-O-) group and are subject to explosive decomposition. They are available as: (a). Liquids, (b). Pastes, (c). Solutions. They are subdivided as follows:

- UNCLASSIFIED: Peroxides, which are capable of detonation. These peroxides present an extremely high explosion hazard through rapid explosive decomposition and are regulated in accordance with the provisions of the Fire Code for Class A explosives.
- CLASS I: peroxides are capable of deflagration, but not detonation.
- CLASS II: peroxides burn very rapidly and present a severe reactivity hazard.
- CLASS III: peroxides burn rapidly and present a moderate reactivity hazard.
- CLASS IV: peroxides burn in the same manner as ordinary combustibles and present a minimum reactivity hazard.
- CLASS V: peroxides do not burn or present a decomposition hazard.

### PYROPHORIC MATERIALS:

Materials possessing the ability to react in air.

### TOXIC MATERIAL:

Any material, which produces a lethal dose or a lethal Concentration within any of the following categories:

- (a) A gas that has a median lethal dose (LD50) of more than 50 milligrams per kilogram but not more than 500 milligrams per kilogram of body/weight when administered orally to albino rats weighing between 200 and 300 grams each.
- (b) A gas that has a median lethal dose (LD50) of more than 200 milligrams per kilogram but not more than 1000 milligrams per kilogram of body weight when administered by continuous less if death occurs within 24 hours) with the bare skin of albino rats weighing between two and three kilograms each.
- (c) A gas that has a median lethal concentration (LC50) in air of more than 200 parts per million but not more than 2000 parts per million by volume of gas or vapor, of more than 2 milligrams per liter of mist, fume, or dust, when administered by continuous inhalation one hour (or less if death occurs within one hour) to albino rats weighing between 200 and 300 grams each.

### HIGHLY TOXIC MATERIAL:

A material, which produces a Lethal Dose or Lethal Concentration, which falls within any of the following categories:

- (a) A chemical that has a median lethal dose (LD50) of 50 milligrams OR less per kilogram body weight when administered Orally to albino rats weighing between 200 and 300 grams each.
- (b) A chemical that has a median lethal dose (LD50) of 200 milligrams or less per kilogram of body weight when administered by continuous contact for 24 hours (or less if death occurs within 24 hours) with the bare skin of albino rabbits weighing between 2 and 3 kilograms each.

## Hazardous Materials Management System

### UNSTABLE (REACTIVE) MATERIALS:

- CLASS 4 MATERIALS; which in themselves are readily capable of detonation or explosive reaction at normal temperatures and pressures.
- CLASS 3 MATERIALS; which in themselves are capable of detonation or of explosive reaction but which require a strong initiating source or which must be heated under confinement before initiation.
- CLASS 2 MATERIALS; which in themselves are normally unstable and readily undergo violent chemical change but do not detonate.
- CLASS 1 MATERIALS; which in they are normally stable but which can become unstable at, elevated temperatures and pressures.

### WATER REACTIVE MATERIALS:

- CLASS 3 MATERIALS; which react explosively with water without requiring heat or confinement.
- CLASS 2 MATERIALS; which may form potentially explosive mixtures with water.
- CLASS 1 MATERIALS; which may react with water with some, release of energy but not violently.

### CRYOGENIC FLUIDS:

Those fluids that have a normal boiling point below -150 degrees F.

### RADIOACTIVE MATERIALS:

Any material or combination of materials that spontaneously emits ionizing radiation.

### CORROSIVE MATERIAL:

Any chemical that causes visible destruction of, or irreversible alterations in living tissue by chemical action at the site of contact.

### CARCINOGENS/SUSPECT CARCINOGENS:

Substances, which produce or are suspected of producing or inciting cancer.

### TARGET ORGAN TOXINS:

Substances which cause damage to particular organs or systems.

### IRRITANTS:

Substances, other than Corrosives, which cause a reversible inflammatory effect on living tissue by chemical action at the site of contact.

### SENSITIZERS:

Substances, which cause an allergic reaction in normal tissue after, repeated exposure.

## Hazardous Materials Management System

### AEROSOL:

Is a product, which is dispensed from an aerosol container, other than a rim-vented container, by a propellant.

### AEROSOL CONTAINER:

Is a metal can, up to a maximum size of 4 fluid ounces that is designed to dispense an aerosol product.

### AEROSOL WAREHOUSE:

Is a building used for warehousing aerosol products.

### BASE PRODUCT:

Is the contents of an aerosol container excluding the propellant. A base product is considered flammable if its closed- cup flash point is below 300 degrees F.

### CLASSIFICATION OF AEROSOLS

PROPELLENT	FLAMMABLE CONSTITUENTS IN BASE PRODUCT (percentage)	CLASSIFICATION LEVEL
Nonflammable	$\leq 25$ and Non-water Soluble	1
Nonflammable	$\leq 85$ and Water Soluble	1
<50 Flammable	$\leq 25$	1
$\geq 50$ to < 80 Flammable	$\leq 25$	2
$\geq 80$ Flammable	$\leq 25$	3
Nonflammable	>85 and Water Soluble	2
<50 Flammable	>25 and Water Soluble	2
$\geq 50$ Flammable	>25 and Water Soluble	3
Nonflammable	>25 to $\leq 55$ and Non-water Soluble	2
<50 Flammable	>25 to $\leq 55$ and Non-water Soluble	2
$\geq 50$ Flammable	>25 to $\leq 55$ and Non-water Soluble	3
Nonflammable or <80 flammable	>55 and Non-water Soluble	3
$\geq 80$ Flammable	<20 and Water or Non-water Soluble	3

Fire Symbols and Hazard Classification Symbols may copied and pasted from the Web Page Menu Area, by selecting Symbols from Resources Area

## Hazardous Materials Management System