OSEH’s/UM’s Chemical Inventory Tracking System

“An EHSA Software Infomercial” . . .
Environmental Health & Safety Assistant

ON SITE SYSTEMS, INC
23 N. GORE • SUITE 200 • ST. LOUIS, MO 63119 314-963.9934
Hot Topics

30-Day Public Comment Period Commences for Institute for Social Research Expansion

The University of Michigan announces a 30-day Public Comment Period beginning June 16, 2011, for the construction of an addition to the Institute for Social Research (ISR) Facility at 425 Thompson Street in Ann Arbor, Michigan. An Environmental Assessment (EA) has been prepared to analyze the potential environmental impacts that could result from the proposed expansion of the ISR Facility. Click here to view the EA.

The University of Michigan is currently seeking comments to be considered prior to the finalization of the EA. Written comments may be sent to: Valerie Nottingham, 9000 Rockville Pike, Bldg 13, Room 2S11, Bethesda, Maryland 20892, or by email at nih-neps@mail.nih.gov. Written comments will be accepted during the public comment period up to close of business on July 15, 2011.

Report a Safety Concern

734.647.1143 OFFICE HOURS: 7:30am - 4:30pm

After hours emergency contact through Department of Public Safety at 734-763-1131 or from a campus phone 911.
Chemical Safety

Chemical Inventory

Each Chemical Hygiene Officer (CHO) or Principal Investigator (PI) is required to maintain a current inventory of all potentially hazardous chemicals stored, used, or produced within each laboratory that is under their responsibility. The laboratory’s chemical inventory list should be updated on an annual basis, or more often if warranted. OSEH has a chemical inventory system available to assist laboratories in maintaining their inventories called Environmental Health and Safety Assistant (EHSA).

The EHSA chemical inventory system is a web-based, online, limited access database that is used to maintain inventories of chemicals in UM research laboratories. This system is maintained on a secure internet server and is an easy to use, long-term, convenient way for researchers to maintain their inventories, generate various built-in inventory reports and export data to Excel.

Inventory that are maintained in other systems, e.g., Excel, Access, etc., can also be uploaded into the EHSA for subsequent use, by contacting OSEH for more information. After an inventory has been uploaded into the EHSA, it can be used exclusively for chemical inventory maintenance and report generation, rather than the previous system used.

The EHSA system is also used to facilitate UM’s compliance with the U.S. Department of Homeland Security (DHS)’s Chemical Facility Anti-Terrorism Standards (CFATS). The CFATS are the DHS’ regulations governing security at high-risk chemical facilities to prevent the intentional misuse of certain Chemicals of Interest (COIs) by sabotage, theft, diversion, or direct attack.

Each PI or designee using the EHSA system can only access the inventory and data applicable to their own laboratories. However, certain OSEH personnel have access to all data in order to maintain the system and to enable compliance with the CFATS and other regulatory/institutional requirements.

Changes in DHS’ COIs need to be entered into the EHSA within 60 days of a chemical inventory change. At a minimum, this inventory should be updated annually. Although, many researchers choose to update their inventories quarterly, monthly, or weekly depending on the frequency of new purchases and their use of each chemical.

Click here to obtain a Username (which will be your UM uniqname) and a temporary Password to gain access to the EHSA.

- EHSA Instructions
- EHSA Summary of Capabilities
- EHSA User Survey

WHERE TO GO IN THE EVENT OF AN INJURY

Occupational Health Services
(734) 764-8021
Clinic Location

After regular business hours:
U-M Emergency Department

HOW TO REPORT AN INJURY/ILLNESS

U-M Work Connections: Injury/ILLNESS Form
(734) 615-3643
Email this form to get a Username & Password!

Please supply the following information in order to obtain your user login information to access OSEH's EHSA Chemical Inventory tracking software.

After completing the form, click on the “Email Form” button on the bottom.

PI & Employee Name: ____________________________ Date: ____________
UM’s Uniqname: ________________________________ UMich ID No.: ________________________________
Job Title: ____________________________ Department: ____________________________
Building: ____________________________ Room Number(s): ____________________________
Work Phone: ____________________________ Campus Address: ____________________________
Laboratory Phone: ____________________________ Email Address: ____________________________

Comments:

After receiving and processing the information supplied, login information (a Username & a temporary Password) will be emailed to the email address provided, typically within 1-2 business days. Use this information to access the chemical tracking software, after changing the temporary Password provided.

For more information about the software, visit OSEH’s webpage (http://www.oseh.umich.edu/) and click on the Chemical Inventory link under the Quick Link topics.

Contact OSEH’s Elizabeth O’Jack at (734)-418-0532 (lojack@umich.edu) or Rick Wasalaski at (734)-763-3594 (rwasalas@umich.edu) should you have any questions.

Thank you!

EMAIL FORM

NOTE: If you have opened this form with a browser other than Internet Explorer, clicking on the EMAIL FORM button may not result in the form being emailed. (A confirmation message should appear after clicking on the EMAIL FORM button.)

If a confirmation message is not displayed, please save a completed form, then send it as an email attachment.
• If you are using a browser other than Internet Explorer ("IE"), e.g., Safari, Firefox, Google Chrome, etc., the PDF form may be opened in the browser’s built-in, “PDF Viewer”, rather than opening the document in Adobe Acrobat or Adobe Professional.

• If the EHSA Access Request form is opened in a PDF Viewer, the Email Form function may not work. Therefore, please email a completed form as an attachment to an email.

• Alternatively, built-in, PDF Viewers for browsers can usually be turned off to allow Adobe Acrobat or Adobe Professional to open the PDF document.
What is Environmental Health & Safety Assistant (EHSA)?

- An **online**, **web-based**, **secure**, **limited access** chemical inventory database that is used to maintain inventories of chemicals in UM **research laboratories**.

What is the purpose of an online chemical inventory?

- The OSEH will use it to facilitate UM compliance with DHS’ Chemical Facility Anti-Terrorism Standards (CFATS), i.e., OSEH will be able to determine the DHS’ Chemicals of Interest (COI) chemicals, their locations & quantities.

- The CFATS are the DHS’ regulations governing security at high-risk chemical facilities to prevent the intentional misuse of certain chemicals by sabotage, theft, diversion, or direct attack.

- OSEH may also use it for emergency response personnel during emergency incidents on campus.

  - **For these reasons, it is essential for UM faculty and staff to maintain up-to-date chemical inventories in the EHSA.**

- UM researchers can coordinate the use and storage of their chemicals which should assist with their HazCom/CHP compliance, chemical ordering, chemical “trading”, etc.
Is the information secure?

- **YES!** The EHSA is maintained on a secure internet server.

- Each Principal Investigator (PI) or designee will have write access to the inventory and data applicable only to their own laboratory.

- Additional logins can be created for others to have read-only access.

- Certain OSEH personnel have access to all data to maintain the system and facilitate compliance with the CFATS and other regulatory/institutional requirements.
How and when should changes to DHS Chemicals of Interest be reported?

• **Changes in DHS Chemicals of Interest need to be entered in the EHSA within 60 days of a chemical inventory change.**

• *At a minimum, the inventory should be updated annually.* Many researchers choose to update the inventories quarterly, monthly or weekly depending on the frequency of new purchases and their use of each chemical.
Why should I use the EHSA rather than my existing system(s)?

- Access & use of the EHSA is **FREE** *(no cost to YOU)* so Dept. money is not used for future software purchases or upgrades.

- The web-based system allows the **FLEXIBILITY** of multiple user logins with different data read/write accesses.

- It’s **EASY** to use with built-in data sorting, searching, PDF report generation & Excel data exports.

- The software is **POWERFUL** so multiple users can access data concurrently.

- Web-based means the **CONVENIENCE** of accessing your data from *any* computer on UM’s network.
And ...

- Web-based means it’s **COMPATIBLE** with PCs & Macs and most web-browsers.

- Can be **CUSTOMIZED** for UM’s particular work-flow & needs.

- Data entry, locating records & inventory updates are **FAST** resulting in significant time savings.

- EHSA is **ROBUST** by offering MSDS support in multiple ways e.g., web links, auto-populated Google web searches & data/file associations.

- Is **BPA-free** and not a Microsoft product!
Anything else?

- Web-based = no software to install or update and no hard disk space needed. Simply login & begin using.

- OSEH staff is available to demo, support & provide personal on-site training to staff.

- Users with read-only access to other Department’s chemical inventory(ies) could use it for “chemical trading/borrowing” activities thus saving money by not ordering chemicals unnecessarily.

- Information is backed-up daily so the potential loss of data greatly reduced.

- Inventories that are maintained in other systems, e.g., Excel, Access, etc., can also be uploaded into the EHSA for subsequent use, by contacting OSEH for more information.
Important software information!

Environmental Health & Safety Assistant Login

Username
Password
Change Password
Forgot Username and/or Password?

Message
Software Updates & Other Announcements ...
06/13/11:
* Added the field "Order Date" within Chemical Inventory record so this date can be used for filtering purposes.
* Any & all MSDS links to JT Baker MUST be changed & linked to Avantor Materials MSDS website in order to keep them valid.
* Updated User instructions documentation.
* Added new inventory reports & updated existing reports with "Number of Records" value.

04/07/11:
* Added a link on the Chemical Inventory screen
Total # of chemicals in current inventory: 7

Appendix A listed chemicals are highlighted in Tan.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Inventory #</th>
<th>CAS #</th>
<th>Type</th>
<th>Quantity</th>
<th>Unit</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,4-Dioxane</td>
<td>0103628</td>
<td>123-91-1</td>
<td>Liquid</td>
<td>4</td>
<td>gal</td>
<td>Central Campus</td>
</tr>
<tr>
<td>75% Phosphoric Acid</td>
<td>0103635</td>
<td>7664-38-2</td>
<td>Liquid</td>
<td>1</td>
<td>L</td>
<td>Central Campus</td>
</tr>
<tr>
<td>Acetone</td>
<td>0103631</td>
<td>67-64-1</td>
<td>Liquid</td>
<td>25</td>
<td>gal</td>
<td>Central Campus</td>
</tr>
<tr>
<td>Ammonia</td>
<td>0103630</td>
<td>7664-41-7</td>
<td>Gas</td>
<td>3</td>
<td>kg</td>
<td>Central Campus</td>
</tr>
<tr>
<td>Dihydrogen monoxide</td>
<td>0103626</td>
<td>7732-18-5</td>
<td>Liquid</td>
<td>2</td>
<td>gal</td>
<td>Central Campus</td>
</tr>
<tr>
<td>Formaldehyde, 37% solution</td>
<td>0103634</td>
<td>50-00-0</td>
<td>Liquid</td>
<td>1</td>
<td>L</td>
<td>Central Campus</td>
</tr>
<tr>
<td>Water, demineralized/deionized/distilled</td>
<td>0103627</td>
<td>7732-18-5</td>
<td>Liquid</td>
<td>10</td>
<td>gal</td>
<td>Central Campus</td>
</tr>
</tbody>
</table>
### Editing Chemical

**Chemical not found? Click here.**

- **Search by CAS #**
- **Search By Chemical Description**

#### Required Fields
- Chemical Name: 1,4-Dioxane
- Physical State: Liquid
- Total # of Containers: 5
- Total Quantity: 5 gal

#### Supplemental Chemical Information
- Building Name: Campus Safety & Security Building
- Room #: 1505

#### Vendor Information
- **CAS #**: 123-91-1
- **Vendor**: [Vendor Information]
- **Catalog #**: [Catalog Information]

#### Contact Information/Comments
- **Contact**: [Contact Information]
- **Contact E-Mail**: [Contact E-Mail]

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**Max. total quantity in all containers.**

**MUST also be a valid CAS No.**

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**Actions:**
- **Save & Add Another Chemical**
- **Save/Return**
- **Cancel**
Reports can be generated as a PDF or as Excel spreadsheets.
Does this system have Material Safety Data Sheets (MSDS) capabilities?

The system has the following capabilities:

1. Users can click on field that launches the default web browser & does a pre-filled Google search for an MSDS for the particular chemical record you have open that includes the vendor’s name (default vendor = “JT Baker” if not known).

2. The online (web) MSDS location (URL) for an MSDS (for a particular Chemical + Vendor combination) can be associated to an inventory record, e.g., Fisher’s Acetone MSDS.

3. Users can manually note/associate the storage location(s) of the MSDS & Expiration Date for a particular chemical record as well as other MSDS elements, e.g., NFPA/HMIS rankings, Flash Point, Health Hazards, PPE, etc.
Example pre-populated, auto-launched MSDS search.
Additional, MSDS functionality ...

1. Users can click on a field that will open a PDF version of an MSDS that has been previously scanned by the user.

2. The ChemWatch / ChemGold III (online MSDS database) program can be launched.
<table>
<thead>
<tr>
<th>TRACK</th>
<th>PART NO.</th>
<th>DOCUMENT NAME</th>
<th>VENDOR</th>
<th>TYPE</th>
<th>LANG</th>
<th>CTRY</th>
<th>SRC</th>
<th>ISSUE DATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>✓</td>
<td></td>
<td>Acetone</td>
<td>Fisher Scientific</td>
<td>MSDS</td>
<td>EN</td>
<td>USA</td>
<td>S</td>
<td>1997-02-27</td>
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<td>USA</td>
<td>S</td>
<td>2006-04-25</td>
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<td>Fisher Scientific (Pierce</td>
<td>MSDS</td>
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<td>2008-02-28</td>
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<tr>
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<td></td>
<td>acetone</td>
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<td>MSDS</td>
<td>EN</td>
<td>USA</td>
<td>S</td>
<td>1995-12-06</td>
</tr>
<tr>
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<td>Acetone</td>
<td>Fisher Scientific</td>
<td>MSDS</td>
<td>EN</td>
<td>USA</td>
<td>S</td>
<td>2009-04-28</td>
</tr>
<tr>
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<td>acetone</td>
<td>Fisher Scientific (Acros</td>
<td>MSDS</td>
<td>EN</td>
<td>USA</td>
<td>P</td>
<td>2009-09-22</td>
</tr>
<tr>
<td>✓</td>
<td></td>
<td>Acetone</td>
<td>Fisher Scientific (BioLab)</td>
<td>MSDS</td>
<td>EN</td>
<td>AUS</td>
<td>S</td>
<td>2007-08-01</td>
</tr>
</tbody>
</table>
Currently ...

• We have ~ **150** users (PIs & alternates).
  “Happy customers”

• Representing ~ **50** different Departments.

• Representing **35** different buildings.

• Approximately **12,400** distinct chemicals (not including chemical synonyms) & more added weekly.
HAPPINESS IS ...

... new-n-improved chemical tracking software!
QUESTIONS?!?!