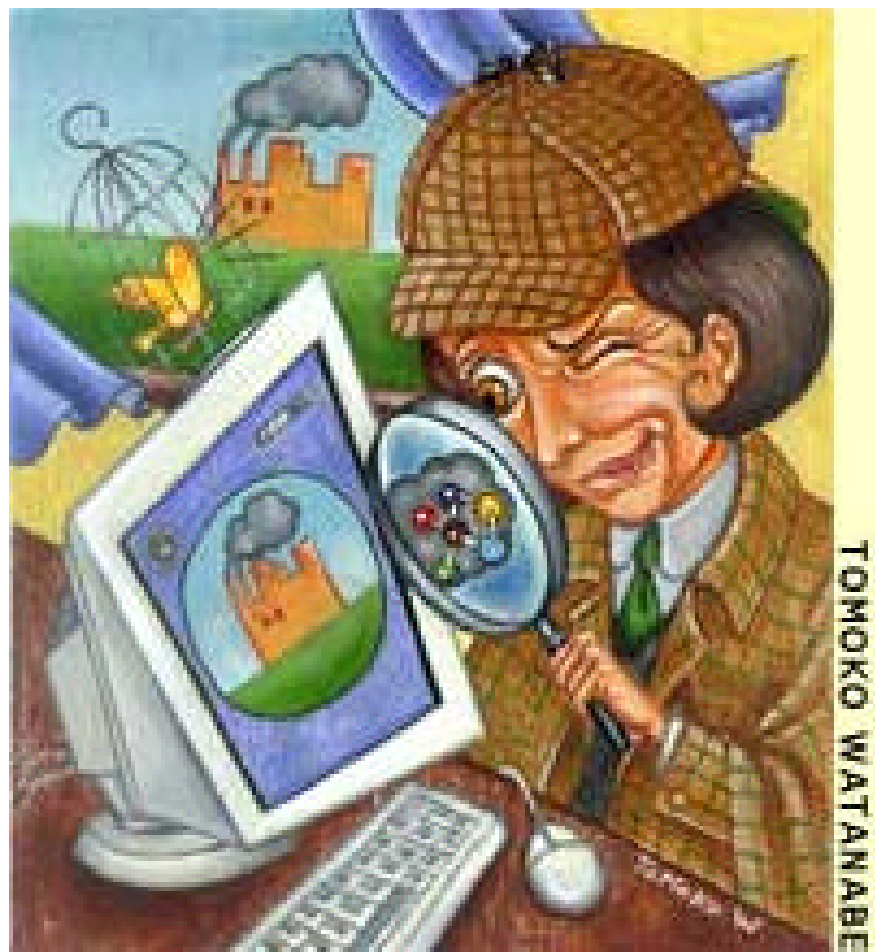




Researching Health, Safety and Environment on the Internet



**UAW Health & Safety
Conference
Walter and May Reuther
Family Education Center
March 18-23, 2001**

Internet for Health and Safety

Small Group Activity Method

This class uses a training technique called the Small Group Activity Method (**SGAM**). The method is designed to allow groups to solve real-life problems, building on their skills and experiences. The SGAM method is a self paced “LEARNING BY DOING” approach to education.

Small group discussion

The idea is to work together on an assigned task, using each other’s experiences to resolve problems and make judgments on key issues. Part of the task involves reading from fact sheets to develop an opinion on an issue.

Reporting back

For each task, the group selects a different person as a reporter whose job is to take notes on the small group discussion and report back to the class as a whole. The facilitator records these reports on a flipchart in a place where everybody can see and refer to it. The report back should help to generate discussion between different groups who may have solved the same problem in a different way.

The Instructor will divide the class into teams, and assign each team a computer and a set of questions to answer.

The Purpose

- **Introduce participants to the UAW's Health Safety and Environment Resource web Site**
- **Use various internet sites to profile company environmental records,**
- **Learn how to search for OSHA Compliance History**
- **Learn how to research chemical Health effects on the web.**

Task 1

Participants will review photographs and fact sheets and then use the internet to answer the following questions. Each team should take turns using the computer. One team member should chart answers on flip chart paper. One team member should review fact sheets in this booklet for helpful information.

Scenario:

For the last three years you have worked in a spray booth where you do the final touch up on bumpers that are painted in a robotic spray booth. Occasionally you have felt dizzy when using purge solvents to clean equipment. You have a rash on your hands that comes and goes. You have volunteered to be member of the health and safety committee and are just beginning to investigate the health and safety concerns of workers in your department. Your first stop is the UAW website. Your health and safety committee brainstorms on questions then divides up to find the answers.

Answer the following questions on the following pages. Chart your answers on Flip Chart Paper

Team 1: Toxic Chemical Spills

Workers are concerned about spills that have occurred in the paint kitchen [right]. One worker gets a rash whenever he is required to clean up a spill. Several others have had to go outside for fresh air to clear their heads. Many have gotten headaches. To clean up spills workers are provided with gloves. The closed loop recycling system has a 500 gallon holding tank that overflows occasionally. Workers are also concerned about the way hazardous waste is stored in this area.



1. What chemicals does the company report released to the Air, Land and Water? Use the format below to create your chart. Search on the standard report form on RTK NET (see Fact Sheet 1)
2. What chemicals are stored on site and how much is stored? Check out the Maximum Amount on site on RTK NET standard report. (see Fact Sheet 1)

Chemical	Air Release (lbs)	Land	Water	Storage

3. What does ERNS stand for? Use Fact Sheet 2. to find the ERNS Search engine on RTKNET.

3a) If you look up Textron information using the ERNS Database no information is on file. Why do you think this is the case?

3b Look up another facility in ERNS and be prepared to report back what you found.

4. What does ARIP stand for? Use Fact Sheet 3 to answer this question.

4.b) Look up your own zip code using the ARIP Database.. Use the Geographic Area search engine.

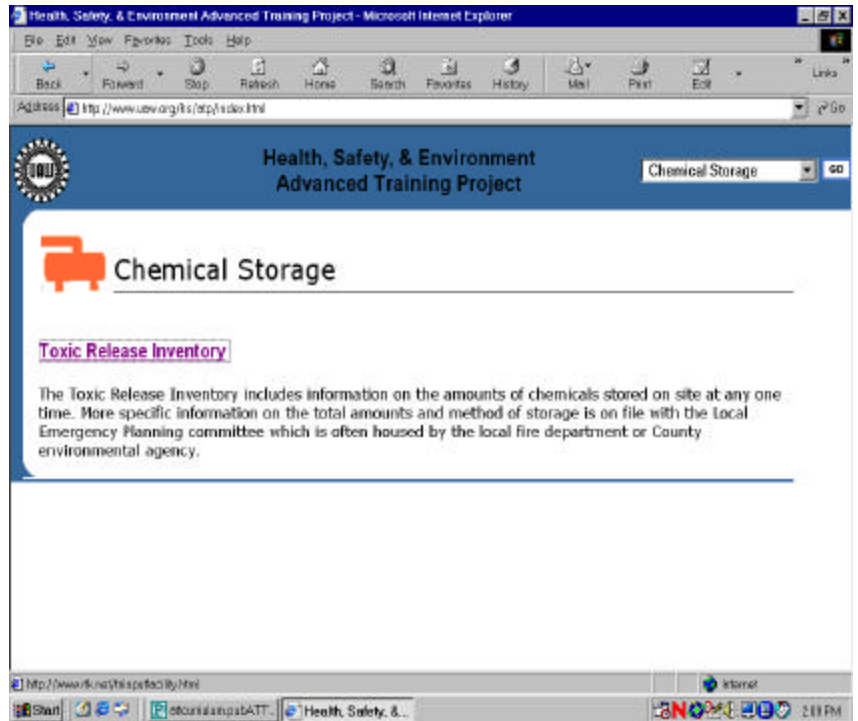
5. What kinds of hazardous wastes are generated at Textron from the paint department? Check out the RCRA hazardous waste report using BRS data base on RTK NET.

6. Could any of the hazardous waste listed be eliminated at the source? Search the EPA site called SAGE for alternative methods for cleaning spray booths. Report back what you found.

FACT SHEET 1: Reports on Storage and Releases

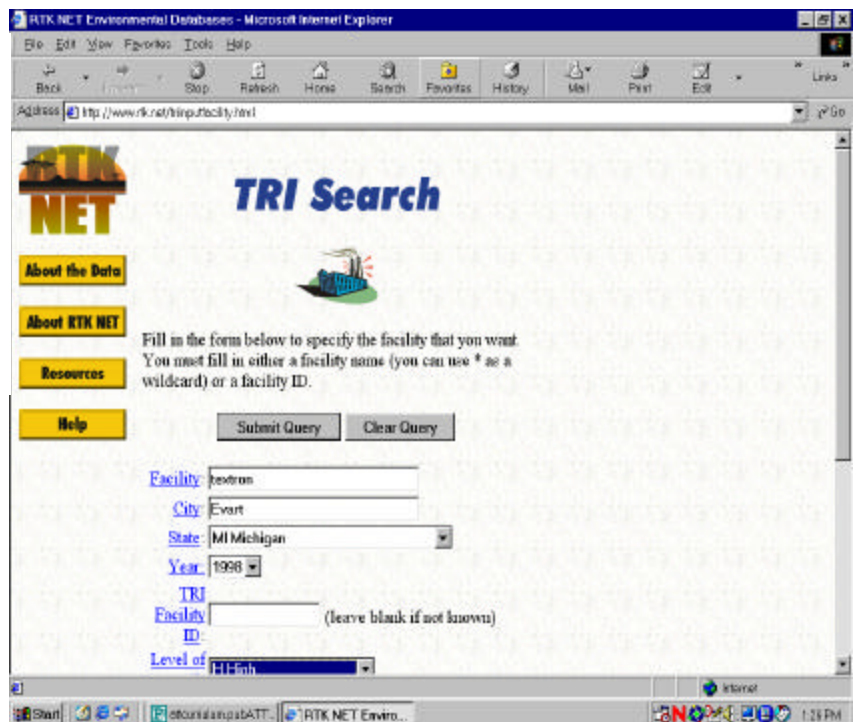
STEP 1
CLICK ON CHEMICAL
STORAGE

STEP 2
CLICK ON Toxic Release
Inventory



STEP 3
TYPE IN the FACILITY
INFORMATON SHOWN

CLICK SUBMIT QUERY
BUTTON



FACT SHEET 1 Reports on Toxic Releases

STEP 4 FACILITY REPORT

Use this report to determine what types of chemicals are released to the environment.

There is also storage information listed on this form.

The screenshot shows a web browser window titled "Health, Safety, & Environment Advanced Training Project - Microsoft Internet Explorer". The address bar shows "http://www.ewg.org/hsa/faq/index.htm". The page has a blue header with the title "Health, Safety, & Environment Advanced Training Project" and a dropdown menu for "Accidental Releases". The main content area is titled "Facility Report (TRI data)". On the left, there is a sidebar with links: "About the Data", "About RTK NET", "Resources", and "Help". The main content area displays search results for "TEXTRON*" in "EVART", "MI", with "TRI Facility ID: ALL", "Year: 1998", "Database type: Current (last updated 5/10/2000)", "Level of Detail: Summary", "Output Type: Text", and "Sort Order: Facility name". Below this, a paragraph states: "This search was taken from RTK NET's (the Right-To-Know Network)'s copy of EPA's TRIS database. RTK NET is run by OMB Watch at 1742 Connecticut Ave., NW, Washington DC, 20009 - Phone: 202-234-8494 (hours 9:00 AM -- 6:00 PM EST) The search was done on 03/14/2001." The bottom of the page shows a taskbar with several open applications and a system clock showing 2:01 PM.

Health, Safety, & Environment Advanced Training Project - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Refresh Home Search Favorites History Mail Print Edit Links

Address http://www.ewg.org/hsa/faq/index.htm

Go

Health, Safety, & Environment Advanced Training Project

Accidental Releases

Facility Report (TRI data)

search used-

Facility name: TEXTRON*

City: EVART

State: MI

TRI Facility ID: ALL

Year: 1998

Database type: Current (last updated 5/10/2000)

Level of Detail: Summary

Output Type: Text

Sort Order: Facility name

About the Data

About RTK NET

Resources

Help

This search was taken from RTK NET's (the Right-To-Know Network)'s copy of EPA's TRIS database. RTK NET is run by OMB Watch at 1742 Connecticut Ave., NW, Washington DC, 20009 - Phone: 202-234-8494 (hours 9:00 AM -- 6:00 PM EST) The search was done on 03/14/2001.

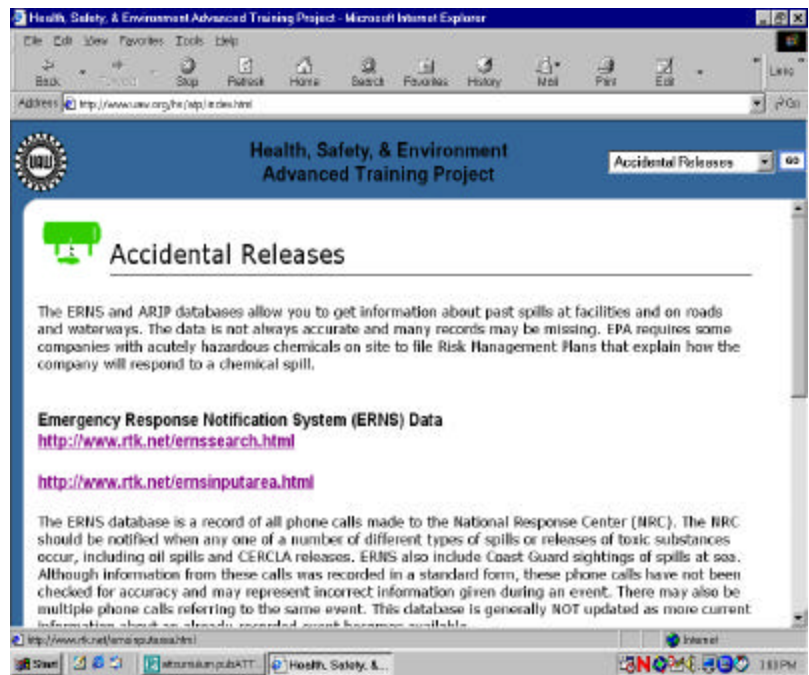
Internet

2:01 PM

FACT SHEET 2: Emergency Response Notification System (ERNS)

STEP 1

The UAW web page contains a links page for spills . Select the link for the ERNS database.



Use the ERNS search to find spill histories by plant or geographic area.

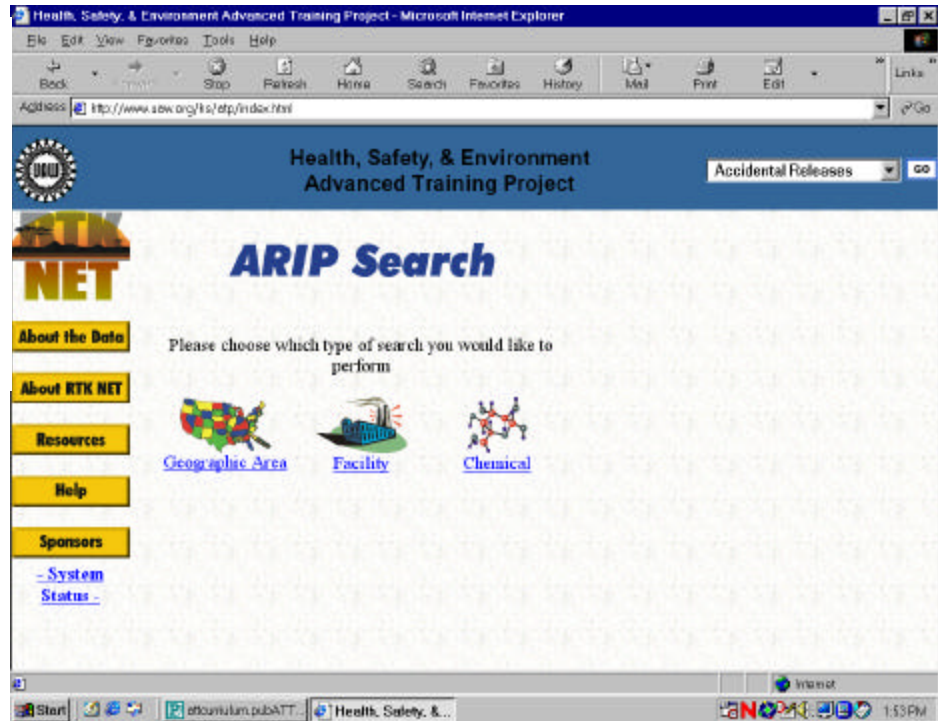


Below is an example of a search for Spill information from Textron. No information was found.

FACT SHEET 3: Accidental Release Information Program (ARIP)

QUESTION 3

From the UAW web site find ARIP link back to RTKNET



FACT SHEET 4: Hazardous Waste Generation

STEP 1 CLICK ON HAZARDOUS WASTE TRANSFERS

STEP 2 CLICK ON BRS FACILITY SEARCH



FACT SHEET 4 (cont.)

STEP 3
FILL IN THE FACILITY
INFORMATION FOR THIS
PLANT. CLICK SUBMIT
SEARCH

THIS REPORT WILL TELL
YOU WHAT SORTS OF
HAZARDOUS WASTES ARE
GENERATED AT THIS PLANT.

The screenshot shows a web browser window titled "Health, Safety, & Environment Advanced Training Project - Microsoft Internet Explorer". The address bar shows "http://www.uow.org.au/http/index.html". The page has a blue header with the title "Health, Safety, & Environment Advanced Training Project" and a "Select Category" dropdown menu. On the left, there are yellow buttons for "About RTM NET", "Resources", and "Help". The main content area contains a search form with the following fields and options:

- Facility:** Text input field containing "Bedtron".
- City:** Text input field containing "Ewart".
- State:** Dropdown menu showing "MI Michigan".
- Year:** Dropdown menu showing "ALL".
- EPA Facility ID:** Text input field.
- Level of Detail:** Dropdown menu showing "H-HBN".
- Output Type:** Dropdown menu showing "T Text".

There are two "Submit Query" and "Clear Query" buttons, one above and one below the form fields. The Windows taskbar at the bottom shows the Start button, several open applications, and the system clock displaying "10:58 AM".

Team 2: Chemical Information



You decide that you need more information on the chemicals used in the spray booth. You review the MSDS sheet for the purge solvents and the spray paint. The spray paint contains melamine formaldehyde and the purge solvent includes xylene and toluene. Answer the following questions with additional information from the Internet.

1. What studies can you find on the health problems of spray painters on Medline? Go to the National Library of Medicine (NLM) and use spray painters in the search. (See fact sheet 5).

2. What are the acute (short term) health effects of toluene exposure? Check the National Library of Medicine's Hazard Substance Data Base. Use "spray paint" as a key word. (Fact sheet 6)

3. What are the environmental impacts of toluene? (check out the NLM HSDB on fact sheet 6)

4. Several types of gloves are used in the spray booth supply cabinet. What personal protective equipment is recommended for booth cleaning operations? Does the New Jersey Department of Health recommend latex gloves for protection?



5. What does NIOSH say about rashes? Check the NIOSH homepage where health topics are listed alphabetically. Check the NORA site on the NIOSH page (See fact sheet 8)

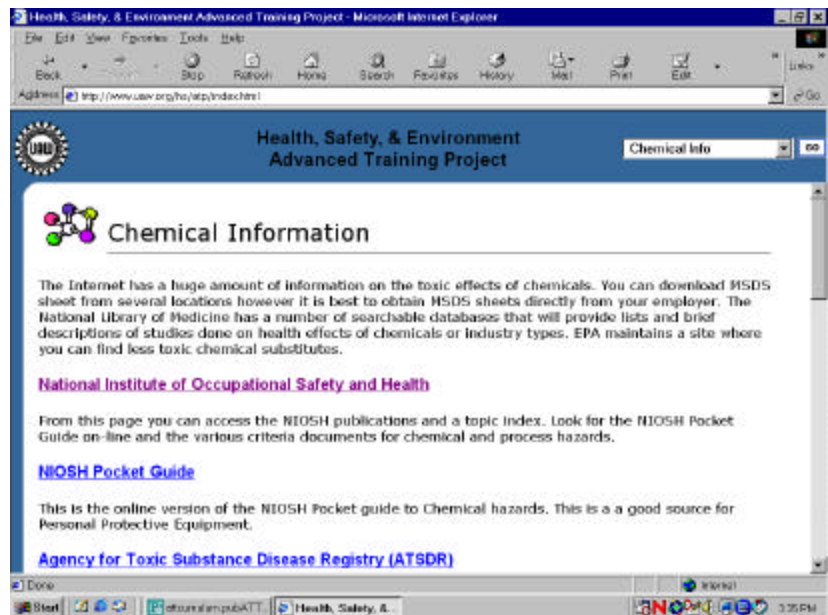
6. How would you request a NIOSH Health Hazard Evaluation on Line?

FACT SHEET5: National Library of Medicine Finding The Latest Studies

STEP 1
CLICK ON CHEMICAL INFORMATION

STEP 2
CLICK ON MEDLINE –THIS DATABASE CONTAINS ABSTRACTS FROM BIOMEDICAL JOURNALS

STEP 3
CLICK ON MEDLINE

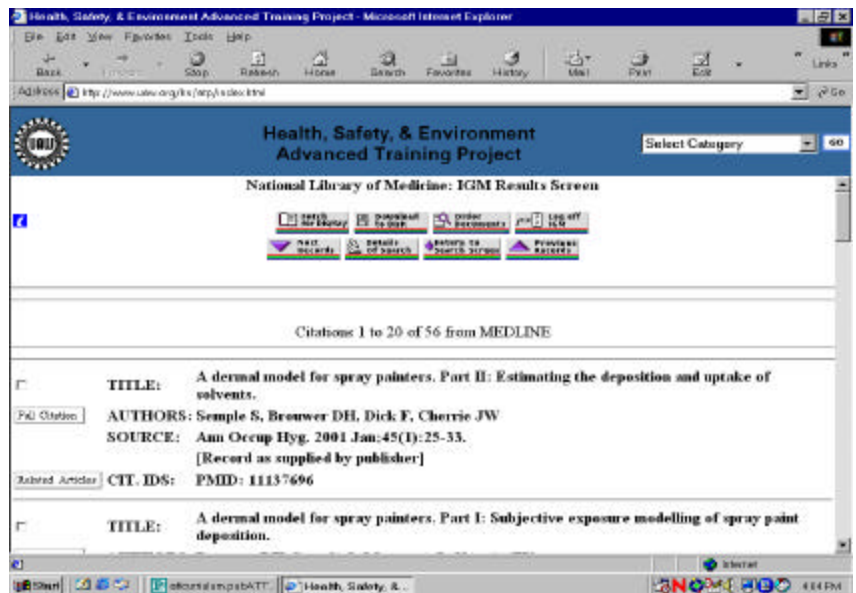


FACT SHEET 5 (cont)

STEP 4
TYPE IN SPRAY PAINTERS
AND HIT ENTER



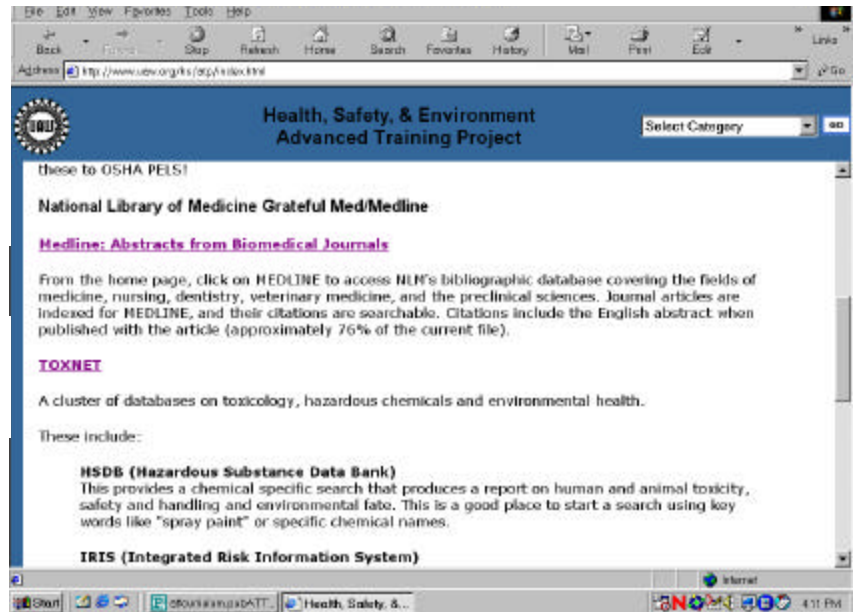
STEP 5
CONGRADULATIONS
YOUR HAVE SUCCEEDED
GOOD LUCK ON YOUR NEXT
QUESTION



FACT SHEET 6: National Library of Medicine Toxnet

STEP 1
CLICK ON
CHEMICAL
INFORMATION

STEP 2
CLICK ON TOXNET



STEP 3
FROM SPECIALIZED INFO
SERVICE SCREEN (SIS)

CLICK ON THE BLUE BOX
“TOXNET”



Fact Sheet 6 (CONT)

STEP 4 CLICK ON HSDB

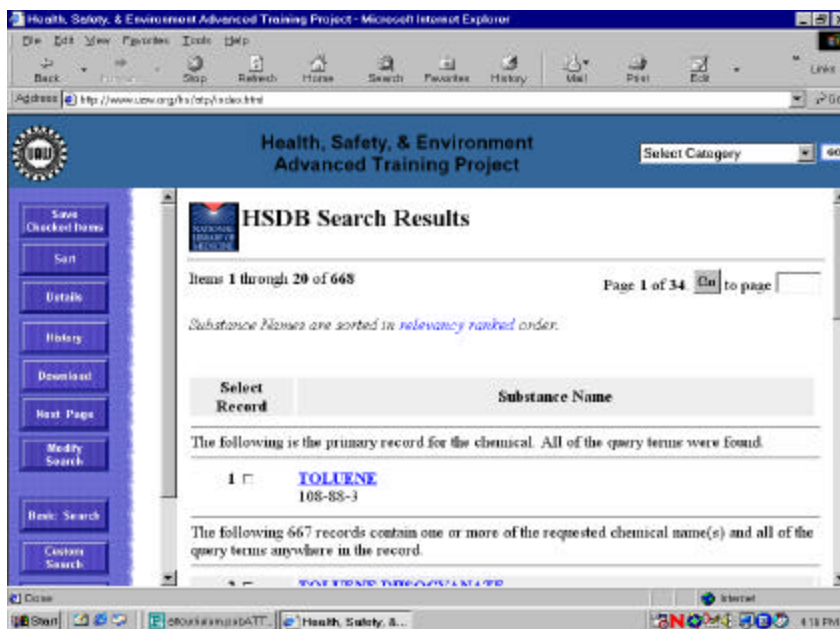


STEP 5 TYPE IN THE CHEMICAL NAME TOLUENE CLICK ON SEARCH

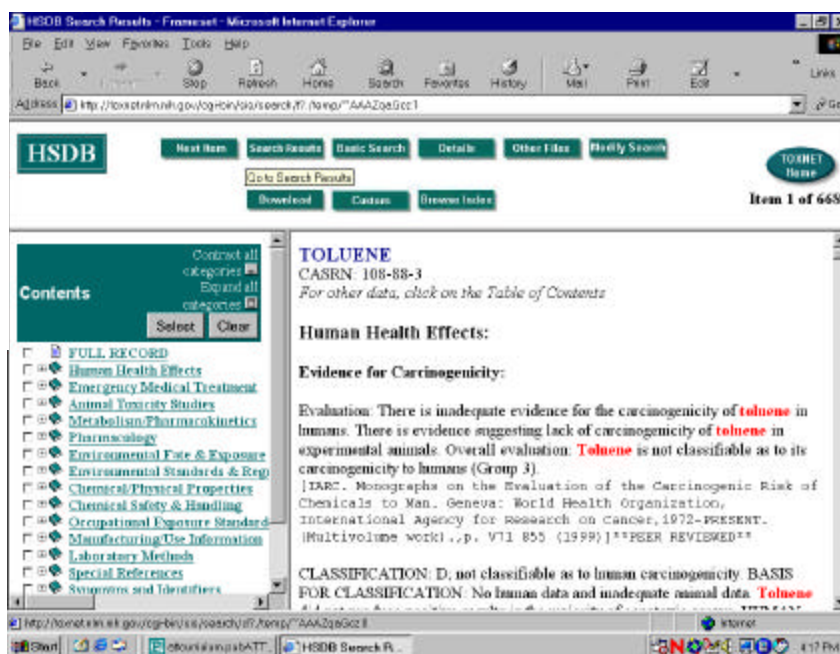


Fact Sheet 6 (CONT)

STEP 6 CLICK ON TOLUENE



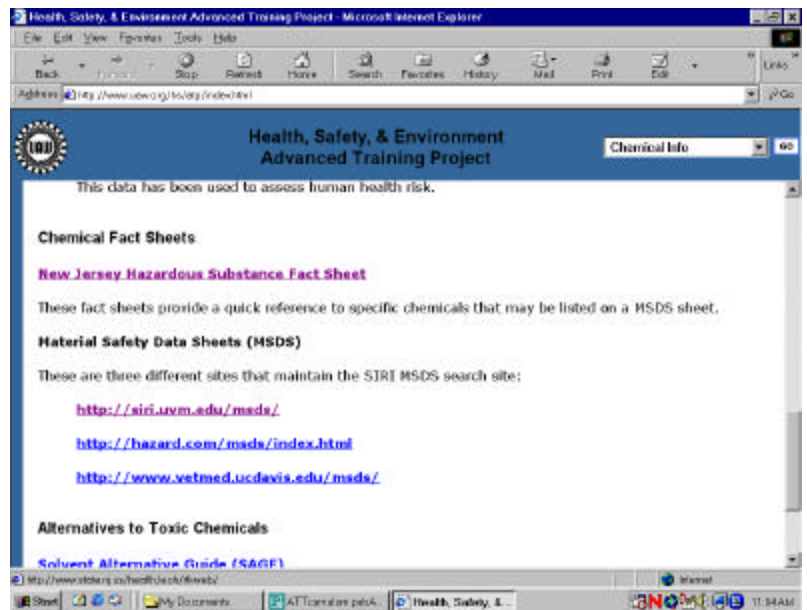
STEP 7 LOOK UNDER "CONTENTS" FOR THE INFORMATION ON THIS CHEMICAL, INDEXED BY TOPIC. CLICK ON ENVIRONMENT OR HUMAN HEALTH



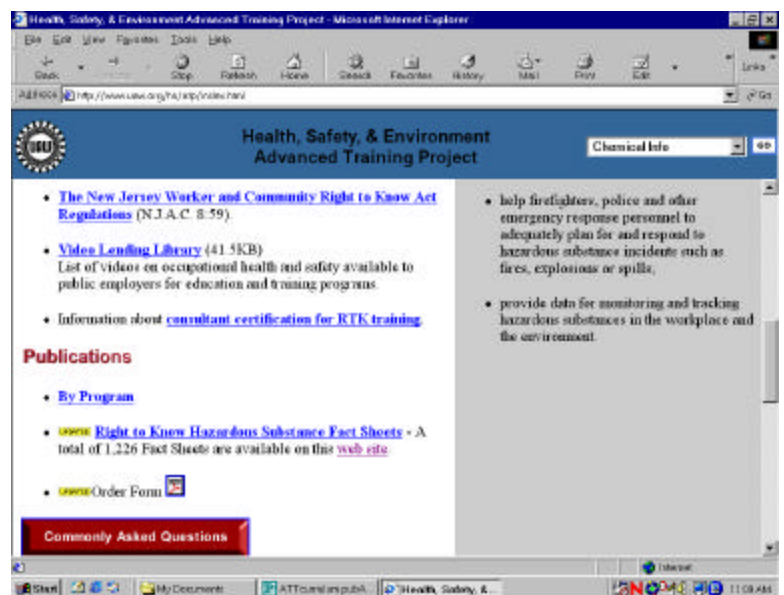
Fact Sheet 7 New Jersey Fact Sheets

STEP 1
CLICK ON
CHEMICAL INFORMATION

STEP 2
CLICK ON NEW JERSEY
HAZARDOUS SUBSTANCE FACT
SHEET

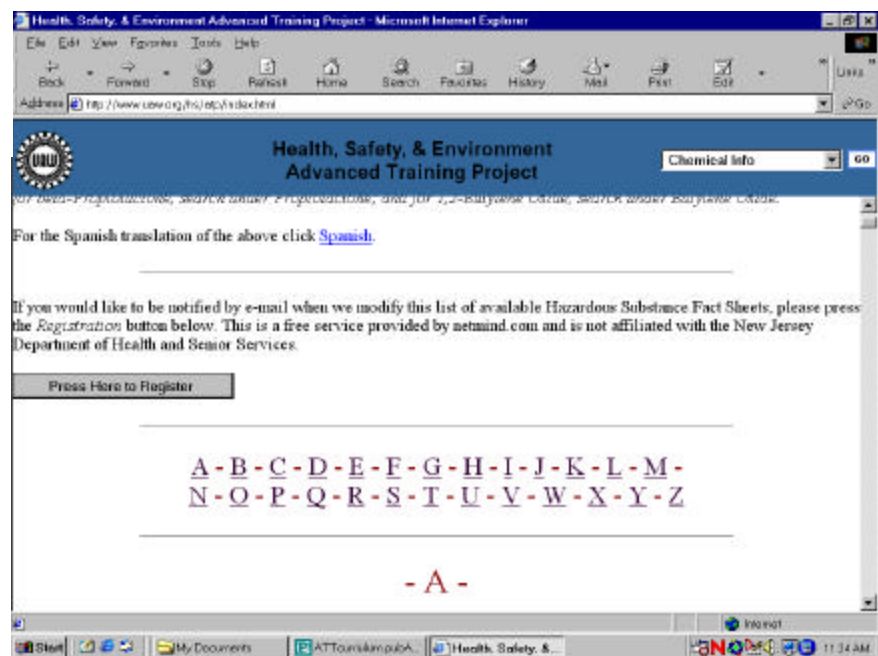


STEP 3
CLICK ON
RIGHT TO KNOW HAZARDOUS
SUBSTANCE FACT SHEET



Fact Sheet 7 (CONT)

STEP 4
CLICK ON THE LETTER T
FOR TOLUENE



STEP 5
CLICK ON TOLUENE
FOR FACT SHEET

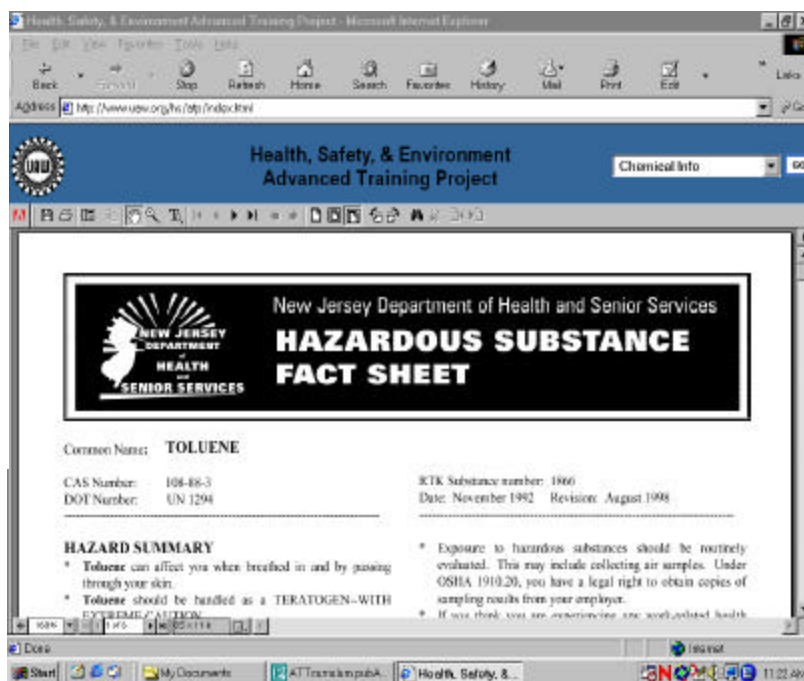
The screenshot shows a web browser window with the URL <http://www.ow.org/hsa/ats/index.html>. The page title is "Health, Safety, & Environment Advanced Training Project". Below the title, there is a search bar labeled "Chemical Info" and a "GO" button. A table of hazardous substances is displayed. The row for Toluene is highlighted.

Index	Chemical Name	Date	Link
1859	7646-78-8	November, 1998	TIN TETRACHLORIDE
1861	13463-67-7	August, 1998	TITANIUM DIOXIDE
1861sp	13463-67-7	September, 2000	DIOXIDO DE TITANIO (spañol)
1864	7550-45-0	June, 2000	TITANIUM TETRACHLORIDE
1866	108-88-3	October, 1998	TOLUENE
1869	584-84-9	September, 1997	TOLUENE 2,4-DIISOCYANATE
1869sp	584-84-9	October, 1999	2,4-DIISOCIANATO DE TOLUENO
1868	91-08-7	September, 1997	TOLUENE 2,6-DIISOCYANATE
1868sp	91-08-7	September, 2000	TOLUENO 2,6-DIISOCIANATO
1870	25231-46-3	August, 1997	TOLUENE SULFONIC ACID

Fact Sheet 7 (CONT)

STEP 6 CONGRATULATIONS!

DOES THE FACT SHEET GIVE
YOU INFORMATION ABOUT
SKIN CONTACT WITH
TOLUENE?

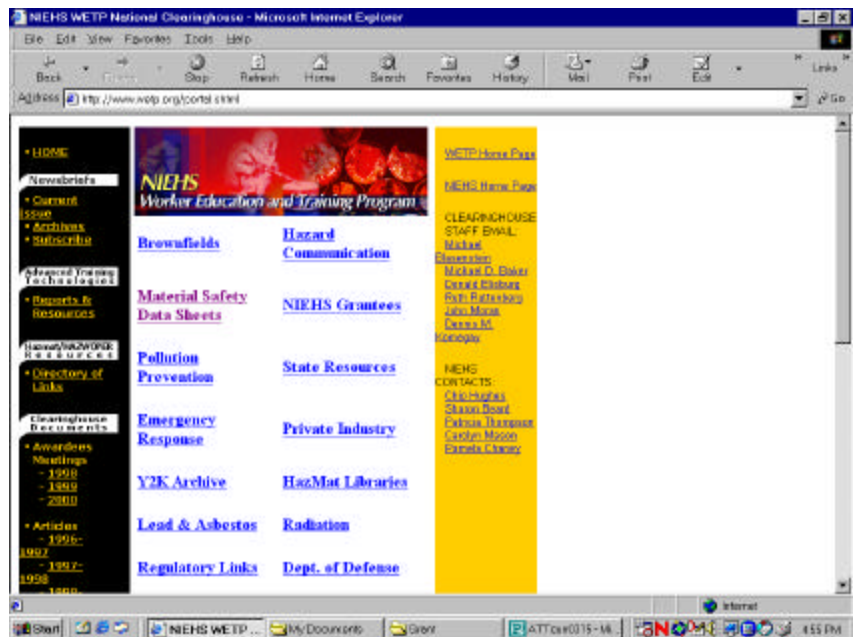


Fact Sheet 8 : MSDSs on the Web

**GO TO THE WEB SITE
“WWW.WETP.ORG”**

**THIS IS A SITE THAT WILL
TELL YOU MORE ABOUT
WORKER HEALTH AND
SAFETY TRAINING
PROGRAMS.**

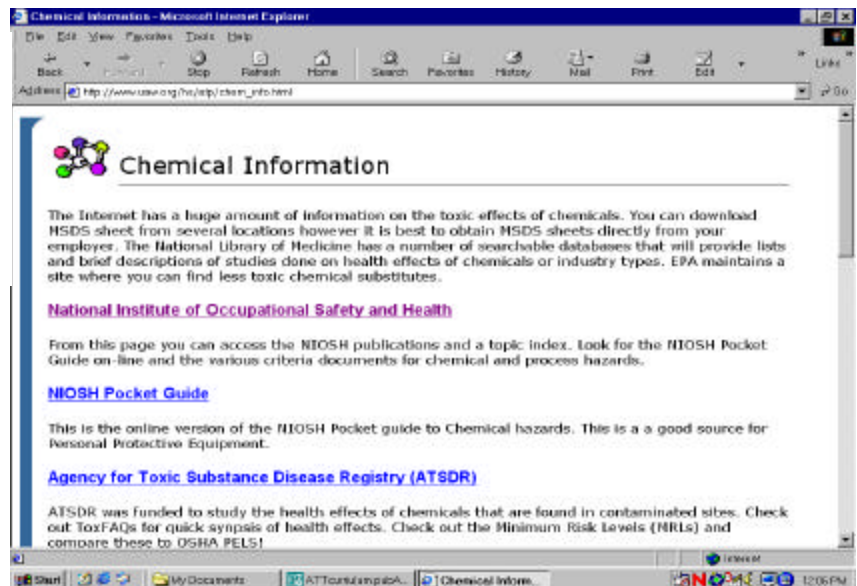
**FROM HERE YOU CAN
FIND INFO ON MSDS
SHEETS AND SEARCH
FOR UAW SUCCESS
STORIES.**



Fact Sheet 8: NIOSH and Rashes

**STEP 1
CLICK ON
CHEMICAL INFORMATION**

**STEP 2
CLICK ON
NATIONAL INSTITUTE OF
OCCUPATIONAL SAFETY
AND HEALTH (NIOSH)**



**STEP 3
CLICK ON NORA OR**

**Optional STEP 3:
CLICK ON THE TOPIC
INDEX. THEN USE THE
SEARCH ENGINE TO
SEARCH FOR RASHES
OR DERMATITIS.**

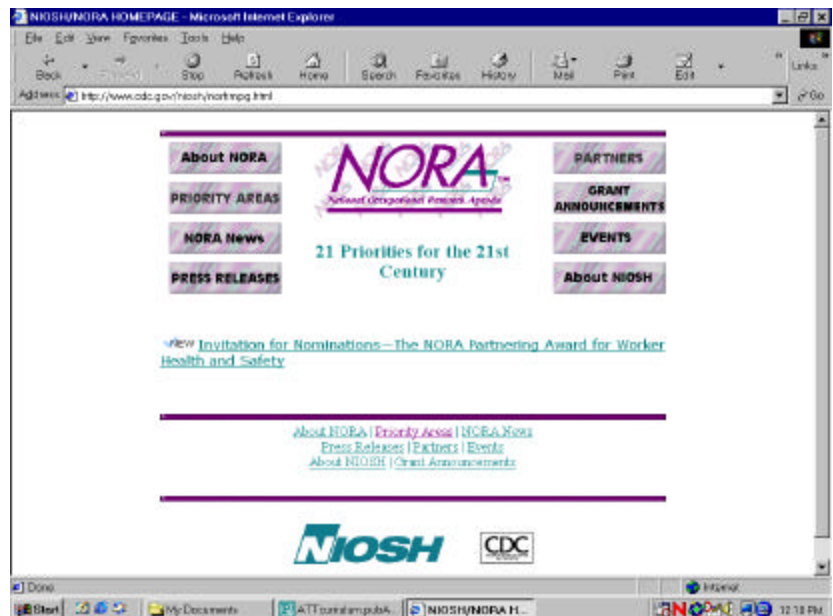


Fact Sheet 8: NIOSH and Rashes (cont)

Step 4

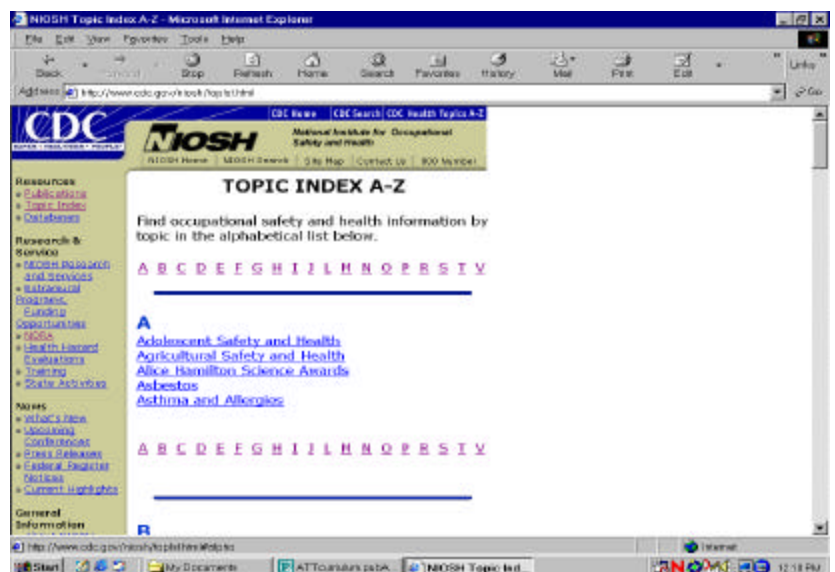
If you **CLICK ON NORA**
You find out more about the
National Occupational
Research Agenda.

Rashes is on the agenda!



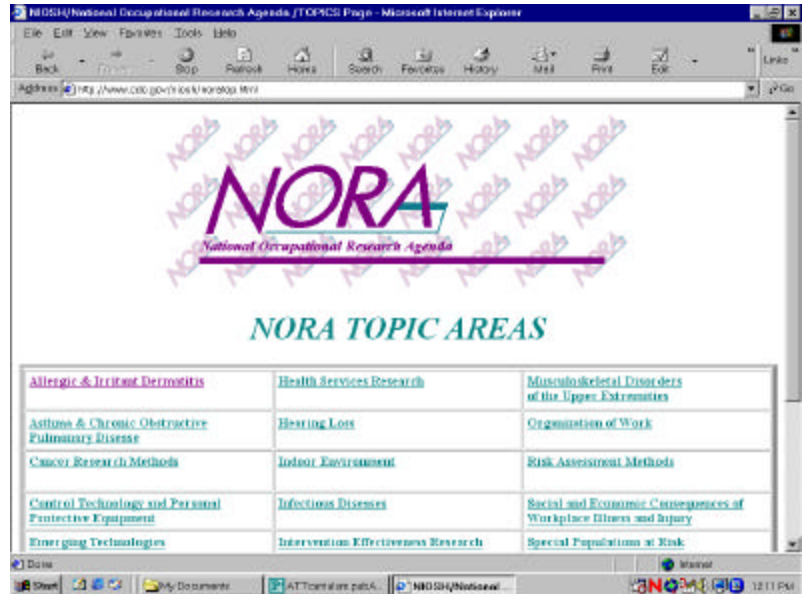
STEP 4b

IF YOU **CLICK ON TOPIC INDEX** YOU CAN FIND MANY CITATIONS ON DERMATITIS. WITH THE SEARCH ENGINE

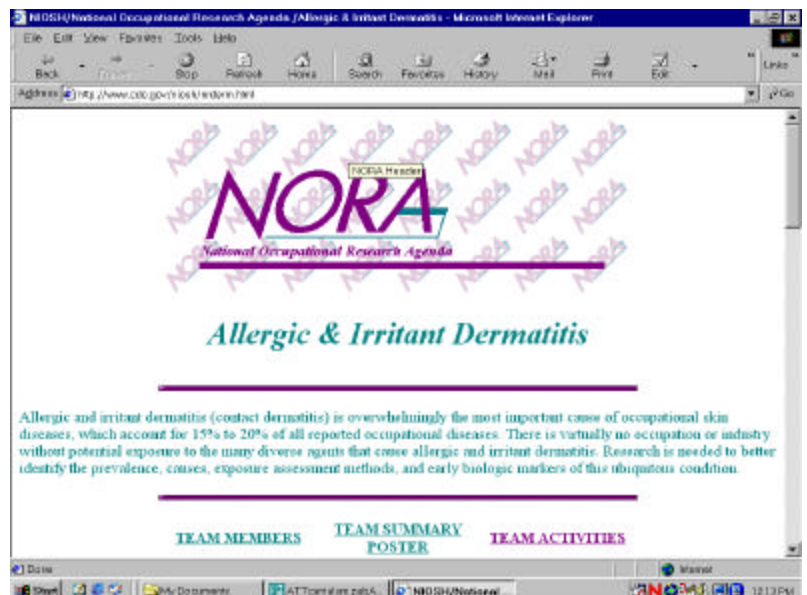


Fact Sheet 8: NIOSH and Rashes (cont.)

STEP 4
CLICK ON
ALLERGIC & IRRITANT
DERMATITIS



STEP 5
CLICK ON TEAM ACTIVITIES



Fact Sheet 8: NIOSH and Rashes (cont.)

STEP 6
CLICK ON
DERMATOLOGY INTERNET
RESOURCES FOR A LIST OF
FASCINATING RASH SITES.

CHECK OUT OTHER
RECENT ACTIVITIES OF THE
NIOSH RASH TEAM.

Send the NIOSH rash team
an encouraging word



Team 3: Environmental Impact

1. Look up the total releases for Textron using the RTK NET standard report. (See fact sheet 1 on Page 6)) What chemicals does the company report released to the Air, Land and Water? Use the format below to create your chart. Search on the standard report form on RTK NET (see Fact Sheet 1)

Chemical	Air Release (lbs)	Land	Water	Storage

2. How does this company compare to other auto parts suppliers in terms of environmental releases?

\

2. How does this company compare to auto spray paint operations at large auto assembly plants? Checkout the Environmental Defense Fund web site. This can be accessed from the standard report generated on RTKNET.

3. After reviewing the RCRA data base (on RTK NET) what ideas do you have about reducing waste generation? (Refer to Fact sheet 3)

4. According to the hierarchy of controls, elimination is one of the best practices for reducing exposure to chemicals. What clean technologies are available that may reduce the use and release of solvents into the environment and the workplace? Try SAGE an EPA website.

5. To clean out guns purge solvent is sprayed into a receptacle (see photo) Is this the best way? Why or why not?

Fact Sheet 9 Solvent Alternatives at SAGE

Team 4: OSHA Regulations

You have discovered that formaldehyde is released when painted parts are sent through the drying oven. Air monitoring shows that formaldehyde is present at 0.5 ppm outside the spray booth. Sometimes a yellow fog can be seen drifting through the air.

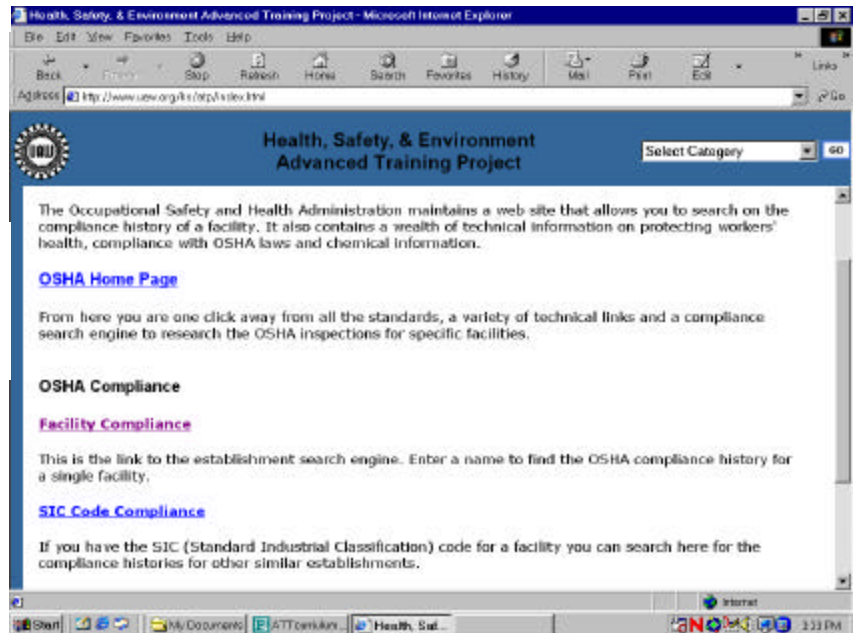


1. Has the plant been inspected by OSHA? Look up the company on the OSHA compliance page.
2. Look for the formaldehyde standard on the OSHA website. In **1910.1048 (L) (1) ii** what levels of formaldehyde are linked to health effects? What are these health effects?
3. If spills of paint containing formaldehyde occur, what procedures for clean up are required? See **(J) (2)**
4. The paint oven shows signs of leaking. According to the MSDS sheet this may be a source of formaldehyde vapors. What does the Formaldehyde Standard say about such leaks?

Fact Sheet 10: OSHA Violations

STEP 1
FROM THE UAW LINKS PAGE
CLICK WORKER HEALTH
OSHA ICON

STEP 2
CLICK FACILITY
COMPLIANCE



STEP 3
FILL OUT FORM
TYPE TEXTRON IN THE
ESTABLISHMENT BOX.

SELECT MICHIGAN AS THE
STATE

CLICK SUBMIT



Fact Sheet 10: OSHA Violations (cont)

**CONGRATULATIONS!
SCROLL DOWN TO VIEW THE
OSHA INSPECTIONS.**

**WHEN YOU SEE A BLUE NUM-
BER CLICK ON IT TO GET THE
DETAILS ABOUT THE VIOLA-
TIONS THAT WERE UNCOV-
ERED DURING EACH OSHA IN-
SPECTION.**

Health, Safety, & Environment Advanced Training Project

OSHA Occupational Safety & Health Administration U.S. Department of Labor

Details for the inspections listed below may be obtained in two ways. The first method is simply following the inspection activity number link. The second method is marking the check boxes for selected inspections and pressing the *Get Detail* button. Information relevant to the selected cases will be returned and may then be browsed or printed. For information on the data elements displayed below, see [definitions](#).

Please note that inspections which are known to be incomplete will have the identifying Activity ID shown in *italics*. Information for these open cases is especially dynamic; e.g., violations may be added or deleted.

Search Options

Establishment	Date Range	RID State	Limits	Include	Exclude
TETRON	1972-07-01 2010-12-31	All	MI	100/2500	

Get Detail - All Reset

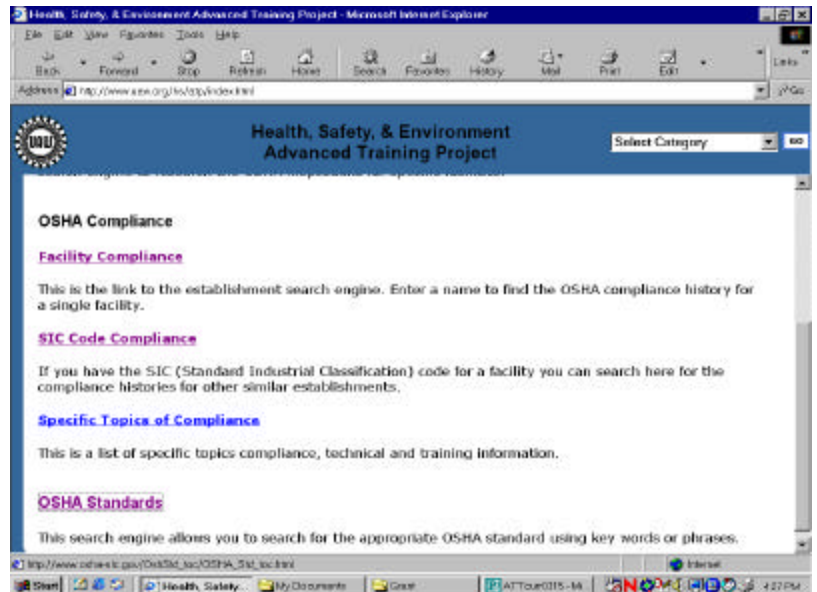
Found 65 - Processed 65 - Selected 65 - Displayed 65

Activity Nr	Open Date	Report ID	St	Type	Sc	SIC	Vio	Establishment Name
<input type="checkbox"/> 1	125138420	10/20/2000	0552621	MI	Planned	Part	3321	1 Tetrone Automotive Co Cno Division
<input type="checkbox"/> 2	127170728	10/10/2000	0552652	MI	Planned	Comp	3714	4 Tetrone Automotive Co

Fact Sheet 11: OSHA Rules

STEP 1
SELECT WORKER HEALTH AND
OSHA

STEP 2
SCROLL DOWN AND CLICK ON
OSHA STANDARDS

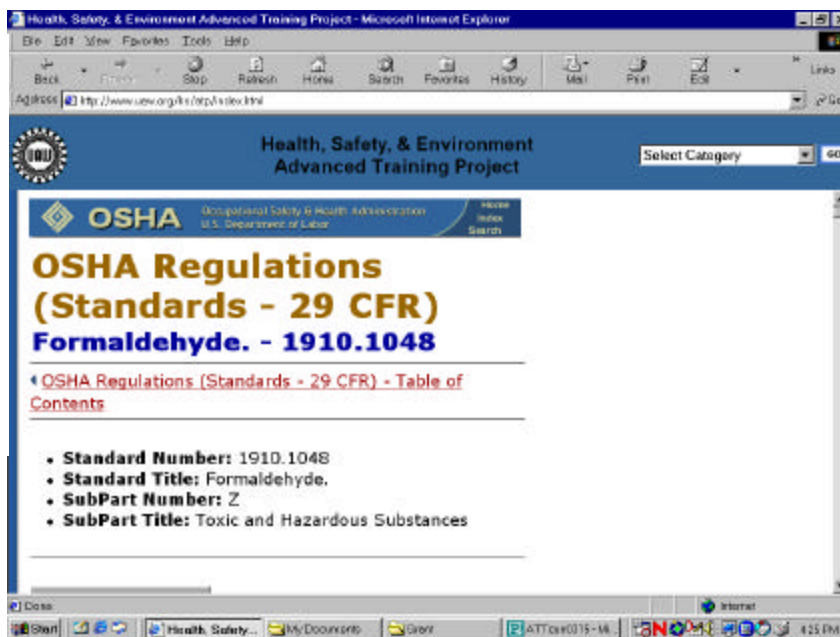


STEP 3
TYPE IN FORMALDEHYDE
CLICK SEARCH



STEP 4

TO ANSWER THE
QUESTIONS
REFER TO SECTIONS
(L)(1)(ii)
and (j)



TASK 2: Look Up Stuff on the Internet

Purpose

To apply your internet research skills to a facility, process or chemical in which you are interested.

For each Team

Choose a facility, chemical or process to research as you did in Task 1. Choose your own facility or one near where you work or live. Answer the following questions and be prepared to report back to the group using flip chart paper or an overhead transparency.

For facilities

1. List the chemicals and the maximum amount of chemicals stored on site. (Use TRI search). Then look up the company's Risk Management Plan, If one exists. Do you think the company is prepared?
2. Look up other companies that manufacture the same product. Use a **Standard Industrial Classification or SIC** code). How do the environmental releases compare to the plant you are investigating?
3. Look up the OSHA compliance history for a particular plant.

For Chemicals Hazards

4. Pick a Familiar chemical you work with and search for information on the National Library of Medicine or other linked websites.
5. Is the PPE you have available right for the process or chemical?
What specific diseases can be cause by this chemical? Are there workers you know who have these illnesses?
6. What specific diseases can be caused by this chemical? Are there workers you know who have these illnesses?

Please come up with your own question to include in this curriculum.