

Hazardous

Inventory

Tracking

System *a pollution prevention tool*



User's Manual

Version 2.1

August 2003

HITS hotline: 410-436-9656

Hazardous Inventory Tracking System (HITS)

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August 2003

Directorate of Safety, Health and Environment
Environmental Compliance Division
Pollution Prevention Program
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Version 1.00.8 printed August 1999, September 1999
Version 1.00.10 printed March 2000
Version 2.02 printed October 2001
Version 2.1 printed August 2003

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Introduction

This manual was developed as a guide for people who use the Hazardous Inventory Tracking System (HITS) to manage or view inventory data for one or more specific locations or for an activity.

Starting HITS

To start HITS, go to the Windows toolbar and select **Start, Programs,** and then **HITS.**

The **Log In** window (figure 1) appears. Enter your user name and press tab to move to the next field. If this is your first use of HITS, enter the password "HITS." Once you are connected, the system will prompt you to enter a new password.

If you do not have a user name and password assigned to you by your system administrator, select **OK.** This will give you viewing rights to all reference and product information but no access to inventory data.

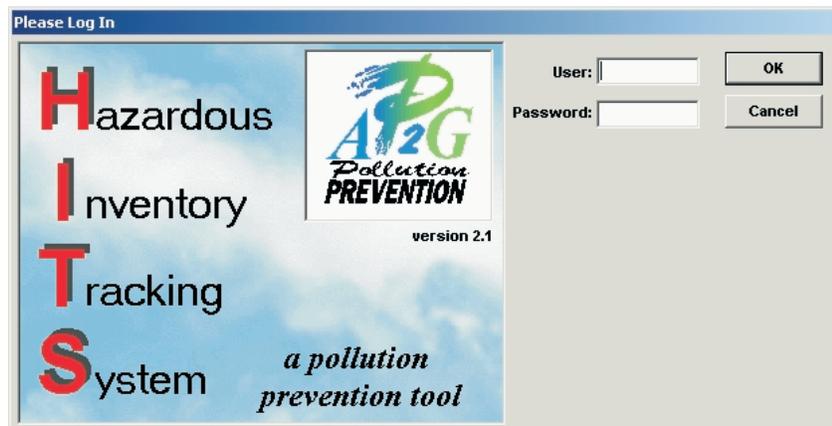


Figure 1. Log In window.

Once you have logged on to the system, the HITS main window (figure 2) will display. At the top of the window is the title bar showing the current version, HITS 2.1. Beneath the title bar are the menu line, the toolbar, and the display area where all other HITS windows will display.

Menu Items

There are eight pull-down menus.

File contains the typical Windows functions of **Print**, **Printer Setup**, **Change Password**, and **Exit**. Additional functions call up detailed views of records, capture data to the clipboard, and set up columns for viewing.

Inventory provides functions for tracking and maintaining inventory data. You can add, change, move, and view inventory and inventory status; download data from a portable barcode reader (e.g., an Intermec Trakker); view items placed on the Freebies List; change product IDs; and correct inventory deficiencies.

Products provides reference information on products stored on the installation. Only the HAZMART can make additions and deletions to this data with the exception of **Location Limits**, which can be changed at the activity level provided you have the access rights to do so. Should there be a question about or problem with the data, call the HAZMART to correct the information.

Reference allows you to view all reference data and consists of the options **Chemicals**, **Activities**, **Locations**, **Manufacturers**, **Regulatory Lists**, and **Processes**. Only the HAZMART can make additions and deletions to this data with the exception of **Locations** data, which can be changed at the activity level provided you have the access rights to do so. Should there be a question about or problem with the data, call the HAZMART to correct the information.

Reports allows you to create reports for such things as current or past chemical levels. It lets you print safety labels for pure chemical products, location barcodes, and stored Crystal Reports formats.

Administrative allows you to view the users of the system within your activity and edit their access rights to the system. Only the HAZMART can add or delete users from the system.

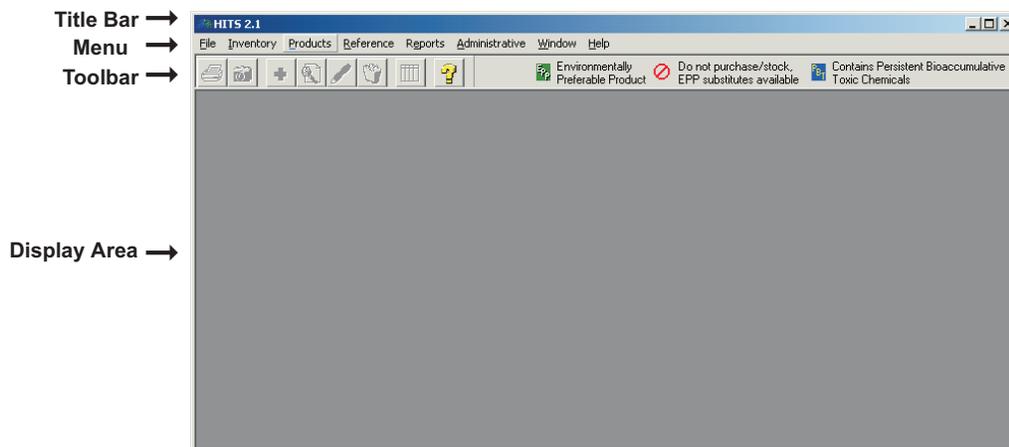


Figure 2. HITS 2.1 main window. On screen, windows that are accessed from the main window are superimposed on the main window. However, for readability, they are shown as individual windows in subsequent figures.

Window gives you several options to format the layout of multiple opened windows on the screen.

Help accesses HITS help information.

Toolbar



The *Print* icon sends a copy of the window results to the printer.



The *Snapshot* icon copies the current window's data to the clipboard to be used in another application



The *View Full Record* icon calls up another window with more detailed information for the current record.



The *Set Grid Columns* icon allows you to customize the display of columns of information on a window.



The *Help* icon displays help for the open window

Symbols

The symbols pictured and described on the right side of the toolbar appear before product trade names in inventory lists to help you select environmentally preferable products (EPP).



The EPP symbol appears alongside trade names of environmentally preferable products. Among products that perform similar functions, EPP are those known to be least hazardous to human health and the environment.



This symbol appears alongside trade names of products for which environmentally preferable substitutes are available.



The persistent bioaccumulative toxin (PBT) symbol appears alongside trade names of products that contain PBTs.

File Menu

The **File** menu (figure 3) presents typical Windows functions such as **Print**, **Printer Setup**, **Change Password**, and **Exit**. In addition, there are functions for calling up more detailed views of records, capturing data to the clipboard, and setting up columns for viewing.

Print	Ctrl+P
Printer Setup	
Snapshot	Ctrl+S
View Full Record	Ctrl+V
Set Grid Columns	Ctrl+G
Change Password	
Exit	

Figure 3. File menu.

Print

The **Print** option from the **File** menu sends a copy of the window to the default printer. This option is identical to pressing the *Print* icon on the toolbar. The print function can also be selected by pressing the *Ctrl* and *P* keys at the same time.

Printer Setup

Printer Setup (figure 4) allows you to change the default font, font size, and page margins to be used when sending data to the printer.

Printer identifies the printer currently selected. To select a different printer, click on the **Setup...** button.

Font lets you select the printer font to use when printing.

Size lets you select the point size to use for printing.

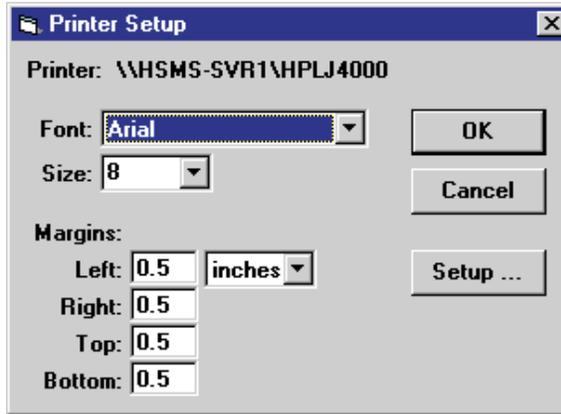


Figure 4. Printer Setup window.

Margins applies to the page margins. You can define the margin size in either inches or centimeters.

The **OK** button saves the settings.

The **Cancel** button exits without saving changes.

The **Setup...** button allows you to select a different printer and/or set your printer's default parameters (orientation, paper source, etc.).

Snapshot

The **Snapshot** option copies the current data window to the clipboard to be used in another application. This option is identical to pressing the *Snapshot* icon in the toolbar. The function may also be selected by pressing the *Ctrl* and *S* keys at the same time.

View Full Record

The **View Full Record** option in the **File** menu allows you to view, in a data window, detailed information for the record selected. This option is identical to pressing the *View Full Record* icon in the toolbar. The function may also be selected by pressing the *Ctrl* and *V* keys at the same time.

Set Grid Columns The **Set Grid Columns** option allows you to control which columns in a data window will be visible and which ones will be hidden. This option is identical to pressing the *Set Grid Columns* icon in the toolbar and is enabled only when an appropriate data window is viewed. The function may also be selected by pressing the *Ctrl* and *G* keys at the same time.

The **Set Grid Columns** window (figure 5) displays, from left to right, the major headings, the column headings, and check boxes for turning columns on or off. You can turn on/off all of the column headings under a major heading by clicking on the major heading. For example, clicking on the major heading “Packaging,” turns off all five column headings (#, NSN, Description, Size, Measure, and Type).

When exiting this window, you will be asked if you want to save your choices as your default setting. If you answer “Yes,” the next time you open the data window, it will automatically display the format you selected as the default. These are your personal settings and will appear on any machine you use; they will not affect anyone else’s settings for the same window.

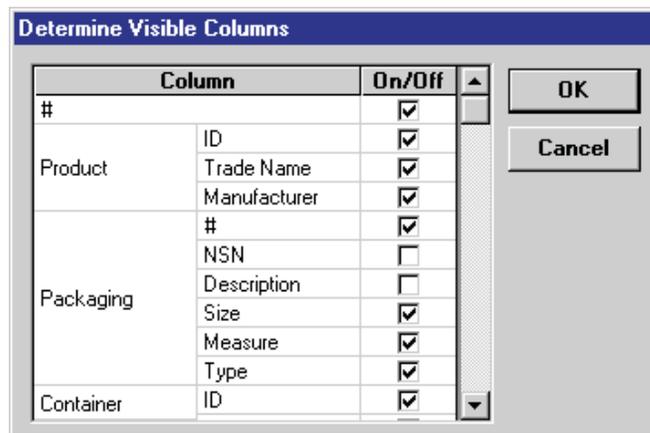


Figure 5. *Set Grid Columns* window.

Change Password

From the **File** menu, the option **Change Password** (figure 6) allows you to change your existing password. Enter a new password, then re-type the password to verify the entry. The new password will take effect the next time you log on to HITS.

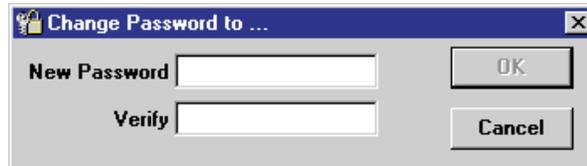


Figure 6. Change Password window.

Exit

The **File** menu **Exit** option exits HITS.

Inventory Menu

The **Inventory** menu (figure 7) shows functions for tracking and maintaining inventory. You can add, change, move, and view inventory and container status; check inventory using a portable barcode reader (e.g., Intermec Trakker); and view items placed on the Freebies List.

Inventory List	Ctrl+L
Tracking Log	
Accept Transfers	
Container History	Ctrl+H
Add to Inventory	Ctrl+I
Barcode Reader	
Freebies List	
Items on Hold	
Change Product ID	
Delete a Container	
Correct Inventory Deficiencies	

Figure 7. Inventory window.

Inventory List

The **Inventory List** window (figure 8) is used to specify what portions of your inventory you want to list and how you want the list organized. The **Inventory List** function can also be selected by pressing the *Ctrl* and *L* keys at the same time. You can specify the activity, location, and product categories. In addition, you can tell the program to select items according to specified product information and container status. Then you can choose how the list is sorted and displayed. Once you finish those steps, you can create the inventory listing by selecting **Product List** or **Container List**. More about those options later in this section. First, a closer look at your choices about what information to list and how to list it.

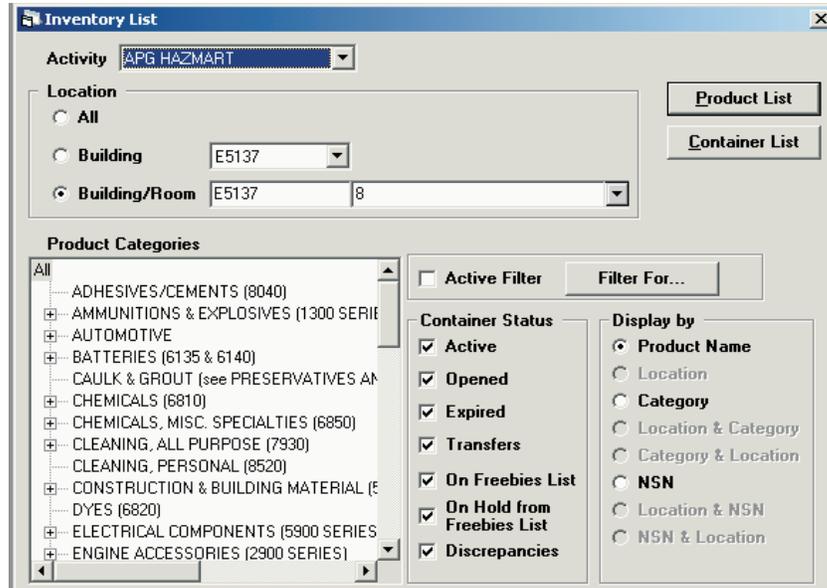


Figure 8. Inventory List window.

Activity contains a list of all the activities to which you have access rights. You can select only one activity. Switching to a different activity will automatically update the list of locations you can select from.

Location allows you to set the location(s) to be included in your inventory listing. Only the locations for which you have viewing rights will be listed. Choose one of the three options.

- **All** – All available locations.
- **Building** – all locations within the building selected.
- **Building/Room** – only the specified location within the selected building.

Product Categories lets you select products to list based on hierarchical groupings that can have as many as four levels. To select all categories, click on **All** at the top of the list. To select a product category, click on the specific category in the list. Click on the plus sign before a category to expand the list to the next level.

Note: Some product categories are links to other items in the category tree and, when selected, will automatically take you to the linked category.

Filter For... allows you to specify which products to list based on the product information you select. For example, you can list products according to a specific manufacturer or a certain ingredient. Access the options by clicking on the **Filter For...** button. See the HITS Search Engine section for a detailed explanation of how to set selection criteria.

Active Filter shows whether selection criteria have been established and are being used. Checking the box activates the search engine if no criteria have been set, or it reactivates the previously selected criteria. Unchecking the box turns off the selection criteria, and all inventory items will be listed.

Container Status lets you select containers based on any or all of seven container status settings.

- **Active** – The container is active in the inventory.
- **Opened** – The container has been opened and is only partially full.
- **Expired** – The container is marked as expired but is still on the shelf.
- **Transfers** – The container is to be transferred to another activity, but the other activity has not yet accepted the container, so it is still in your inventory.
- **On Freebies List** – The container has been marked as available for others to use.
- **On Hold from Freebies List** – The container was placed on the Freebies List and someone has placed a “hold” on it (i.e., someone wants the container and is waiting for you to make contact).

- **Discrepancies** – The container is identified in the database as having one or more of the following discrepancies.
 - Container was found at this location during an inventory check, but the database lists another location.
 - Container was not found at this location during an inventory check, but the database lists this location.
 - Container's status is wrong (e.g., marked as emptied but available on the shelf).
 - Container's quantity as identified during an inventory check does not match the quantity listed in the database.
 - Container has not been properly entered into the system.

Display by allows you to control how the information is sorted and organized in your inventory listing. The available choices depend on whether you selected **All**, **Building**, or **Building/Room** as the **Location**. You can select only one of the available choices.

- **Product Name** – Inventory will be sorted by product trade name only.
- **Location** – Inventory will be sorted by building or by building and room. This option is available only when the selected location is **All** or **Building**.
- **Category** – Inventory will be sorted by product category. This option is available only when the selected product category is **All**.
- **Location & Category** – Inventory will be sorted first by location and then by category.
- **Category & Location** – Inventory will be sorted first by category and then by location.

- **NSN** – Inventory will be sorted by the product’s national stock number (NSN).
- **Location & NSN** – Inventory will be sorted first by location and then by NSN.
- **NSN & Location** – Inventory will be sorted first by NSN and then by location.

Product List

If you choose to have your inventory listing display data by location or by category, the **Set Display Parameters** window (figure 9) appears when you click on the **Product List** button.

Under **Location Display Parameters**, you can select **Building and Room** if you want both columns to appear, **Building Only** (if you selected **All** for location), or **Room Only** (if you selected a particular building for location).

Under **Category Display Parameters**, you can specify how much of the category hierarchical tree you want included in the inventory listing. For

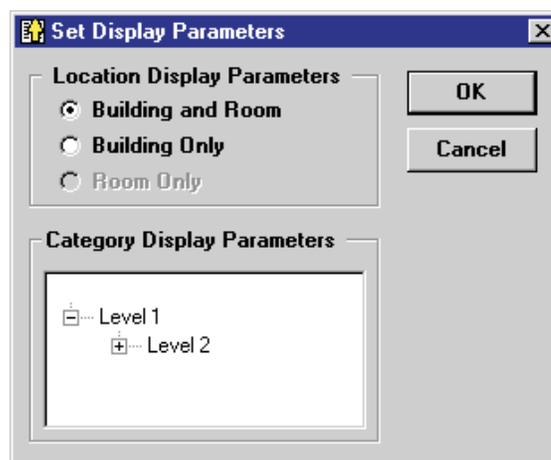


Figure 9. Set Display Parameters window.

example, if you set the parameter at Level 1, you will have a one-column entry such as "Pesticides." Setting the parameter at Level 2 will cause a two-column entry such as "Pesticides – Herbicides" or "Pesticides – Insecticides."

When you have made your choices, clicking **OK** in the **Set Display Parameters** window will create an inventory listing. If your selected display criteria were other than location or category, clicking on the **Product List** button in the **Inventory List** window will create an inventory listing. In either case, the listing (figure 10) will be based on the criteria selected and will have all the containers grouped together by product category.

Displayed in the top left corner of the window are the activity, location, and product categories selected in the **Inventory List** window.

The column headings in the inventory listing will reflect choices made in the **Inventory List** window. Use the horizontal scroll bar to view all columns in the table. Although all possible headings are described below, not all of them appear in figure 10.

Activity: DSHE
 Location: Building - 1059
 Category: All

Row	Category		Location			Product			Inventory	Packaging		
	Level 1	Building	Room	POC	Phone	ID	Trade Name	Manufacturer	Quantity	Size	Measure	Type
23						72825	35 SERIES- ULTRA DELUXE	DURON, INC.	1	1	GALLON	CAN
24						61547	CLASSIC CARE AUTOMOTIVE	KRYLON PRODUCTS GROUP	1	12	OUNCE	CAN
25						77736	COLOR PLACE	WALMART STORES INC.	1	11	OUNCE	CAN
26							INTERIOR/EXTERIOR FAST DRY	(HOME OFFICE)	2	12	OUNCE	CAN
27						78209	DELUXE INTERIOR FLAT, VINYL	DURON, INC.	1	1	GALLON	CAN
28						51746	DURA CLAD ALKYD ENAMEL	DURON, INC.	1	1	GALLON	CAN
29	PAINTS, DOPES, VARNISHES STAINS (8010)	1059	BAY FLAMMA LOCKER	NAME	555-1234	72095	INDUSTRIAL AND MAINTENANCE	C.M. ATHEY PAINT	1	1	GALLON	CAN
30						54563	LACQUER AEROSOL RED	PLASTIKOTE CO. INC.	1	1	PINT	CAN
31						81528	PAINT WHITE	MANUFACTURER UNKNOWN	2	1	GALLON	CAN
32						53444	PREMIUM LATEX PAINT	LASTING PAINTS COMPANY	1	1	GALLON	CAN
33						39708	PVR - PAINT STRIPPER	BIDALL CHEMICAL	1	18	OUNCE	CAN
34						64111	SO-SURE ENAMEL, ALKYD	LHB INDUSTRIES	1	10.5	OUNCE	CAN
35						53581	SO-SURE LACQUER GLOSS	LHB INDUSTRIES	1	10.25	OUNCE	CAN
36						53580	SO-SURE LACQUER, AEROSOL	LHB INDUSTRIES	1	10.25	OUNCE	CAN
37						32077	TURPENTINE	CSD/ STARTEX CHEMICAL	2	1	GALLON	CAN
38						61567	UNIVERSAL METAL PRIMER	THE SHERWIN WILLIAMS	1	1	GALLON	CAN
39	PESTICIDES, (6840)	1059	BAY FLAMMA LOCKER	NAME	555-1234	22427	FREEZE WASP & HORNET	TERAND INDUSTRIES INC.	1	13	OUNCE	CAN
40						35075	HERBIE I & II	PRESTIGE LABORATORIES	2	17	OUNCE	CAN
41						74161	HOSPISFECTIC SURFACE	TERAND INDUSTRIES INC.	3	12	OUNCE	CAN

Figure 10. Inventory List by Product window.

- **Row** – number of data lines retrieved.
- **Category** – category level(s) selected in the **Set Display Parameters** window (figure 9).
 - **Level 1** – level 1 product name
 - **Level 2** – level 2 product name
- **Location** – location columns selected in the **Set Display Parameters** window (figure 9).
 - **Building** – building name
 - **Room** – room name
 - **POC (point of contact)** – name of the person assigned to manage containers in the selected location. POCs are determined by information maintained in the **Locations** window of the **Reference** menu.
 - **Phone** – phone number of the POC
- **Product**
 - **ID** – HITS’ unique product identification code. (Product IDs that begin with the letter “T” are temporary IDs that have not been validated by the HAZMART.)
 - **Trade Name** – manufacturer’s name for the product. Note, before product 53444, the red symbol indicating that an environmentally preferable substitute is available, before product 72825, the green EPP symbol, and before product 61567, the blue symbol indicating that the product contains a PBT chemical.
 - **Manufacturer** – manufacturer’s name.

- **Inventory**
 - **Containers** – the total number of containers (items with barcodes on them) found for that product.
 - **Quantity** – the total quantity within the containers. For example, if there were three boxes, each containing twelve 1-pint cans, the total quantity would be 36.
- **Packaging** – any variety of containers, each of a unique size, color, etc. Each unique container, even for one product, has a unique package number. For example, in figure 10, lines 25 and 26, product ID 77736 has two types of packaging, an 11-ounce can and a 12-ounce can.
 - # - HITS packaging number for the product.
 - NSN – national stock number.
 - **Description** – description of the packaging (may include color or manufacturer's code). This field is most useful when the packaging types are the same size, such as for paints where the manufacturer may distribute the same product in different colors.
 - **Size** – number of units of measure per item.
 - **Measure** – unit of measure for an item.
 - **Type** – container type.

Three types of additional information described here may be retrieved for any listed product by clicking on it, using the right mouse button.

- **Product Information** lists the product's physical parameters, packaging types, chemical constituents, hazards, storage and disposal instructions, and identified substitutes. See the **Products** menu section for details.

- **Container Information** opens a new inventory window that displays the individual containers for that product. This is the same listing you get when you click **Container List** on the **Inventory List** window except that only containers for that product are listed.
- **MSDS** allows you to call up the scanned MSDS (if available) for the product. See the **Products** menu section for further information on scanned MSDSs.

Container List

Clicking on the **Container List** button (figure 8) will create an inventory listing that is based on the criteria selected in the **Inventory List** window and that lists each container as a separate data line (figures 11a and 11b).

Displayed in the top left corner of the window are the activity, location, and product categories selected in the **Inventory List** window. Notice that the table headings do not include **Inventory by Containers** and **Quantity**. The column headings that are unique to this window are as follows.

Inventory List by Container (Activity: DSHE, Location: Building - 1059, Category: All)													
Activity: DSHE													
Location: Building - 1059													
Category: All													
■ Shelf Life Expiration ■ 90 Days till Expiration ■ Discrepancy													
Row	Category	Location				Product				Packaging			
	Level 1	Building	Room	POC	Phone	ID	Trade Name	Manufacturer	#	NSN	Description	Size	
42	GRAPHIC	1059	BAY	NAME	555-1234	36806	SO-SURE STENCIL INK, YELLOW	LHB INDUSTRIES	001	7510-00-183-7698		10.5	
43	OILS & GREASES:	1059	BAY	NAME	555-1234	39906	3-IN-1 PEN (PENETRATING OIL W/MT	STATE CHEMICAL	001			18	
44	CUTTING, LUB.,		FLAMMABLE LOCKER			55987	STIHL CHAIN AND BAR LUBRICANT	WESTLAND OIL COMPANY	001			1	
46			ROOM 5	NAME	555-1234	55987	STIHL CHAIN AND BAR LUBRICANT	WESTLAND OIL COMPANY	001			1	
47						72825	35 SERIES- ULTRA DELUXE	DURON, INC.	010		ANTIQUE WHITE	1	
48						61547	CLASSIC CARE AUTOMOTIVE	KRYLON PRODUCTS GROUP	001			12	
49							COLOR PLACE		008	- - -	COLOR PLACE	11	
50						77736	INTERIOR/EXTERIOR FAST DRY SPRAY PAINT PRIMER	WALMART STORES INC. (HOME OFFICE)	019	- - -		12	
51	PAINTS,												
52	DOPEES,	1059	BAY	NAME	555-1234	78209	DELUXE INTERIOR FLAT, VINYL	DURON, INC.	001			1	
53	VARNISHES		FLAMMABLE LOCKER			51746	DURA CLAD ALKYD ENAMEL	DURON, INC.	001			1	
54	STAINS (8010)					72095	INDUSTRIAL AND MAINTENANCE	C.M. ATHEY PAINT COMPANY	001			1	
55						54563	LACQUER AEROSOL RED	PLASTI-KOTE CO. INC.	002	8010-00-141-2952		1	
56						81528	PAINT WHITE	MANUFACTURER UNKNOWN	002	- - -		1	
57													
58						53444	PREMIUM LATEX PAINT	LASTING PAINTS COMPANY	001			1	
59						39708	PVR - PAINT STRIPPER	BIDALL CHEMICAL	003			18	

Figure 11a. Inventory List By Container (left side of the table).

• **Container**

- **ID** – unique ID (barcode) assigned to the container.
- **Quantity** – quantity that is in the container and available for use.
- **Status** – status of the container. When the status appears in brackets <>, the shelf life has expired. This allows the data to be transferred to another application and still be flagged in some manner.
- **Received** – date the container arrived at the installation.
- **Expires** – specific date on which the material in the container will no longer be usable.
- **Batch/Lot** – batch and lot of the shipment.
- **Comments** – comments attached to the container by users.

Row	Packaging			Container						Shelf Life			
	Size	Measure	Type	ID	Quantity	Status	Received	Expires	Batch/Lot	Comments	Description	Years	Days Left
42	10.5	OUNCE	CAN	6A306155	1	<ACTIVE>	29-Jan-1998				12 MONTHS. EXTENDIBLE		
43	18	OUNCE	CAN	6A157848	1	ACTIVE	21-Mar-1996	01-Jul-2003					28
44		QUART	PLASTIC	6A95923	1	ACTIVE	21-Mar-1996						
45		QUART	BOTTLES OR	6A95924	1	ACTIVE	21-Mar-1996						
46	1	QUART	PLASTIC	3A987654	1	ACTIVE	03-Jun-2003			Not Found During Inventory			
47	1	GALLON	CAN	6A95920	1	ACTIVE	21-Mar-1996						
48	12	OUNCE	CAN	6A157827	1	ACTIVE	21-Mar-1996						
49	11	OUNCE	CAN	6A148337	1	ACTIVE	29-Jan-1998						
50	12	OUNCE	CAN	7A058307	1	ACTIVE	29-Jan-1998						
51	12	OUNCE	CAN	7A058308	1	ACTIVE	29-Jan-1998						
52	1	GALLON	CAN	8A010074	1	ACTIVE	29-Jan-1998						
53	1	GALLON	CAN	8A010073	1	ACTIVE	29-Jan-1998						
54	1	GALLON	CAN	6A223570	1	ACTIVE	29-Jan-1998						
55	1	PINT	CAN	6A157831	1	<ACTIVE>	21-Mar-1996				24 MONTHS. EXTENDIBLE		
56	1	GALLON	CAN	6A95916	1	ACTIVE	21-Mar-1996			UNKNOWN WHITE PAINT			
57	1	GALLON	CAN	6A95917	1	ACTIVE	21-Mar-1996			UNKNOWN WHITE PAINT			
58	1	GALLON	CAN	6A95921	1	ACTIVE	21-Mar-1996						
59	18	OUNCE	CAN	6A157838	1	ACTIVE	21-Mar-1996						

Figure 11b. Inventory List By Container (right side of the table).

- **Shelf Life**

- **Description** – description of the shelf-life code attached to the product.
- **Years** – number of years that the product is listed as being viable.
- **Days Left** – number of days remaining before the container's shelf life expires.

Container line numbers may be marked with any of three color codes.

- Red indicates that the container has exceeded its expiration date, but has not been marked as expired.
- Yellow indicates that the container is within 90 days of exceeding its expiration date.
- Blue (cyan) indicates that the container has some type of discrepancy. For example, it could have been found at another location during an audit; it could have the wrong status; or it could have been found during an audit but never properly entered into the system.

Calculation for a container's expiration is based on one of three formulas:

- Expiration date present – The container is flagged if the expiration date is less than the current date.
- Expiration date empty, shelf-life description present – The container is flagged if the current date is earlier than the date received plus the shelf-life description. All months in the shelf-life description are assumed to be 30 days.
- Expiration date and shelf-life description both empty, shelf-life years present – The container is flagged if the current date is earlier than the date received plus the number of years. All years are assumed to be 365 days.

Six types of additional information may be retrieved for any listed product by clicking on a record, using the right mouse button.

- **Product Information** lists the product's physical parameters, packaging types, chemical constituents, hazards, storage and disposal instructions, and identified substitutes. See the **Products** menu section for details.
- **Container History** lists the transaction history for the container. See more information later in this section.
- **MSDS** allows you to call up the scanned MSDS (if available) for the product. See the Products Menu section for further information on scanned MSDSs.
- **Transaction** activates the **Tracking Log** window and automatically copies the container into the Tracking Log list. This option is only visible when you have editing rights to the inventory data selected.
- **Refresh List** updates the listing in the table, based on transactions you or others have performed on data since the listing was created.
- **Who Placed on Hold** returns information about who placed the container on hold.

Tracking Log

From the **Inventory** menu, the **Tracking Log** window (figure 12) allows you to record changes in a container's status, to indicate use of some of a container's quantity, to record a location, to electronically transfer a container to another activity, or to make a container available for general use by placing it on the Freebies List. Any change to a container's quantity, location, or status is called a *transaction*. The **Tracking Log** window lets you make transactions to a single container or group of containers.

Location lists all the locations to which you have editing access rights. *Only containers found at the location selected can be selected for transactions.*

Activity lists all the activities to which you have access rights. Switching to a different activity will automatically update the list of locations from which you can select.

Building/Room lists the building and room number of an inventory item.

Submitted By lists the person who submitted the transaction for entry into the system.

The screenshot shows the 'Tracking Log' window with the following details:

- Location:** Activity: DSHE; Building / Room: 1059 BAY FLAMMABLE LOCKER
- Submitted By:** MANUAL, HITS; **Date Submitted:** 13-Aug-2001
- Date:** 13-Aug-2001; **Barcode(s):** (empty); **From Reader File:** (button)
- Containers Table:**

#	Container	Date	Status	Quantity	Activity	Building	Room
1	8A065423	13-Aug-2001	ACTIVE	1	DSHE	1059	BAY FLAMMA
- Transaction:**
 - Change Status to: Emptied; **Process:** (empty)
 - Quantity Used: (empty)
 - Change Location to: 1059 BAY FLAMMABLE LOCKER
 - Transfer to: 520TH TAML; E1932; FLAMMABLE CABINET
 - Reset Expiration Date to: (empty)
 - Transfer Off-Site: (empty)
 - Inventory Adjustment, Reset Quantity to: (empty)
 - Inventory Adjustment, Reset Status to: Active
- Comment:** (empty text box)

Figure 12. Tracking Log window.

Date Submitted lists the date that the transaction was submitted for entry into the system.

Date automatically defaults to the current date as the transaction date.

Barcode(s) allows you to identify, by barcode, the container(s) for transactions. You can enter containers singly, list several containers at once by separating them with commas, or enter a range of containers by placing a hyphen (-) or the word "to" between them (e.g., 6A313788 to 6A313795). As containers are entered, they appear beneath the text box in a table showing current status and quantity. Containers that are not found (invalid container ID or listed as being at another location) will be listed as unavailable or not found with the exception of containers that you purchase from the self-service supply centers/stores at the installation. You can remove a container from the list or review its history by clicking on it with the right mouse button.

From Reader File reads the containers from a file created from a barcode reader download and lists them for transactions. This is a way of enabling you to use a barcode reader to input containers to be moved, emptied, sent to the Hazardous Waste Tracking System (HWTS), etc.

Transaction lets you select eight types of transactions.

- **Change Status to** lets you select one of the following choices:
 - **Emptied** – All the contents have been used.
 - **HWTS** – The container has been sent to HWTS.
 - **Recycled** – The container has been sent to recycling.
 - **Expired** – The container's status is changed to show it is expired.
 - **Place on Freebies List** – The container is added to the Freebies List so that others may request it.

- **Take off Freebies/Transfer List** – The container is removed from the Freebies List, or a container being transferred is reset back to this location.
 - **Returned to Manufacturer** – The container was returned to the manufacturer and is no longer at the installation.
 - **Destroyed in Fire** – The contents were destroyed in a fire.
 - **Spilled** – The contents were spilled.
 - **Unknown Disposal** – The contents have been emptied, but there is no record of the method.
- **Process** lets you select a process from the dropdown list in order to associate the hazardous material that you use with the waste stream that the hazardous material creates. See the **Reference** menu section for details.
 - **Quantity Used** lets you indicate that some, but not all, of the items within the container were used. Enter the quantity used in the text box.
 - **Change Location to** lets you record a change in the container's location *within the same activity* by selecting from the dropdown list. This includes transferring containers purchased from the self-service supply centers/stores into your inventory.
 - **Transfer to** lets you indicate that the container has been sent to another activity. Select the receiving activity from the list box. For inventory purposes, the container will be listed as in the original location until the transfer is accepted by the other activity.
 - **Reset Expiration Date to** lets you reset the expiration date on the container.
 - **Transfer Off-Site** is used to transfer the container to an off-site location. Enter the new site name in the text box.

- **Inventory Adjustment, Reset Quantity to** lets you reset the quantity of the container (e.g., change the quantity from 0 for “empty” to 1 for “active” in your inventory).
- **Inventory Adjustment, Reset Status to** lets you reset the status of the container (e.g., designate a previously empty container as active in your inventory).

Comment lets you add a comment to the container along with the transaction change.

OK button performs the transaction(s) and clears the list of containers.

Cancel button exits without performing a transaction.

A data report showing container transactions that have been entered into the system in one session is available by selecting the **Print** option from the **File** menu or clicking the *Print* icon in the toolbar. The option to print the data report is also available when you exit the **Tracking Log** window.

Accept Transfers

From the **Inventory** menu, the **Accept Transfers** window (figure 13) allows you to accept or deny (send back) containers marked as being transferred to your activity. Containers will be listed in this window only if a **Transfer to** transaction was selected in the **Tracking Log** window.

Activity allows you to set the list to material being sent to your activity or to an activity for which you have viewing rights.

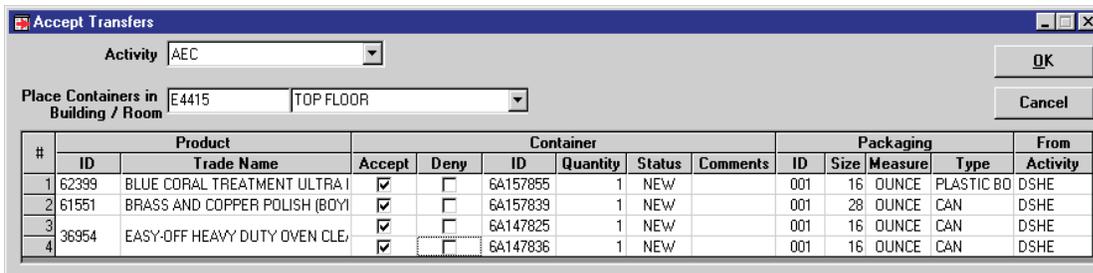


Figure 13. Accept Transfers window.

To accept a transfer, go to **Place Containers in Building/Room** and enter the building and select the room in which accepted containers will be stored. Then click the **Accept** check box next to each container that will go in that location. When all the containers for a single location have been checked, click **OK**. Repeat the process for each location to receive transfers.

To deny a container (i.e., refuse the transfer), click the **Deny** check box next to an item. When you click **OK**, these containers will no longer be marked as being sent to your activity.

Notes

- You can deny some containers in the same procedure that you accept others.
- Containers marked as transferred will remain listed in the originating activity's inventory until the transfer is accepted by the receiving activity.

For additional information for any listed product or container, click the record, using the right mouse button.

- **Product Information** – provides a detailed listing about the product. See the **Products** menu section for more details.
- **Container History** – provides a history listing of all transactions for the container. See more information later in this section.
- **MSDS** – allows you to call up the scanned MSDS (if available) for the product. See the **Products** menu section for further information on scanned MSDSs.

Container History

From the **Inventory** menu, the **Container History** option displays the **Container History for...** dialog box (figure 14). Pressing the *Ctrl* and *H* keys at the same time can also activate the dialog box. Enter the



Figure 14. Container History for... dialog box.

Container ID and select **OK** to access the **Container History** window (figure 15), which displays the transaction history for the specified container. Within other windows, you can access a container's history by clicking the record using the right mouse button. Within the **Container History** window, right-clicking a history record displays information about the person who entered the transaction.

Column headings are explained here.

- number of data lines retrieved.

Date – the date on which the transaction was registered.

Qty – how much of the container contents were available on that date.

Transaction – the type of transaction.

#	Date	Qty	Transaction	By	Comments
1	26-Feb-2003	1	Product: 33281 Tradenname: LAUNDRI DESTAINER (LIQUID SODIUM HYPOCHLORITE BLEACH) Packaging: 1 GALLON PLASTIC BOTTLES OR JUGS Category: CHEMICALS (6810) - BLEACH, INSTITUTIONAL Received Activity: DIO - DOL Building: 4219 Room: STORAGE SHED	Submitted by: LINDA FAGANS (26-Feb-2003) Entered by: ANDREA HAMMOND	
2	24-Mar-2003	0	Emptied	Submitted by: LINDA FAGANS (24-Mar-2003) Entered by: MIRANDA SACKLEH	

Figure 15. Container History window.

By – who submitted the transaction (and date) and who entered the transaction into the system. The “Submitted by” information and the date apply to transactions performed in only the **Tracking Log** and the **Add to Inventory** functions.

Comments – lists the comment added to a container inserted with the transaction change.

Add to Inventory

From the **Inventory** menu, the **Add to Inventory** window (figure 16) lets you enter new containers for a selected location. Pressing the *Ctrl* and *I* keys at the same time can also activate this window. All required fields, shown in blue in the window and marked with an asterisk in the list below, must be completed before the system will add the container data to the inventory. A separate entry must be made for each product and for each location into which the product is to be placed.

Activity* lists all the activities to which you have access rights. Switching to a different activity automatically updates the list of locations from which you can select.

Figure 16. Add to Inventory window showing **Packaging** tab.

Building/Room* lists all the locations to which you have access rights. Enter the location to which you are adding containers.

Date Received* should be the date the product is received. This field automatically defaults to the current date.

Submitted By* lists the person who submitted the transaction for entry into the system.

Date Submitted* lists the date the transaction was submitted for entry into the system.

Containers* section lets you enter the number of containers you want in the inventory.

- **Barcode(s)** – Click this option if the containers are to receive barcodes. If you want to add only a single container, enter the barcode in the first text box. If you want to add a range of barcodes, enter the first barcode of the series in the first text box and the last barcode of the series in the second text box. A count of the total number of barcodes entered appears in red after the second text box.
- **Not Barcoded** – Click this option when you don't need the product barcoded.
- **Expiration Date** – If the expiration date of the container(s) is known, enter the date in this field.
- **Total Cost** – This field and the **Cost per Container** field are for use by activities that wish to use HITS to manage hazardous materials expenditures. Enter the total cost for all the containers, or leave the field blank.
- **Cost per Container** – If you choose, enter the average cost for each container.

Packaging Tab

This tab (figure 16) allows you to enter information about how the product is packaged and used in inventory counting.

- **Items per Container*** – This is the number of individual items that are within a barcoded container and can be used separately. There are two ways of determining this number, depending on how you want the container (barcoded item) to be counted in the inventory. If you want the container to be listed as “empty” as soon as a single item is taken from it, enter “1” in **Items per Container**. If you want to keep track of how much of the container has been used, enter the number of individual items within the barcoded container.
- **Size per Item*** – This is the number of units of an item in a container.
- **Unit of Measure*** – This is either a unit of weight or volume. You may set this value by selecting from either the list box of codes for units or the list box of unit names.
- **Container Type*** – This indicates how the barcoded item is packaged. You may set this value by selecting from either the list box of codes for container types or the list box of names.
- **Physical State*** – Indicate the physical state of the product.
- The red comment at the bottom of the **Packaging** tab appears automatically and is based on the **Items per Container** multiplied by the **Size per Item**, which equals the total weight or volume of the barcoded container.

Example: A pallet of twelve 5-gallon cans is to be placed into inventory. If a barcode is placed on each can, there are 12 barcodes and **Items per Container** is “1” and **Size per Item** is “5” (**Unit of Measure** = gallon).

*12 barcodes (containers) x 1 Items per Container x 5 Size (gallon)
per Item = 60 gallons*

Example: A single barcode is placed on a box containing 12 items, which allows you to track each time an item is removed from the box. In this case, set **Items per Container** to “12” and **Size per Item** to “5” (**Unit of Measure** = gallon).

*1 barcode (container) x 12 Items per Container x 5 Size (gallon)
per Item = 60 gallons*

However, if you want to consider the whole box used as soon as it is opened, set **Items per Container** to “1” and **Size per Item** to “60” (**Unit of Measure** = gallon).

*1 barcode (container) x 1 Items per Container x 60 Size (gallon)
per Item = 60 gallons*

Product Information Tab

This tab (figure 17) allows you to enter information about the product.

- **Product Name*** – Enter the name of the product.
- **Category*** – Select the product category that best fits the product. Go down as many levels as possible.
- **Description** – Enter a short description of the product. This information should not duplicate the product name but should further identify the product. For example, since a manufacturer might have the same product name for all of its paints, you could enter color of the paint as the description.
- **Part Number*** – Enter the manufacturer’s part number.
- **MILSPEC** – Enter the military specification for the product.
- **NSN** – Enter the national stock number for the product.

Fig. 17. Add to Inventory window showing *Product Information* tab.

- **CAS #** – If the product consists of only one chemical, enter the Chemical Abstract Service (CAS) Registry number, if available.
- **Batch/Lot** – Enter the batch/lot information received from the manufacturer.
- **Color Code** – Enter the manufacturer-assigned color code for the product, if available.
- **Storage Pressure*** – Select the appropriate pressure requirements for storing the product.
- **Storage Temperature*** – Select the appropriate temperature requirements for storing the product.

Manufacturer Tab

This tab (figure 18) allows you to enter information about the manufacturer.

- **Name*** – Enter the manufacturer's name.
- **CAGE** – Enter the manufacturer's commercial and government entity (CAGE) identifier, if available.
- **Division of** – If the manufacturer is a part of another company, enter the name of the parent company.
- **Address*** – Enter the manufacturer's address in one or both text boxes as needed.
- **City*** – Enter the city in which the manufacturer is located.

The screenshot shows a software window titled "Add to Inventory - Label and Container Information Only". The window is divided into several sections:

- Activity:** A dropdown menu set to "DSHE".
- Date Received:** A text box containing "13-Apr-2001".
- Building/Room:** Two text boxes, the first containing "1059" and the second containing "BAY FLAMMABLE LOCKER".
- Submitted By:** A text box containing "E. ALTERNATIVE".
- Date Submitted:** A text box containing "13-Apr-2001".
- Containers:**
 - Radio buttons for "Barcode(s)" (selected), "Not Barcoded", and "Classified Material".
 - Barcode(s) field: "1A053232" to "1A053232", with "1 containers" in red text.
 - Expiration Date, Total Cost, and Cost Per Container text boxes.
- Manufacturer Tab (Active):**
 - Name:** "PAINT MANUFACTURER"
 - CAGE:** Empty text box.
 - Division of:** Empty text box.
 - Address:** "12345 PAINT WAY" (with a second empty line below it).
 - City:** "PAINT"
 - State:** "MD" (dropdown menu)
 - Zip Code:** Empty text box.
 - Country:** Empty text box.
 - Phone, Fax, Web Site:** Empty text boxes.

Buttons for "Add to Inventory" and "Cancel" are on the right side. A checkbox for "Clear After Each Inventory Add" is also present.

Figure 18. Add to Inventory window showing Manufacturer tab.

- **State*** – Select the manufacturer’s state. (When you enter data for **State**, you are not required to enter data for **Country**.)
- **Zip Code** – Enter the zip code.
- **Country*** – Enter the name of the country if other than the United States. (When you enter data for **Country**, you are not required to enter data for **State**.)
- **Phone** – Enter the manufacturer’s phone number.
- **Fax** – Enter the manufacturer’s fax number.
- **Web Site** – Enter the manufacturer’s Web site.

Add to Inventory allows you to add the new information to the inventory. The window will clear for the next entry. For a list of all the containers that have been added to the inventory in one session, select the *Print* icon from the toolbar.

Cancel cancels the information and exits the window.

Clear After Each Inventory Add, when checked, clears out all three tabs after you click on the **Add to Inventory** button. When adding the same product to several locations or when adding several products from the same manufacturer, make sure that this check box is not activated (checked). After clicking **Add to Inventory**, the information in the tabs will not be erased. Changing information in the **Packaging** or **Product Information** tab causes the system to generate a new product ID for the data. Changing information in the **Manufacturer** tab causes a new manufacturer record to be created.

Each product entered in the **Add to Inventory** window is given a temporary product ID that begins with the letter “T.” Information about the product is sent to the HAZMART, which will determine if the product already exists in the database, if this is a new packaging of an existing product, or if this is a new product. At that time, the HAZMART will change the temporary ID to the correct permanent ID. The manufacturer information will also be stored in a temporary record for the HAZMART to verify.

A data report showing the containers that have been added to the inventory in one session is available by selecting the **Print** option from the **File** menu or by clicking the *Print* icon in the toolbar. The option to print the data report is also available when you exit the **Add to Inventory** window.

Barcode Reader From the **Inventory** menu, the **Barcode Reader** window (figure 19) allows you to download data from a portable barcode reader, save the data to a file, and use the downloaded data to conduct inventory checks or perform inventory moves.

Default Directory lets you enter the drive and the directory (in figure 19, E:\HAZMART\Reader Downloads) where the files are stored. This text box will be filled automatically when you use the *Browse* icon.

Reader Files to Read allows you to enter the name of each file you wish to read. If no pathway (drive and directory) is entered with the file name, it is assumed to be the default pathway. You can enter as many files as you want in this text box or select them using the *Browse* icon. If you plan to edit data, enter only one file name.

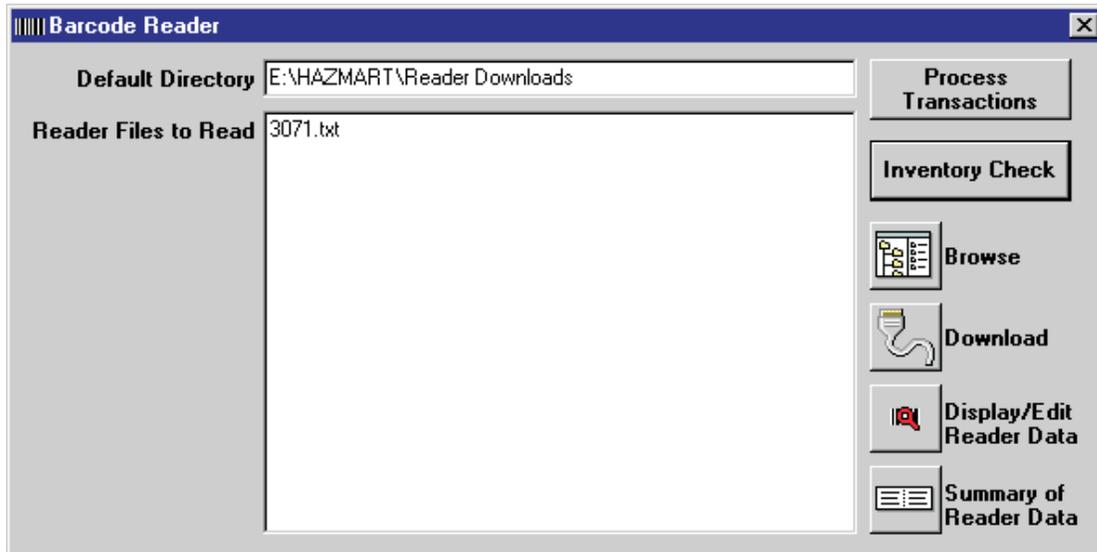


Figure 19. Barcode Reader window.

The *Browse* icon calls up a directory listing that lets you locate and select a file.

The *Download* icon activates the **Reader Download** window (figure 20) that transmits the selected files.

Follow these steps:

1. Click the *Download* icon on the **Barcode Reader** window (figure 19).
2. Put the reader in the docking station and turn the reader on.

Note: In order for the download to work, the HITS.ini file must be properly configured for your communications port. If you experience problems downloading files, please contact the HAZMART or HITS hotline.

3. On the reader, press the *Alt* and *F1* keys at the same time to tell the reader to go to the transmit mode.
4. On the reader, press the *F1* key and then *Enter* to tell the reader to start transmitting. As data is downloaded, it will appear in the **Reader Download** window (figure 20). The data shown in the **Reader Download** window is a direct transmission from the reader with no editing checks made and no comparison made between the data and

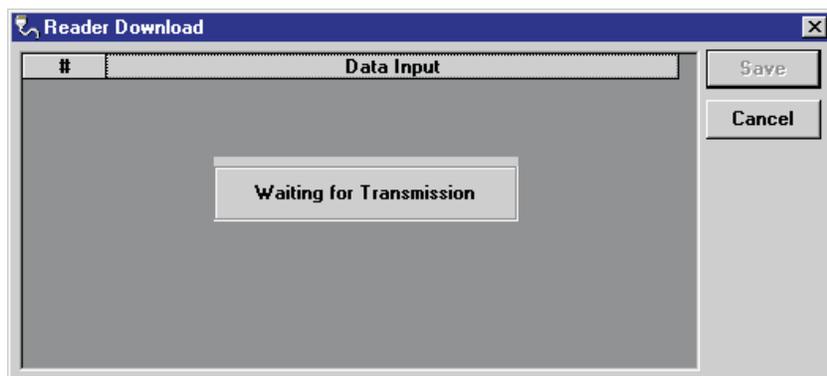


Figure 20. Reader Download window.

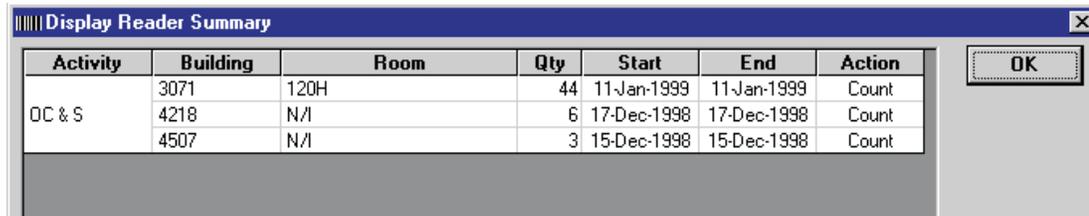
records in the database. When the data transmission is complete, the reader window shows how many records were downloaded and the **Reader Download** window displays the message “Done.”

5. Click **Save** in the **Reader Download** window to activate the Windows file manager and select the drive, directory, and file name to save the data under. The file is saved in ASCII format and can be edited by any standard text editor, such as Notepad, or by opening the file using the *Display/Edit Reader Data* icon in the **Barcode Reader** window (figure 19).
6. After saving the information in the **Reader Download** window, you will be asked whether you want to open the file in display/edit mode explained next.

The *Display/Edit Reader Data* icon in the **Barcode Reader** window reads the reader file(s) and presents a list of the information by location (figure 21) and checks the barcodes listed in each file with records in the HITS database. This display is useful for checking duplicate entries and unknown containers. If you entered a single file in the **Barcode Reader** window, then you can edit the file by right-clicking on the record to edit it or delete it, for example, in the event of a duplicate.

#	Building	Room	Barcode	Product	Manufacturer	Qty	Size
1			6a254068	KODAK C DEVELOPERS BLACK	EASTMAN KODAK COMPANY	1	750 GRAM BOX
2			6a254069	KODAK C DEVELOPERS BLACK	EASTMAN KODAK COMPANY	1	750 GRAM BOX
3			6a254070	KODAK C DEVELOPERS BLACK	EASTMAN KODAK COMPANY	1	750 GRAM BOX
4			6A282760	REMANUFACTURED TONER CARTRIDGE	LASER LIFE, INC.	1	2 POUND BOX
5			6A282761	REMANUFACTURED TONER CARTRIDGE	LASER LIFE, INC.	1	2 POUND BOX
6			6A297315	WD-40 AEROSOL	WD-40 CO.	1	11 OUNCE CAN
7			6a37332	REMANUFACTURED TONER CARTRIDGE	LASER LIFE, INC.	1	500 GRAM OTHER
8			6a86883	KLEEN SCREEN	SUNSHINE CHEMICAL SPECIALITIES, IN	1	18 OUNCE CAN
9			6a86886	KRYLON 1311 MATTE FINISH SPRAY CO	KRYLON IND./DIVISION OF SHERWIN W	1	13 OUNCE CAN
10	3071	120H	6a86887	KRYLON 1311 MATTE FINISH SPRAY CO	KRYLON IND./DIVISION OF SHERWIN W	1	13 OUNCE CAN
11			6a86888	TIME MIST ODOR ELIMINATOR	WATERBURY CO., INC.	1	12 OUNCE CAN
12			6a86889	NO. 337 PADDING COMPOUND	HURST GRAPHICS, INC.	1	1 GALLON PLASTIC BI
13			6a86890	NO. 337 PADDING COMPOUND	HURST GRAPHICS, INC.	1	1 GALLON PLASTIC BI
14			6a86893	INSECT REPELLENT II (CASE:12.5 OZ C	TERAND INDUSTRIES INC.	1	5 OUNCE CAN
15			6a86925	WD-40 AEROSOL	WD-40 CO.	1	12 OUNCE CAN
16			6a86933	SILICONE SEVEN LUBRICANT	CROWN INDUSTRIAL PRODUCTS INC.	1	16 OUNCE CAN
17			6a86945	CRAWLING INSECT SPRAY (AEROSOL)	AEROSOL MAINTENANCE PRODS/DIV	1	14 OUNCE CAN
18			6a86947	KLEEN SCREEN	SUNSHINE CHEMICAL SPECIALITIES, IN	1	18 OUNCE CAN
19			6a86949	KLEEN SCREEN	SUNSHINE CHEMICAL SPECIALITIES, IN	1	18 OUNCE CAN

Figure 21. Data display of a barcode reader file.



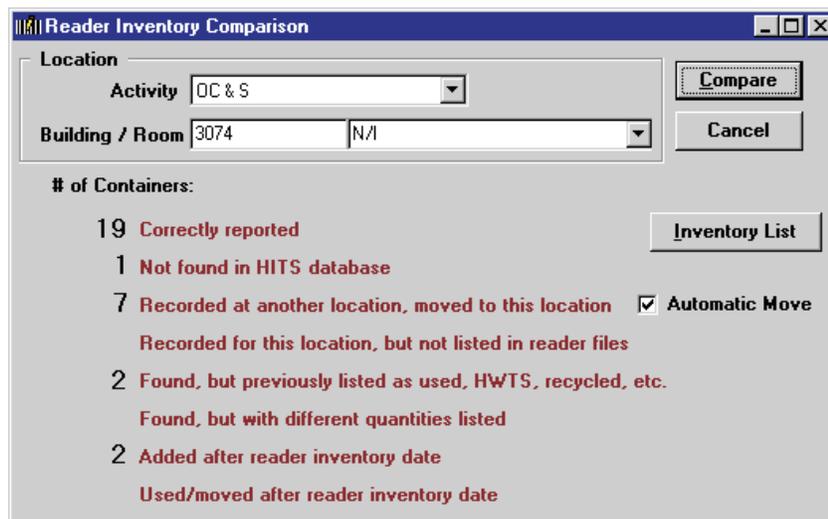
Activity	Building	Room	Qty	Start	End	Action
OC & S	3071	120H	44	11-Jan-1999	11-Jan-1999	Count
	4218	N/I	6	17-Dec-1998	17-Dec-1998	Count
	4507	N/I	3	15-Dec-1998	15-Dec-1998	Count

Figure 22. Summary data display of barcode reader files.

The *Summary of Reader Data* icon in the **Barcode Reader** window reads through the file(s) and presents a summary of the information by location (figure 22).

Process Transactions in the **Barcode Reader** window processes the reader files listed that contain *move* and all *use* records. After processing, a summary message appears, showing how many records were changed in the HITS database.

Inventory Check in the **Barcode Reader** window allows you to compare barcode reader *count* data with the HITS inventory for a location. This button opens the **Reader Inventory Comparison** window (figure 23). Select the activity and the building/room that you want to



Location

Activity: OC & S

Building / Room: 3074 N/I

of Containers:

- 19 Correctly reported
- 1 Not found in HITS database
- 7 Recorded at another location, moved to this location Automatic Move
- Recorded for this location, but not listed in reader files
- 2 Found, but previously listed as used, HWTS, recycled, etc.
- Found, but with different quantities listed
- 2 Added after reader inventory date
- Used/moved after reader inventory date

Figure 23. Reader Inventory Comparison window.

compare, and click **Compare** to generate a summary of the number of correctly reported records and discrepancies. To see the new inventory listing for that location, click **Inventory List**.

The eight counts in this window are as follows.

Correctly reported – containers that are currently in the database for the location listed in the reader file(s).

Not found in HITS database – containers that were listed in the reader file(s) but have not been recorded in HITS (i.e., unknown containers).

Recorded at another location, moved to this location – containers found at this location but recorded in HITS as being at another location. To automatically move the containers to the location where the reader found them, have the **Automatic Move** box checked (default condition).

Recorded for this location, but not listed in reader files – containers in the database that are supposed to be at this location, but were not counted by the reader. These containers may have been moved to another location and not yet found, or they may have been used.

Found, but previously listed as used, HWTS, recycled, etc. – containers that were supposedly gone from the inventory, but have been found.

Found, but with different quantities listed – containers with quantities listed in the database that do not match the quantities listed by the reader.

Added after reader inventory date – containers added to the inventory between the inventory date and comparison date.

Used/moved after reader inventory date – containers used or moved between the inventory date and comparison date.

After comparing the reader and inventory data, an inventory listing for the location can be created by clicking **Inventory List**.

Freebies List

From the **Inventory** menu, the **Freebies List** option accesses the **HITS Freebies** window (figure 24), which displays products that have been placed on the Freebies List and are available to all activities. On the left side of the window is a list of the product categories. A blue check mark indicates a category for which freebie items are available. To see what products are available in a category, click on the category name. To expand the category list out another level, click on the plus sign (+) in front of a category name. On the right side of the window is a listing of all of the products that have been placed on the Freebies List for that category.

Clicking on a product with the right mouse button brings up several options:

- **Product Information** lists the product's physical parameters, packaging types, chemical constituents, hazards, storage and disposal instructions, and identified substitutes. See the **Products** menu section for details.

The screenshot shows the 'HITS Freebies' window. On the left is a tree view of 'Product Categories' with blue checkmarks next to several categories. On the right is a table of 'Products' with columns for ID, Trade Name, Packaging (Size, Measure, Type), Number of Containers and Units, and Activity.

#	ID	Product Trade Name	Packaging			Number of...		Activity	
			#	Size	Measure	Type	Containers		Units
20	67406	ALUMINA NEUTRAL TYPE WN-6 CHROMATC	001	1	JLOGRAM	PLASTIC BO	1	1	
21	75052	AMMONIUM BIFLUORIDE	001	500	GRAM	PLASTIC BO	1	1	
22	41096	AMMONIUM CARBONATE HPLC GRADE	004	500	GRAM	GLASS BOT	1	1	
23	39007	AMMONIUM CHLORIDE	001	1	JLOGRAM	PLASTIC BO	1	1	
24	33517	AMMONIUM CHLORIDE CRYSTAL ACS REAG	004	3	JLOGRAM	PLASTIC BO	1	1	
25	62673	AMMONIUM PERSULFATE	002	100	GRAM	GLASS BOT	1	1	
26	33527	AMMONIUM PHOSPHATE CERTIFIED A.C.S. I	002	500	GRAM	PLASTIC BO	1	1	
27	66455	ANILINE 99.5% ACS REAGENT	001	100	GRAM	GLASS BOT	1	1	
28	75013	ARSENIC III SULFIDE 98%	001	25	GRAM	GLASS BOT	1	1	
29	75092	ARSENIC POWDER 325 MESH	001	10	GRAM	GLASS BOT	1	1	
30	75014	ARSENIC TRICHLORIDE 99.8% (ARSENIC III)	001	250	GRAM	GLASS BOT	1	1	
31	67400	ASOLECTIN #1 95% PURIFIED SOY PHOSPH	001	1	POUND	GLASS BOT	1	1	
32	77470	BENZONYL CHLORIDE REAGENT ACS	001	500	GRAM	PLASTIC BO	1	1	
33	69218	BIS-ACRYLAMIDE	001	100	GRAM	GLASS BOT	1	1	
34	74964	BISMUTH SHOT, TEAR-SHAPED, .4-30 MES	001	500	GRAM	GLASS BOT	1	1	
35	33543	BORIC ACID (CERTIFIED A.C.S.)	001	500	GRAM	PLASTIC BO	1	1	
36	77352	BRAKE FLUID, SILICONE	001	1	GALLON	CAN	3	3	ATC
37	33547	BRIJ 35	002	500	GRAM	GLASS BOT	1	1	
38	52349	CACODYLIC ACID MOLECULAR BIOLOGY GR	001	100	GRAM	GLASS BOT	1	1	
39	74968	CADMIUM CHLORIDE (99+% ACS REAGENT)	001	100	GRAM	GLASS BOT	2	2	
40	74969	CADMIUM GRANULAR 99+% 5-20 MESH	001	500	GRAM	GLASS BOT	1	1	
41	74970	CADMIUM POWDER 99+% 100 MESH	001	500	GRAM	GLASS BOT	1	1	
42	74971	CADMIUM POWDER 99+% 100 MESH	002	500	GRAM	GLASS BOT	1	1	
43	39103	CALCIUM CHLORIDE DIHYDRATE GRADE I	001	500	GRAM	GLASS BOT	2	2	
44	50797	CAPILLARY CARTRIDGE COOLANT	001	450	MILLILITE	PLASTIC BO	1	1	
45	67401	CHEMALOG L-ASCORBIC ACID	001	500	GRAM	PLASTIC BO	1	1	ECBC
46	67402	CHEMALOG L-ASCORBIC ACID	001	500	MILLILITE	GLASS BOT	1	1	
47	64774	CHEMICAL OXYGEN DEMAND STANDARD SI	002	200	MILLILITE	GLASS BOT	1	1	
48	55328	CITRIC ACID 99%	002	500	GRAM	PLASTIC BO	1	1	
49	67405	CITRIC ACID FREE ACID ANHYDROUS	002	1	JLOGRAM	PLASTIC BO	1	1	
50	55329	CITRIC ACID TRISODIUM SALT	001	500	GRAM	PLASTIC BO	1	1	
51	52381	CONGO RED, HIGH PURITY BIOLOGICAL ST	002	25	GRAM	GLASS BOT	1	1	
52	77569	COPPER(II) ACETATE MONOHYDRATE P.A.	001	100	GRAM	PLASTIC BO	1	1	
53	33624	CUPRIC SULFATE	002	500	GRAM	GLASS BOT	1	1	
54	57207	DENATURED ALCOHOL	003	5	GALLON	STEEL DRU	1	1	ATC
55	41840	DEOXYCHOLIC ACID, SODIUM SALT MOLECI	001	100	GRAM	GLASS BOT	1	1	

Figure 24. HITS Freebies window.

- **Container Information** displays a detailed listing for the product, showing the individual containers (figure 25).
- **MSDS** displays the manufacturer's MSDS for the product.

Clicking on a record in the **Freebies Container Listing** window with the right mouse button presents several options:

- **Product Information** lists the product's physical parameters, packaging types, chemical constituents, hazards, storage and disposal instructions, and identified substitutes. See the **Products** menu section for details.
- **Container History** allows you to view the container history.
- **MSDS** displays the manufacturer's MSDS for the product.
- **Select** places the item on hold.

Items on Hold

From the **Inventory** menu, the **Items on Hold** option displays the same **Freebies Container Listing** window (figure 25) that is accessed from the **Freebies List** option. In this case, however, only containers that you have already placed on hold will appear in the window. This gives you the ability to see everything that you have marked over several sessions and to remove the "hold" on items you no longer want.

#	Location		Product		Packaging				Container	
	Building	Room	ID	Trade Name	ID	Size	Measure	Type	ID	Quantity
1	5015	N/I	55028	G-395 WTR GREASE AIRCRAFT GRADE A (AEROSHELL GREASE 22)	004	5	POUND	CAN	7A004880	
2		N/I			004	5	POUND	CAN	7A004881	
3		N/I			004	5	POUND	CAN	7A004883	
4		N/I			004	5	POUND	CAN	7A004884	
5		N/I			004	5	POUND	CAN	7A004885	
6		N/I			004	5	POUND	CAN	7A004887	
7		N/I			004	5	POUND	CAN	7A004888	
8		N/I			004	5	POUND	CAN	7A004889	

Figure 25. Freebies Container Listing window.

Change Product ID

From the **Inventory** menu, the **Change Product ID** option accesses the window (figure 26) that lets you change product IDs for containers assigned *00000 – unknown product with unknown manufacturer*. This product ID is assigned to containers that are discovered during inventory audits and are entered into the system by downloading data from a portable barcode reader, using the **Barcode Reader** window. Or it is assigned to containers that are entered into the system by using the **Tracking Log** window. It is not assigned to containers that are initially entered into the system by using the **Add to Inventory** window.

Barcode(s) allows you to identify, by barcode, the container(s) for transactions. You can enter containers singly, list several containers at once by separating them with commas, or enter a range of containers by placing a hyphen (-) or the word “to” between them (e.g., 6A313788 to 6A313795). As containers are entered, they appear beneath the text box in a table showing the product ID (i.e., 00000), the package number assigned to the container, and the trade name “unknown products.” You

Figure 26. Change Product ID window.

can remove a container from the list or review its history by clicking on it with the right mouse button.

Selecting the **New Product** function of the **Save As** option in the **Change Product ID** window allows you to enter the packaging, product, and manufacturer information identified for the previously unknown product. The tabs for these are identical to the tabs in the **Add to Inventory** window (figures 16 through 18) from the **Inventory** menu.

OK allows you to add the new information to the inventory. The window will clear for the next entry.

Each product entered in the **Change Product ID** window is given a temporary product ID that begins with the letter "T." Information about the product is sent to the HAZMART, which will determine if this product already exists in the database, if this is a new packaging of an existing product, or if this is a new product. Then, the HAZMART will change the temporary ID to the correct permanent ID. The manufacturer information will be stored in a temporary record for the HAZMART to verify.

A report showing container transactions that were entered into the system in one session is available by selecting the **Print** option from the **File** menu or by clicking the *Print* icon in the toolbar. The option to print the report is also available when you exit the **Change Product ID** window.

Delete a Container

From the **Inventory** menu, the **Delete a Container...** option accesses the window (figure 27) that allows you to delete a container that may have been inadvertently entered into the system during data entry. Limit use of this option to data entry errors and do not use it to correct inventory deficiencies (e.g., a container reported as *not found during inventory audit*). To delete the barcode, enter the barcode into the text box and click **OK**. The **Delete a Container...** window allows for deletion of one container (up to 12 characters in length) at a time; no ranges are accepted.

Correct Inventory Deficiencies

From the **Inventory** menu, the **Correct Inventory Deficiencies** option accesses the window (figure 28) that allows you to correct inventory discrepancies identified during inventory audits using the **Barcode Reader**

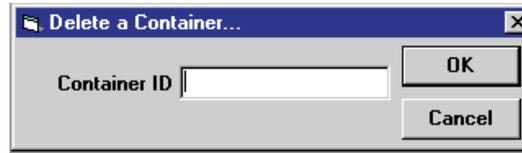


Figure 27. Delete a Container... window.

window (figure 19). You can correct two types of inventory discrepancies in the **Correct Inventory Deficiencies** window. Correct the status of a container not found during an inventory audit. Correct the status of a container that was marked as used, sent to HWTS, recycled, etc., but that was found on a shelf during the inventory audit comparison.

Activity lists all the activities to which you have access rights. Switching to a different activity automatically updates the list of locations from which you can select.

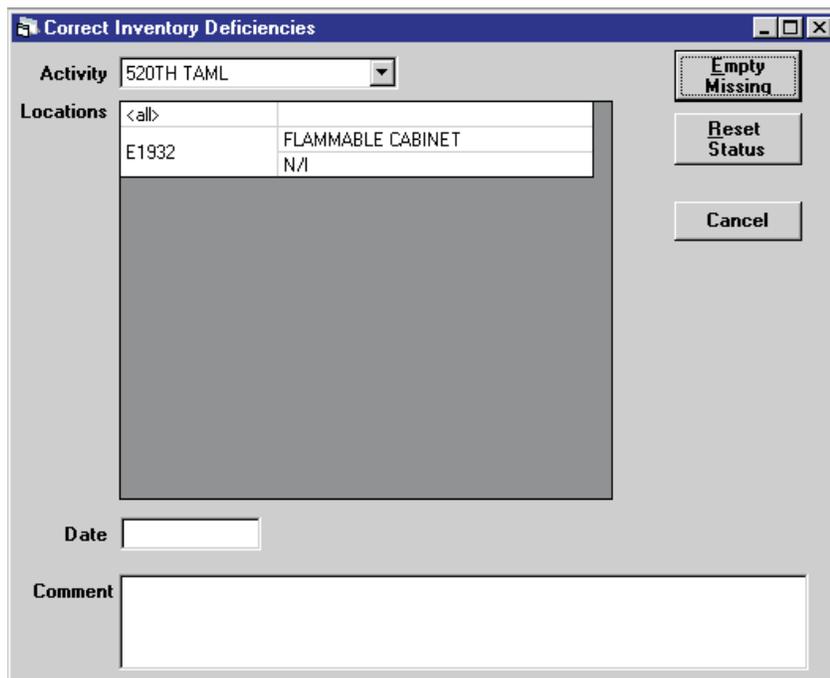


Figure 28. Correct Inventory Deficiencies window.

Locations lists all the locations to which you have editing access rights. **Only containers found at the location selected can be selected for correction transactions.** Select the location(s) for which transactions are to be performed by clicking each, using the right mouse button. You can select all of the locations, part of the locations, or a single location. Blue (cyan) indicates the location(s) you selected.

Empty Missing lets you change the status of containers in all selected locations from the *not found during inventory audit* status to the *empty* status.

Reset Status lets you change the status of the containers in the selected location(s) with the *found during inventory audit previously listed as used, sent to HWTS, recycled, etc.* discrepancy. This option changes the status of such containers to active in your inventory.

Date automatically defaults to the current date as the transaction date or allows you to select the date that you want the inventory corrections to be recorded in the system. Future dates are not accepted, and entering dates should be limited to a time after the original discrepancy was created.

Comment lets you add a comment to the container record(s) along with the transaction change(s).

Cancel lets you exit without performing a transaction.

A data report showing container transactions that have been entered into the system in one session is available by selecting the **Print** option from the **File** menu or clicking the *Print* icon in the toolbar. The option to print the transactions entered is also available when you exit the **Correct Inventory Deficiencies** window.

Products Menu

The **Products** menu (figure 29) provides reference information on products stored on the installation. Only the HAZMART can add or delete this data with the exception of **Location Limits**, which can be changed at the activity level provided you have the access rights to do so. If you have questions about or problems with the data, call the HAZMART to correct the information.

Product List
 Product Information for Container
 Location Limits

Figure 29. Products menu.

Product List

From the **Products** menu, the **Product List** option displays a list (figure 30) of all products in HITS, according to product category. On the left side of the window are the product categories. To see the products for a category, click on the category name. To expand a category to the next

#	Item ID	Trade Name	Manufacturer
2307	78328	N5212 RED A/D ENAMEL 11136	DYNAMATCH/DIV. OF NILES PAINT
2308	62012	N5217 BLACK A/D ENAMEL 17038	NILES CHEMICAL PAINTS CO.
2309	54272	N5239 686 TAN AIR DRY ENAMEL	NILES CHEMICAL PAINTS CO.
2310	140541	N5419A OLIVE DRAB EPOXY 24084	NILES CHEMICAL PAINTS CO.
2311	140432	N54658 EPOXY ACTIVATOR 1:1 BLEND	DYNAMATCH/DIV. OF NILES PAINT
2312	76701	N5803 ORANGE GLOSS A/D 12246	DYNAMATCH/DIV. OF NILES PAINT
2313	57274	N8202A CENTARI ACRYLIC ENAMEL BUTTER YE	DUPONT, (E.I.) (DE NEMOURS & CO. IN
2314	63784	NAPA AUTOMOTIVE FINISHES ACRYLIC ENAMEL S	MARTIN SENDOUR CO.
2315	136226	NASON AUTOMOTIVE FINISHER (99ID)	E.I. DUPONT DE NEMOURS & CO.
2316	152044	NATURAL ODOR FREE FLAT WALL PAINT 39 SE	MCCORMICK PAINT WORKS
2317	152043	NATURAL ODOR FREE INTERIOR LOW SHEEN	MCCORMICK PAINT WORKS
2318	152045	NATURAL ODOR FREE INTERIOR SEMI-GLOSS	MCCORMICK PAINT WORKS
2319	79695	NCP SPECIALIZED COATINGS A2141 GLOSS WHITE	NATIONAL CHEMICAL & PLASTICS CO.
2320	71588	NEVER SLIP (ALL COLORS)	STATE CHEMICAL MANUFACTURING I
2321	57915	NEVER SLIP ANTI-SLIP COATING 48140 RED	STATE CHEMICAL MANUFACTURING I
2322	55911	NEVER SLIP ANTI-SLIP COATING GREY	STATE CHEMICAL MANUFACTURING I
2323	140669	NITROCELLULOSE LACQUER BLK LAC TT-L-54B	LENMAR INC (AMERON CORP)
2324	140650	NITROCELLULOSE LACQUER TTL-32A 16081	LENMAR INC (AMERON CORP)

Figure 30. Product List window.

level, click on the plus sign (+). When a product category is selected, all products assigned to that category are shown in a listing on the right side of the window. Some of the product categories are “reference” categories and instruct you to see another category. Clicking on a reference category displays the category referenced. Note the green environmentally preferable product (EPP) symbol before the trade names of environmentally preferable products, the red symbol before the trade names of products for which environmentally preferable substitutes are available, and the blue symbol before the trade name of products containing a PBT chemical.

You can control the product listing with the following options:

Sort by allows you to reset the list of products by item (product) ID, trade name, or manufacturer.

Filter For... button activates the HITS search engine to select products based on parameters such as name, chemical contents, and MILSPEC. Once a selection criterion is set, it stays active as you move from one product category to another.

Active Filter shows whether a selection criterion has been established and is being used. If the box displays no check, all products for the current category will be listed. If you check the box by clicking on it, it will either activate the search engine (if no criterion has been set), or it will re-activate the previous selection criterion.

Clicking on a product, using the right mouse button, allows you to bring up the **Product Information** window or to create an inventory listing showing all locations (available to you) where that product can be found by selecting **Where Found**.

Product Information

The **Product Information** window (figure 31) and its nine tabs allow you to view detailed information on the selected product. If you know the container ID (barcode), you can access the same information quickly from the **Products** menu by choosing the **Product Information for Container** option explained later. The **OK** button on the right side of the screen closes the window.

Product Information: 164138 - PERMANENT BOND ADHESIVE

Hazard Ratings Safety/Handling Storage/Disposal Alternative Products

Identifiers/ Physical Containers/ Packaging Chemical % Manufacturer MSDS **OK**

Identifiers

Data Entry Date 07-Jun-2003

Category ADHESIVES/CEMENTS (8040)

MILSPEC

Green List UNDETERMINED STATUS

Exempt

Barcoded

Trade Secret

No Longer Manufactured

Central Database Record

Physical Parameters

Spec. Gravity 1.1

Flash Point 110F (Temp °F/Method)

Density

Figure 31. Product Information window, Identifiers/Physical tab.

Identifiers/Physical Tab

The **Identifiers/Physical** tab (figure 31) displays product information according to **Identifiers** and **Physical Parameters**.

Product Identifiers

Data Entry Date – This is the last date the information for this product was edited/entered.

Category – This field displays the product category.

MILSPEC – The product's MILSPEC is displayed.

Green List – Entry indicates whether this product has been recognized as environmentally safe.

Exempt – If checked, the product is exempt from reporting.

Barcoded – If checked, containers of this product should be barcoded.

Trade Secret - If checked, the ingredients for this product are considered proprietary information.

No Longer Manufactured – If checked, this product is no longer made by the manufacturer.

Central Database Record – If checked, this product is included in the database as a result of a joint effort between Aberdeen Proving Ground and Army Environmental Center to collect product information for access by any Army installation.

Physical Parameters

Spec. Gravity – The specific gravity is the ratio of the weight of one unit of the product compared to one unit of water.

Flash Point – The flash point is expressed as temperature and method used.

Density – This field displays the density of a product

Containers/Packaging Tab

The **Containers/Packaging** tab (figure 32) lists the types of packaging available/found for the selected product. Differences in packaging may be due to color, size, physical state, color code, or manufacturer ID.

Use the table's horizontal scroll bar to view all information available for each container.

– container/packaging ID.

Description – description of the container.

#	Description	Qty	Size	Units	Type	State
001		1	5	GALLON	PLASTIC OR NON-METALLIC DRI	Liquid
002		1	1	GALLON	CAN	Liquid

Figure 32. Product Information window, Containers/Packaging tab.

Qty – quantity of items within the container when new.

Size – number of units within the container.

Units – unit of measure for weight/volume.

Type – type of container.

State – physical state of the container/packaging.

Mfr Part No. – manufacturer part number.

NSN – national stock number of the container/packaging.

Color Code – color code of the container/packaging.

Wgt. (lbs.) – weight (in pounds) of one container.

Chemical % Tab

The **Chemical %** tab (figure 33) identifies all of the Chemical Abstract Service (CAS) Registry numbers, chemical names, and percentages for each chemical contained in the selected product.

CAS – This field contains the CAS Registry number for the ingredient if listed by the manufacturer; otherwise, the field will be blank.

Chemical Name – This is the chemical name as identified by the manufacturer.

Percent – Chemicals are sorted by the maximum value of the percentage or percentage range for each chemical.

Trade Secret – This is a check box indicating whether the ingredient is listed as a trade secret by the manufacturer.

CAS	Chemical Name	Percent	Trade Secret	PBT	CAS Info
8052-41-3	STODDARD SOLVENT	25 - 30	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
67-64-1	ACETONE	15	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Figure 33. Product Information window, Chemical % tab.

PBT – This is a check box indicating whether the ingredient is listed as a persistent bioaccumulative toxin (PBT).

CAS Info – This is a check box indicating whether there is a HITS record with further information about the chemical. If there is further information, you can view the chemical record by right-clicking on it.

Manufacturer Tab

The **Manufacturer** tab (figure 34) displays available information about the named manufacturer.

MSDS Tab

The **MSDS** (material safety data sheet) tab (figure 35) displays information about the product's MSDS and lets you view and print the manufacturer's MSDS.

The screenshot shows a software window titled "Product Information: 164138 - PERMANENT BOND ADHESIVE". The window has several tabs: "Hazard Ratings", "Safety/Handling", "Storage/Disposal", "Alternative Products", "Identifiers/Physical", "Containers/Packaging", "Chemical %", "Manufacturer", and "MSDS". The "Manufacturer" tab is selected. The form displays the following information:

Name	HENRY, W.W., CO. (ARMSTRONG INDUSTRIES)	CAGE	11761
Division Of			
Address	5608 SOTO STREET		
	P.O. BOX 789		
City	HUNTINGTON PARK	State	CA
		Zip Code	90255
Country	USA		
Regular Phone	323-583-5000	<input type="checkbox"/>	Out of business
Emergency Phone			
Fax			
Web Site	WWW.HENRY.COM		
Comments			

Figure 34. Product Information window, Manufacturer tab.

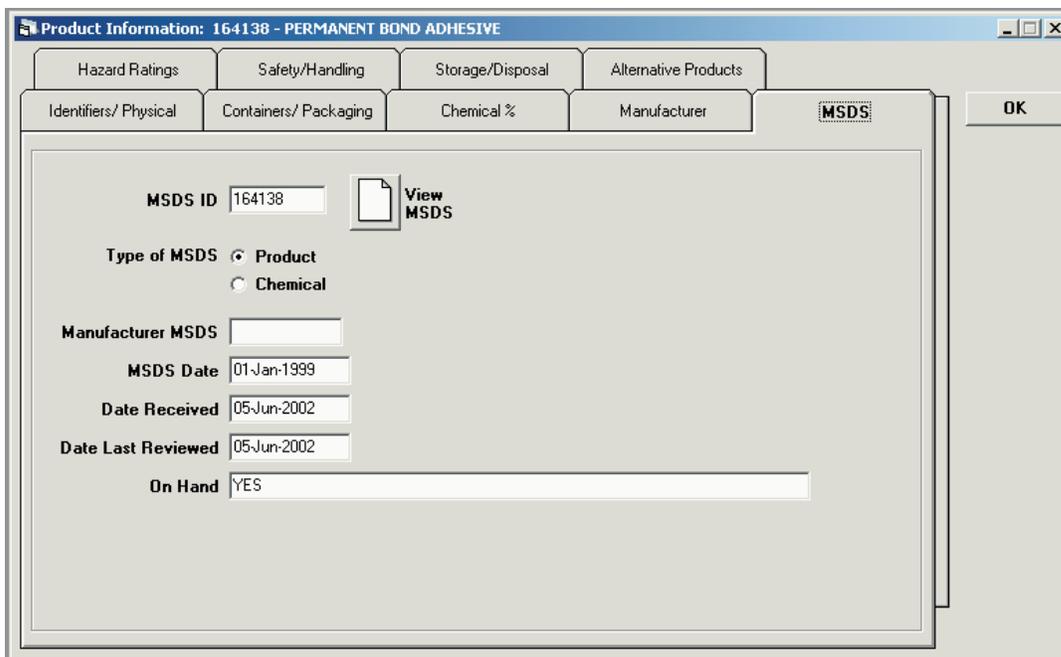


Figure 35. Product Information window, MSDS tab.

MSDS ID – HITS internal ID number.

Type of MSDS – either product or chemical.

Manufacturer MSDS – manufacturer’s MSDS ID.

MSDS Date – date the MSDS was written by the manufacturer.

Date Received – date the MSDS was received at the installation.

Date Last Reviewed – date the information on the MSDS was reviewed by the HAZMART.

On Hand – status of the physical copy of the MSDS.

View MSDS button – enabled or “grayed out.” If the button is enabled (not grayed out), click on it to view a scanned copy of the manufacturer’s MSDS in the **MSDS Images** window (figure 36).

MSDS Images: 164138, PERMANENT BOND ADHESIVE

MSDS: 164138

Page
1

MATERIAL SAFETY DATA SHEET

Henry Company
2911 Stanton Avenue
Huntington Park, CA 90255
Regular Telephone (323) 583-5000
For Emergency Information Only (800) 424-0980

HMIS
HEALTH: 2
FLAMMABILITY: 2
REACTIVITY: 0
PFRS PROT. EQUIP: A
NFPA 704

I. PRODUCT IDENTIFICATION
Trade Name: Permanent Bond Adhesive
CAS#: As per label

II. HAZARDOUS INGREDIENTS

Ingredient Name	Percent	Occupational Exposure Limits TLV	Vapor Pressure
INITIALS	25-33%	100 PPM	<5 MMHg @ 100 Deg F

III. PHYSICAL DATA
Boiling Range: 210-400 Deg F
Vapor Density: Heavy
Evaporation Rate: 3 water based
Weight per Gallon: Approx 8.1 lbs
% Volatile Volume: 33-40%
% Water Volume: 66-67%
Maximum V.O.C.: 250 grams/liter

IV. FIRE AND EXPLOSION HAZARD DATA
Flammability Classification: OSHA II
Flash Point: 110 deg F
LEL: 1% EXTINGUISHING MEDIA: Water, CO2, Dry
Chemical
UNUSUAL FIRE AND EXPLOSION HAZARDS: None
Special Precautions: None

V. HEALTH HAZARD DATA
Effects of Overexposure: Irritation, redness, itching and loss of consciousness. May irritate eye.
Medical Conditions Prone to Aggravation by Exposure: Irritation of the respiratory tract.
Primary Routes of Entry: Inhalation
Emergency and First Aid Procedures: Move person to fresh air. Apply artificial respiration if needed. Seek medical attention during transport with person to hospital.
Comments: The MSDS is subject to change without notice. This MSDS document should be reviewed annually for changes.
Stability: Stable
Hazardous Polymerization: Will not polymerize under normal conditions.
Conditions to Avoid: Sources of heat and light
Incompatibility: Incompatible with acids. May react with strong oxidizing agents.

VI. SPILL OR LEAK PROCEDURES
Steps to be taken in case material is released or spilled: Evacuate all sources of ignition in the area. Wear a respirator with oily, dust/acidic/salt or other non-flammable adsorbent media. Call your safety dept.
Waste Disposal Method: Dispose as solid waste in accordance with local regulations.

VII. SAFE HANDLING AND USE INFORMATION
Respiratory Protection: Not normally required. Spray application releases particles matter into the air. To prevent irritation of nose, use proper respiratory device as recommended by equipment manufacturer.
Ventilation: Proper ventilation sufficient to keep vapor concentration below 500 PPM. Closure of intake vents for roof coating application.
Protective Gloves: Nitrile, except to keep hands from becoming black and sticky.
Eye Protection: Goggles to avoid splashes.
Other Protective Equipment: None
Hygienic Practices: Wash skin with soap and water or waterless cleanser. Flush with water for 15 minutes.

IX. SPECIAL PRECAUTIONS
Precautions to be taken in handling and storing: Store away from heat and flame and other sources of ignition.
Other Precautions: Close air intakes and exhaust over 2000 RPM.

X. TRANSPORTATION DATA
DOT: Regulated
Shipping Name: Combustible liquid, n.o.s.
Hazard Class: Combustible Liquid
Label Required: None
ID: UN 1993, Packing Group: III, ERG #: 122

Figure 36. MSDS Images window.

To move from one page to another, click on the page number on the left side of the window.



The *Zoom In* icon enlarges the section of the image where you click.

The *Zoom Out* icon reduces the size of the image where you click.

The *Fit All* icon restores the image to the full-page view.

To print the MSDS, click on **Print** in the HITS toolbar. You will be given options to print either the entire MSDS or selected pages.

Hazard Ratings Tab

The **Hazard Ratings** tab (figure 37) identifies the selected product's hazard ratings as they apply to the Hazardous Materials Information System (HMIS), the National Fire Protection Act (NFPA), the Superfund Amendments and Reauthorization Act (SARA), health hazards, and physical hazards.

Safety/Handling Tab

The **Safety/Handling** tab (figure 38) displays the actions, supplies, and equipment needed to safely handle the selected product (see checked boxes) or in the event of a spill or fire involving the product.

Storage/Disposal Tab

The **Storage/Disposal** tab (figure 39) displays storage parameters, Department of Transportation (DOT) ID values, and disposal information pertaining to the selected product.

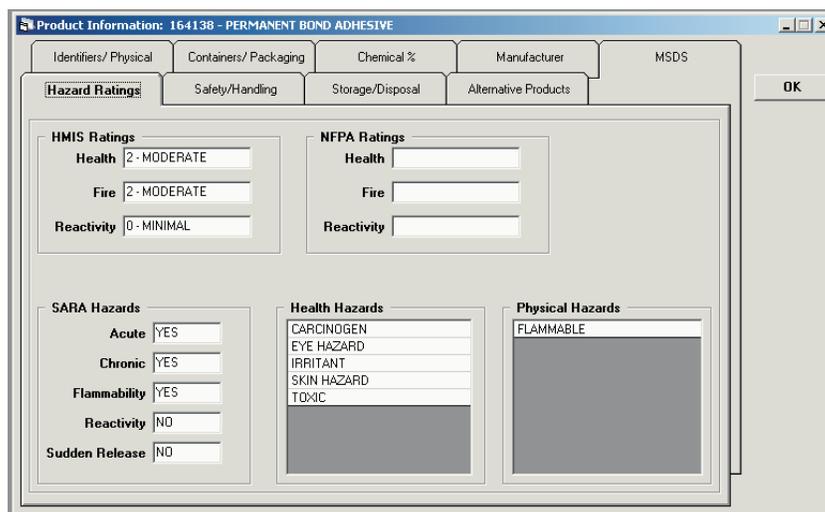


Figure 37. Product Information window, Hazard Ratings tab.

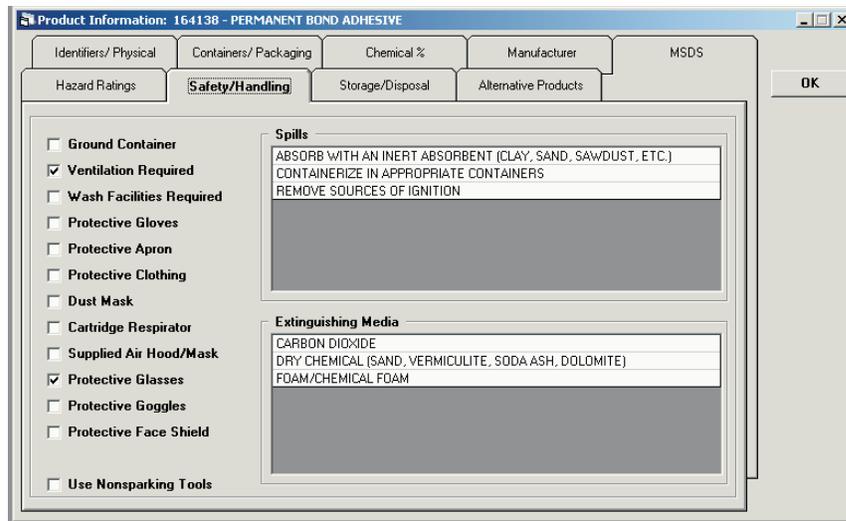


Figure 38. Product Information window, Safety/Handling tab.

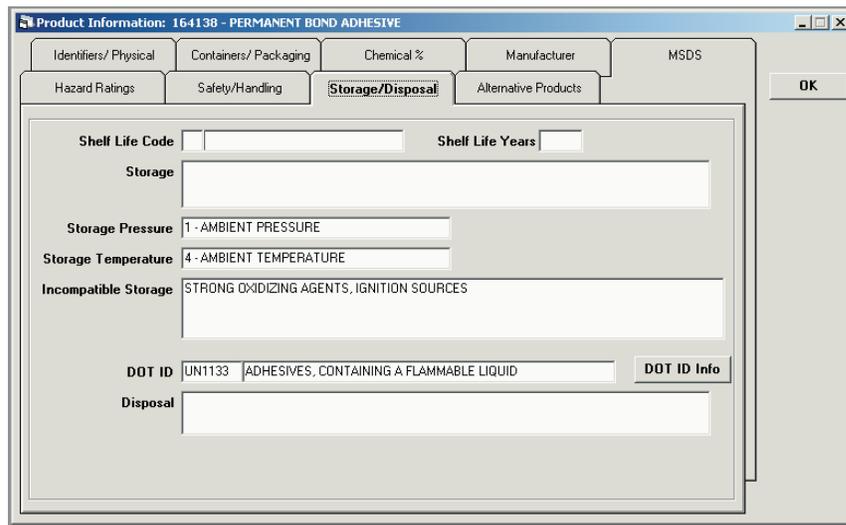


Figure 39. Product Information window, Storage/Disposal tab.

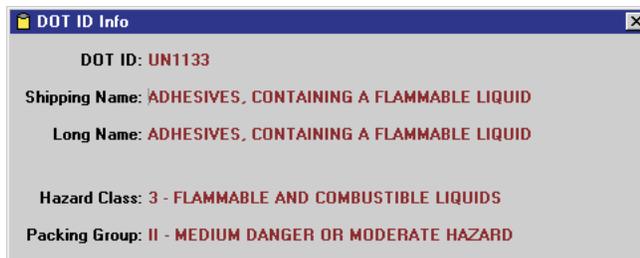


Figure 40. DOT ID Information window.

When a DOT ID is listed for the product, the **DOT ID Info** button becomes available. Pressing the button displays additional information as shown in figure 40.

Alternative Products Tab

The **Alternative Products** tab (figure 41) displays the identified environmentally preferable product (EPP) substitutes (e.g., bulk liquid versus aerosol) for the selected product.

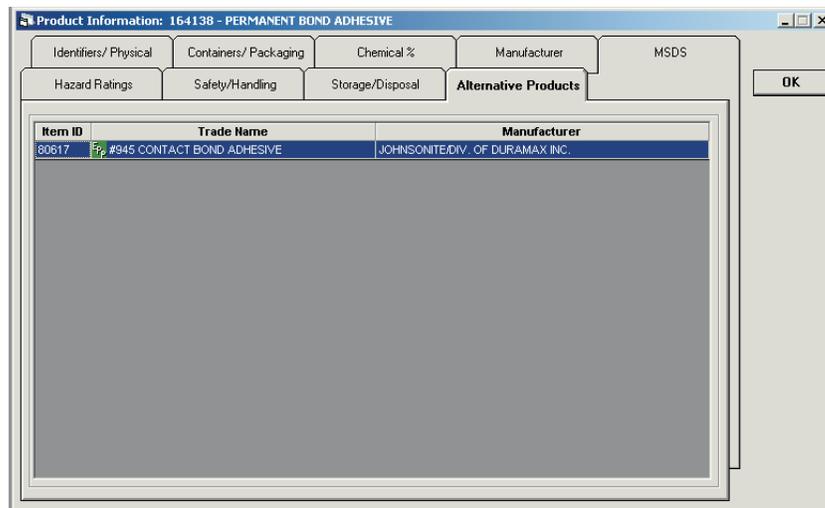


Figure 41. Product Information window, Alternative Products tab.



Figure 42. Product Information for Container window.

Product Information for Container

From the **Products** menu, the **Product Information for Container** option provides quick access to product information when you know the barcode (container) number. In the **Product Information for Container** window (figure 42), enter the container barcode and click **OK** to access the **Product Information** window (figure 31).

Location Limits

From the **Products** menu, the **Location Limits** option is used to manage inventory levels by specifying, by selected activity, the low and high limits for products. This option is available to all users with the access rights to add/edit inventory for an entire activity. The **Location Limits** window (figure 43) displays limits set in the database. Columns are **Activity**, **Limit Name**, **Low Amt.**, **High Amt.**, **Limit Type**, and **Location Type**.

Activity	Limit Name	Low Amt.	High Amt.	Limit Type	Location Type
203RD MIB	LATEX PAINTS	10	20	No. of Containers	Building/Zone: 4727 / N/I

Figure 43. Location Limits window.

To create the first location limit, right-click anywhere on the screen in figure 43 to open the **Add Location Limit** window (figure 44). The *Add*, *Edit*, and *Delete* functions will be activated after you create the initial location limit.

Activity – a list of all the activities to which you have access rights. Select only one activity. Switching to a different activity automatically updates the **Limits** field.

Limit Name –Enter a name for the limit. The name must be no more than 25 characters and must be unique to the selected activity. For example, the limit name may be a process like “VEHICLE MAINTENANCE” or a category like “LATEX PAINTS.”

Location – Select from one of four choices for how the limit is to be applied.

- **All** – total inventory for your activity.
- **Building** – total inventory in an entire building. This is the default option.
- **Building/Zone** – total inventory in a specific zone within a building.
- **Building/Room** – total inventory within a specific location.

Limits – Enter the **Low Limit** and **High Limit** to apply to the **Limit Name**. Create a limit based on quantity, **No. of Containers**, or on weight by pounds, **Weight (lbs)**, depending on the product size and type of packaging. Setting the limit to **Weight (lbs)** lets you combine different products and packaging types. **No. of Containers** is the default option.

Products – Enter the list of products to which the limit is to be applied. You will have the options to *Add* or *Delete* from the list. You must enter the **Product ID** and **Packaging ID**; then HITS will check the database

and fill in the **Trade Name** and **Container Type**. **Container Type** includes a description of the size, measure, and container code (e.g., “F” for can and “L” for cylinder). When you finish adding to or deleting from the list, click **OK** to save the information.

Add Location Limit

Activity: 203RD MIB

Limit Name: LATEX PAINTS

Location

- All
- Building: 4727
- Building/Zone: 4727 01
- Building/Room: 4727 N/A

Limits

Low Limit: 10 No. of Containers Weight (lbs)

High Limit: 20

Products

#	Product ID	Trade Name	Packaging ID	Container Type
	136590	ULTRA DELUXE INTERIOR VINYL ACRYLIC LATEX SEMI-GLOSS ENAMEL (35-SERIES)	001	1 GL F

Figure 44. Add Location Limit window.

Reference Menu

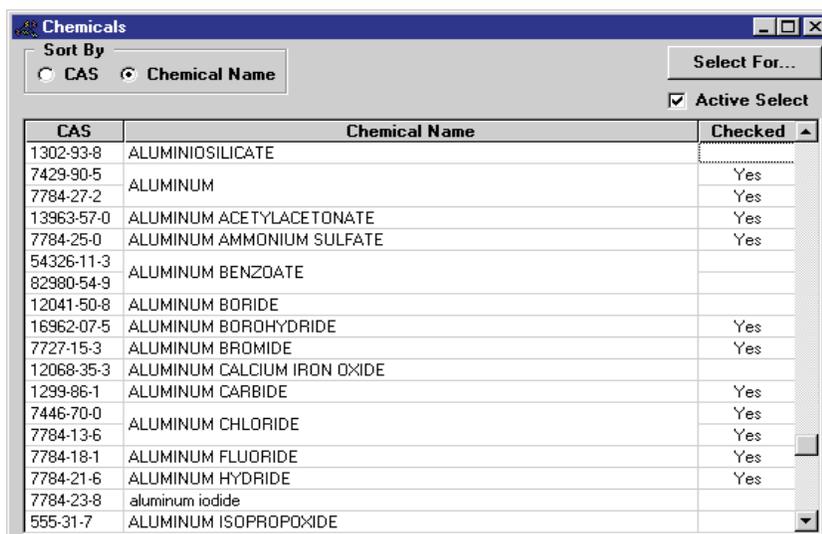
The **Reference** menu (figure 45) allows you to view information by chemical, activity, location, manufacturer, regulatory list, and processes. Only the HAZMART can add or delete this data with the exception of **Locations**, which can be changed at the activity level provided that the user has the access rights to do so. If you have questions about or problems with the data, call the HAZMART to correct the information.

Chemicals
Activities
Locations
Manufacturers
Regulatory Lists
Processes

Figure 45. Reference menu.

Chemicals

The **Chemicals** window (figure 46) displays a list of all chemical records in HITS. When you first access this window, you will have the opportunity to define search criteria to narrow the scope (and time) needed to bring up the list. If you elect not to define search criteria, the full list of



The screenshot shows a window titled "Chemicals" with a "Sort By" section containing radio buttons for "CAS" and "Chemical Name". A "Select For..." button is also present. Below this is a table with three columns: "CAS", "Chemical Name", and "Checked". The "Checked" column has a dropdown arrow. The table contains 18 rows of data.

CAS	Chemical Name	Checked
1302-93-8	ALUMINOSILICATE	
7429-90-5	ALUMINUM	Yes
7784-27-2	ALUMINUM	Yes
13963-57-0	ALUMINUM ACETYLACETONATE	Yes
7784-25-0	ALUMINUM AMMONIUM SULFATE	Yes
54326-11-3	ALUMINUM BENZOATE	
82980-54-9	ALUMINUM BORIDE	
12041-50-8	ALUMINUM BORIDE	
16962-07-5	ALUMINUM BOROHYDRIDE	Yes
7727-15-3	ALUMINUM BROMIDE	Yes
12068-35-3	ALUMINUM CALCIUM IRON OXIDE	
1299-86-1	ALUMINUM CARBIDE	Yes
7446-70-0	ALUMINUM CHLORIDE	Yes
7784-13-6	ALUMINUM CHLORIDE	Yes
7784-18-1	ALUMINUM FLUORIDE	Yes
7784-21-6	ALUMINUM HYDRIDE	Yes
7784-23-8	aluminum iodide	
555-31-7	ALUMINUM ISOPROPOXIDE	

Figure 46. Chemicals window.

chemicals will display. If your selection criteria use alternate chemical names as a selection parameter, the window will display both the preferred and alternative names.

Sort By allows you to reset the list of chemicals by CAS number, the preferred chemical name, or the alternative name (if used as a selection criterion).

Filter For... button activates the HITS search engine to select chemicals based on parameters such as name and regulatory list.

Active Filter shows whether selection criteria have been established and are being used. Checking the box activates the search engine if no criteria have been set, or it reactivates the previously selected criteria. Unchecking the box turns off the selection criteria, and all chemicals will be listed.

CAS is the Chemical Abstract Service Registry number.

Chemical Name is the preferred name by which the chemical is known.

Checked indicates "Yes" if additional information about the chemical is available.

To access the additional information, right-click on the record to open the **Chemical Information** window.

Chemical Information

The **Chemical Information** window (figure 47) and its seven tabs allow you to view detailed information on a selected chemical.

Identifiers/Physical Tab

The **Identifiers/Physical** tab (figure 47) displays identifiers and physical parameters for the selected chemical. When checked, the **Data Checked By Research Staff** box means that the HAZMART has validated the information.

The screenshot shows a software window titled "Chemical Information: 7429-90-5 [ALUMINUM]". It has several tabs: "Identifiers/Physical", "Chemical Names", "Regulations", "Exposure Limits", "Hazard Ratings", "Safety/Handling", and "Storage/Disposal". The "Identifiers/Physical" tab is active. The window contains the following fields and controls:

- Identifiers:**
 - Physical Description: silvery-white, malleable, ductile, odorless metal
 - Chemical Formula: Al
 - RTECS Chemical Substance Number: BD0330000
 - Data Checked By Research Staff
- Physical Parameters:**
 - Physical State: Solid Liquid Gas
 - Melting Point: [] °C
 - Boiling Point: [] °C
 - Flash Point: []
 - Formula Weight: 26.98
 - Specific Gravity: []
 - Density: []

Figure 47. Chemical Information window, Identifiers/Physical tab.

Chemical Names Tab

The **Chemical Names** tab (figure 48) displays all the names (preferred and alternative) for the chemical. The preferred name appears in blue.

The screenshot shows the same software window as Figure 47, but with the "Chemical Names" tab selected. The window displays a list of names for Aluminum in a scrollable list box. The names include:

- AA 1099
- AA 1193
- AA 1199
- AE
- ALPASTE 0230T
- ALPASTE 1500MA
- ALPASTE 240T
- ALUMINIUM
- ALUMINIUM FLAKE
- ALUMINUM**
- ALUMINIUM (FUME OR DUST)
- ALUMINIUM A 00
- ALUMINIUM DEHYDRATED
- ALUMINIUM PIGMENT
- ALUMINIUM POWDER
- ALUMINIUM, METAL AND OXIDE AND WELDING FUMES
- ALUMINIUM-27
- AR 2
- AV 000
- AV00
- C.I. 77000

At the bottom of the list box, there is a note: "Name in blue bold print is the preferred name for this chemical".

Figure 48. Chemical Information window, Chemical Names tab.

Regulations Tab

The **Regulations** tab (figure 49) displays all national, state, county, and international regulations pertaining to the selected chemical. The first column identifies the regulatory level.

Exposure Limits Tab

The **Exposure Limits** tab (figure 50) displays, for the selected chemical, the permissible and biological exposure limits, according to the American Conference of Governmental Industrial Hygienists (ACGIH). When checked, the recommended response to the Biological Exposure Index applies.

Hazard Ratings Tab

The **Hazards Ratings** tab (figure 51) displays health, physical, and environmental hazards that apply to the selected chemical.

Level	Regulation	Date	Source
NATIONAL	ACGIH - TLV's Chemical Substances and Physical Agents in the Work Environment	01-Jan-1996	ACGIH
	DOL - 29 CFR 1910.1000 Subpart Z, Table Z-1 (Limits for Air Contaminants)	24-Oct-1996	TEXT-TRIEVE
	DOT - 49 CFR 172.101, Subpart B - Hazardous Materials Table (ME2)	01-Oct-1994	TEXT-TRIEVE
	EPA - 40 CFR 372.65 - EPCRA Specific Toxic Chemicals to be reported under Section 313 of Title III (TRI List)	24-Oct-1996	TEXT-TRIEVE
	NFPA - 49 List of Hazardous Chemicals		
	NIOSH - Pocket Guide to Chemical Hazards		
STATE	California - Hazardous Substance Lists "The Director's List" (section 339)	15-Feb-1993	
	California - M.C.L. (Maximum Contaminants Level) List of Contaminants (section 64431 inorganics, section 64444)	15-Oct-1990	
	California - Permissible Exposure Limits for Chemical Contaminants (section 515 table AC-1)	15-Feb-1992	
	Colorado - EPCRA Section 313, Toxic Chemicals to be reported, 40 CFR 372.65, pg.429, (EPA33)	09-Oct-1994	U.S. GOVERNMENT PRINTING OFFICE
	Connecticut - Hazardous Substance List (OSHA)	01-Jul-1994	U.S. GOVERNMENT PRINTING OFFICE
	Delaware - Hazardous Substance List (OSHA)	01-Jul-1994	U.S. GOVERNMENT PRINTING OFFICE

Figure 49. Chemical Information window, Regulations tab.

The screenshot shows the 'Exposure Limits' tab of the 'Chemical Information: 7429-90-5 [ALUMINUM]' window. The window has a title bar and a menu bar with tabs: Identifiers/Physical, Chemical Names, Regulations, Exposure Limits (selected), Hazard Ratings, Safety/Handling, and Storage/Disposal. An 'OK' button is on the right. The main area contains several input fields and a checkbox:

- Permissible Exposure Limit**
 - Parts per Million:
 - Milligrams per Cubic Meter:
- ACGIH Threshold Limit**
 - Parts per Million:
 - Milligrams per Cubic Meter:
- ACGIH Ceiling Limits**
 - Parts per Million:
 - Milligrams per Cubic Meter:
- ACGIH Short-term Exposure**
 - Parts per Million:
 - Milligrams per Cubic Meter:
- Biological Exposure Index - Biological monitoring should be instituted to evaluate total exposure**

Figure 50. Chemical Information window, Exposure Limits tab.

The screenshot shows the 'Hazard Ratings' tab of the 'Chemical Information: 7429-90-5 [ALUMINUM]' window. The window has a title bar and a menu bar with tabs: Identifiers/Physical, Chemical Names, Regulations, Exposure Limits, Hazard Ratings (selected), Safety/Handling, and Storage/Disposal. An 'OK' button is on the right. The main area is divided into three columns: Health, Physical, and Environmental.

- Health**
 - Chronic:
 - Acute:
 - PBT
 - Chronic Health
 - Acute Health
 - IRRITANT (in a list box)
 - ACGIH Carcinogen Category:
- Physical**
 - Reactivity:
 - Fire:
 - EHS
 - VOC
 - Air Toxic
 - FLAMMABLE (in a list box)
 - WATER REACTIVE (in a list box)
 - IARC Code:
- Environmental**
 - Land:
 - Air:
 - Water:

Figure 51. Chemical Information window, Hazard Ratings tab.

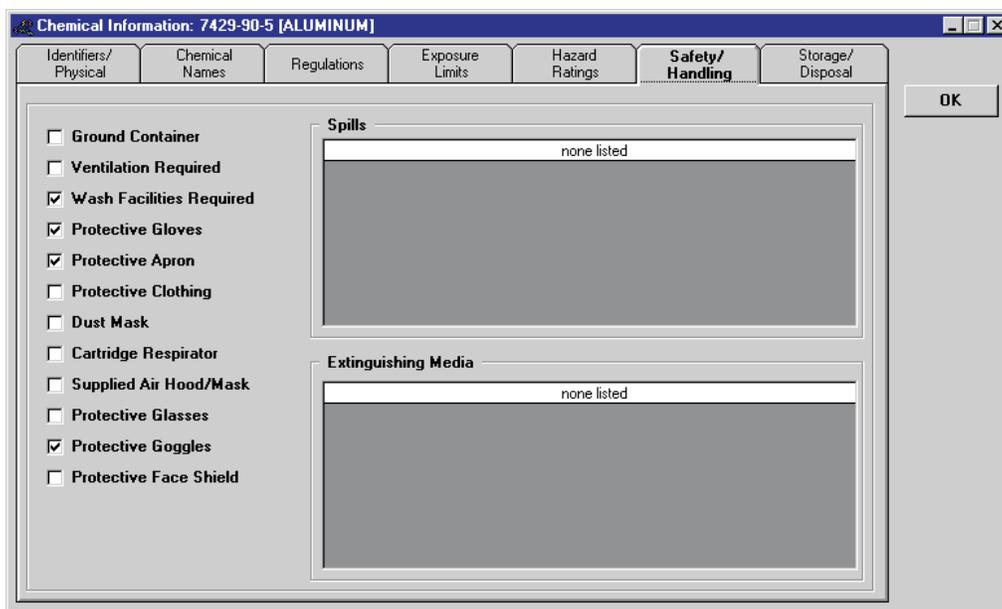


Figure 52. Chemical Information window, Safety/Handling tab.

Safety/Handling Tab

The **Safety/Handling** tab (figure 52) displays, as appropriate, the actions, supplies, and equipment needed to safely handle the selected chemical.

Storage/Disposal Tab

The **Storage/Disposal** tab (figure 53) displays information about shelf life, storage requirements, disposal hazards, and DOT ID codes for the selected CAS/chemical. The **DOT ID Info** button displays additional information (see figure 40).

Activities

From the **Reference** menu, the **Activities** window (figure 54) lists the short name and the full name of each installation activity/organization that uses or stores hazardous materials. Check the **Include Inactive Activities** box to include organizations that are no longer valid but whose inactive records are kept in the database because some container history records still refer to them.

Chemical Information: 7429-90-5 [ALUMINUM]

Identifiers/Physical Chemical Names Regulations Exposure Limits Hazard Ratings Safety/Handling **Storage/Disposal**

OK

Shelf Life Shelf Life Years

Storage

Disposal

DOT ID DOT ID Info

Aldrich Disposal Reference

Figure 53. Chemical Information window, Storage/Disposal tab.

Activities

Name	Description
203D MI	203D MILITARY INTELLIGENCE BATTALION
520TH TAML	520TH THEATER ARMY MEDICAL LABORATORY
AAFES	ARMY AIR FORCE EXCHANGE SERVICE
AEC	ARMY ENVIRONMENTAL CENTER
AIRNG	AIR NATIONAL GUARD
AMSAA	ARMY MATERIAL SYSTEMS ANALYSIS ACTIVITY
APG HAZMART	APG HAZMART
ARGONNE NAT. LAB	ARGONNE NATIONAL LABORATORY
ARL	ARMY RESEARCH LABORATORY
ATC	ARMY TEST CENTER
CDRA	CHEMICAL DEFENSE RESEARCH AGENCY
CHPPM	CENTER FOR HEALTH PROMOTION & PREVENTATIVE MEDICINE
DCFA	DIRECTORATE OF COMMUNITY & FAMILY ACTIVITIES
DECA	DEFENSE COMMISSARY AGENCY

Include Inactive Activities

Figure 54. Activities window.

Locations

From the **Reference** menu, the **Locations** window (figure 55) lists, for the selected activity, all locations where hazardous materials are stored or were stored in the past. A location is defined as a specific building and room combination. Each activity may designate one location as the “default” receiving location (the automatic default displayed when you open the **Add to Inventory** window, figure 16). Inactive locations are those that are no longer valid sites for storing hazardous material but that must be kept in the database because some container history records still refer to them. The inactive records display only when the **Include Inactive Locations** box is checked.

A **Zone** represents a site-specific location designation that is entered by each activity, based on its policies, procedures, and business practices. However, zones can only be assigned within a building. Creating zones allows an activity to track containers to the room level within a building without creating discrepancies during inventory validations when containers are found in different rooms within the same building.

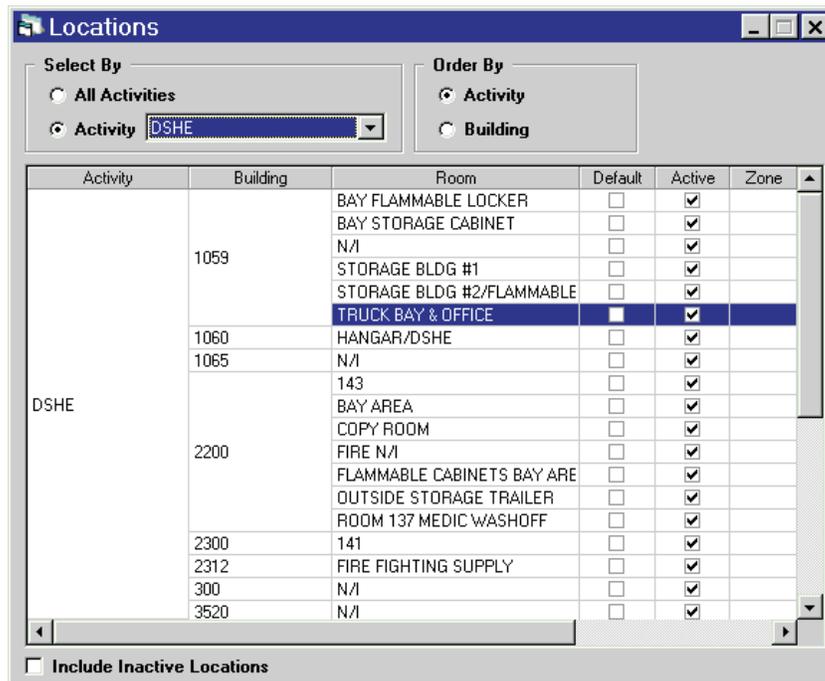


Figure 55. Locations window.

POC (point of contact) lists the name and **Phone** lists the phone number of the person assigned to manage containers in the selected location. This information is captured in **Inventory List** as discussed in the **Inventory** menu section.

Select By allows you to view the locations for all activities to which you are assigned or to select a particular activity.

Order By orders the list by activity or building number.

Three functions (*Add*, *Edit*, and *Delete*) may be activated for any listed location by clicking on it, using the right mouse button. Right-click to open the appropriate window (figure 56 shows the **Edit Location** window). From these option windows, you can add new locations and edit and delete existing locations provided that you have the access rights to do so. In order to deactivate a location, it requires a “0” inventory balance. In order to delete a location, no inventory data could have been placed in the location. On each of the option windows, **History of Changes** provides a summary of the changes made to the location,

Date	From Activity	Reason	Entered By
------	---------------	--------	------------

Figure 56. *Edit Location* window.

including date, from activity, reason, and entered by. These are accessed through the **Edit Locations** window provided that you have the access rights to do so.

Manufacturers

From the **Reference** menu, the **Manufacturers** window (figure 57) displays the manufacturer names and commercial and government entity (CAGE) identifiers. When you first open this window, you can define search criteria to narrow the scope and decrease the time needed to access the list. If you elect not to define the selection criteria, the full list of manufacturer names will display.

Order By allows you to order the list of manufacturers by name, CAGE code, or manufacturer #.

Filter For... button activates the HITS search engine to select manufacturers based on parameters such as name, city, and state.

Active Filter shows whether selection criteria have been established and are being used. Checking the box activates the search engine if no criteria have been set, or it reactivates the previously selected criteria.

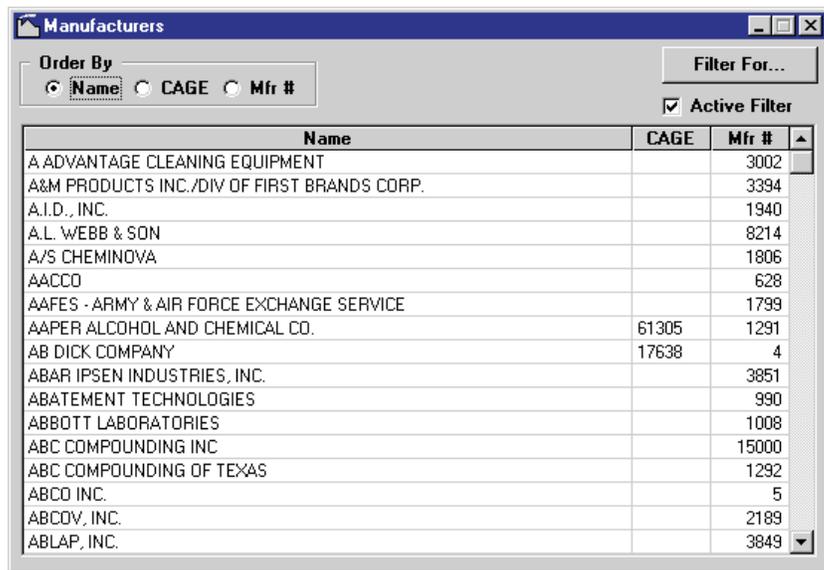


Figure 57. Manufacturers window.

Unchecking the box turns off the selection criteria, and all manufacturers will be listed.

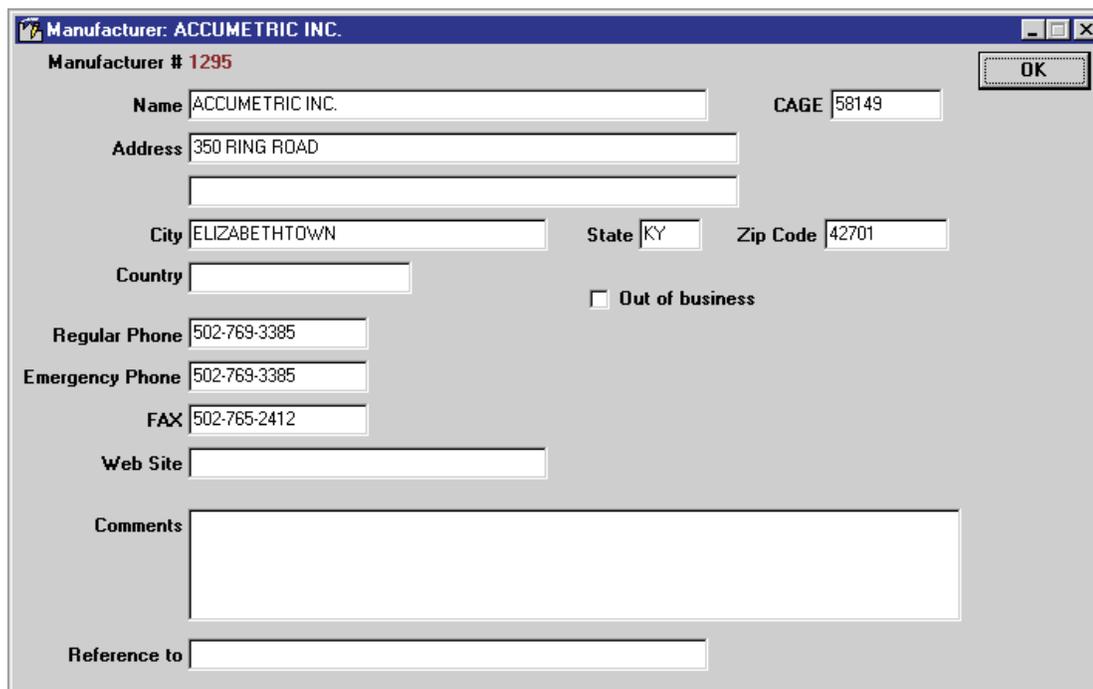
Additional information about a manufacturer may be retrieved by clicking on a record, using the right mouse button, to access the **Manufacturer** window.

Manufacturer

The **Manufacturer** window (figure 58) displays a manufacturer's organizational information and includes the CAGE identifier and a box that, when checked, indicates the manufacturer is out of business.

Regulatory Lists

From the **Reference** menu, the **Regulatory Lists** window (figure 59) displays all regulations covering the chemicals in the database. The table displays the regulatory level and the regulation number and title. The



The screenshot shows a software window titled "Manufacturer: ACCUMETRIC INC." with a standard Windows-style title bar. The window content is as follows:

- Manufacturer # 1295** (in red text) with an **OK** button in the top right corner.
- Name:** ACCUMETRIC INC. (text box)
- CAGE:** 58149 (text box)
- Address:** 350 RING ROAD (text box)
- City:** ELIZABETHTOWN (text box)
- State:** KY (text box)
- Zip Code:** 42701 (text box)
- Country:** (empty text box)
- Out of business** (checkbox)
- Regular Phone:** 502-769-3385 (text box)
- Emergency Phone:** 502-769-3385 (text box)
- FAX:** 502-765-2412 (text box)
- Web Site:** (empty text box)
- Comments:** (empty text area)
- Reference to:** (empty text box)

Figure 58. Manufacturer window.

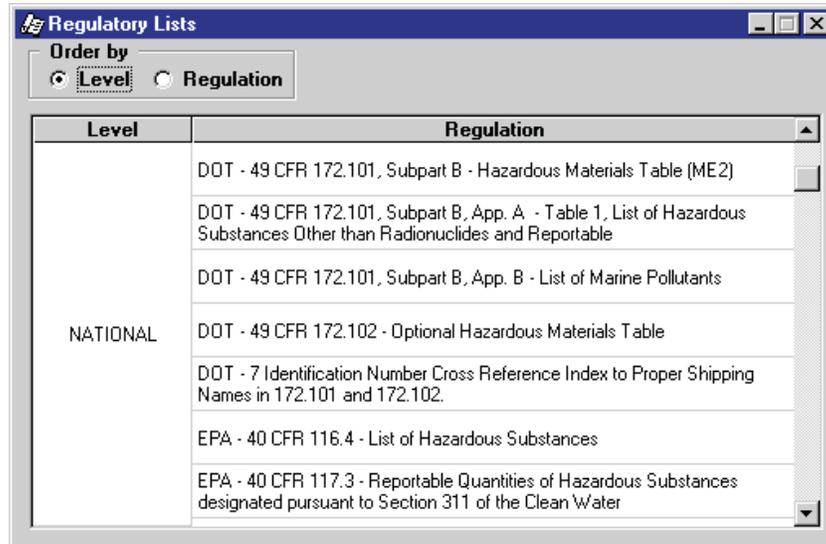


Figure 59. Regulatory Lists window.

Order By choices allow you to order the list by regulatory level (national, state, local, international) or by regulation name.

Processes

From the **Reference** menu, the **Processes** option accesses the **Processes** window (figure 60). The table displays the processes that you can associate with your hazardous material to identify the resulting waste

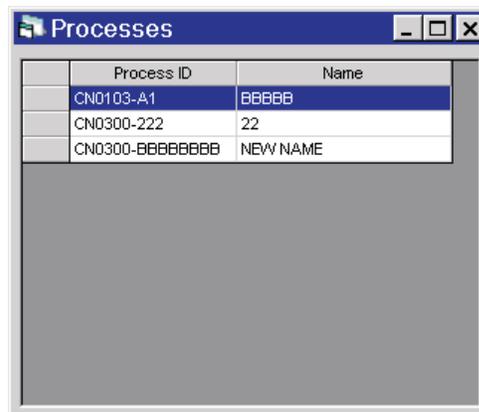


Figure 60. Processes window.

stream. The table displays the **Process ID** and **Name** associated with the site-specific process. Click on a process, using your right mouse button, to view the data elements associated with the process.

Process Tab

This tab (figure 61), accessed when you click on a process with your right mouse button, provides information on the site-specific processes entered into the system. All of the Department of Defense **Generic Process IDs** are available from a dropdown list. Entering information into the text boxes creates multiple site-specific processes.

Algorithms Tab

This tab (figure 62) provides the release routes for waste streams assigned to the site-specific process. Information can be entered for solid, liquid, and gas constituents by defining the percentage of each that is released to the air, land, or water as well as the percentage that is discharged to a publicly owned treatment plant or that is consumed in the process (**To Product**). The appropriate sections of the Toxic Release

The screenshot shows a software window titled "Process: CN0300-BBBBBBBB". It has two tabs: "Process" (selected) and "Algorithms". The "Process" tab contains the following fields and values:

- Generic Process: CN0300 (dropdown menu showing "CONSTRUCTION, PLASTERING AND RELATED TASKS, MULTIPLE OPERATI")
- ID: BBBBBBBB
- Name: NEW NAME
- Date Created: 05-May-2005
- Respondent: TECHNICAL
- Technical POC: TECHNICAL
- Authorization: AUTH
- Tank Number: TANK
- Temperature: 666 °F
- Equipment Part Number: EQUIP
- Monitoring Method: METHOD
- Control Equipment: CONTROL
- Monitoring Schedule: SCHEDULE
- Comment: (empty text box)

Buttons for "Save" and "Cancel" are located on the right side of the window.

Figure 61. Process window showing Process tab.

Inventory (TRI) Form R report are provided in a dropdown list to designate the use category for the site-specific process.

	Activities and Uses:	Percent	Form-R
1	Solid		
	Air Non-point:	<input type="text"/>	N/A
2	Liquid		
	Air Point:	<input type="text"/>	N/A
	Land Onsite:	<input type="text"/>	N/A
	To Product:	<input type="text"/>	
	POTW:	<input type="text"/>	N/A
3	Gas		
	Waste:	<input type="text"/>	N/A
	Total:	<input type="text"/>	

Valid Data Record

Figure 62. Process window showing Algorithms tab.

Reports Menu

The **Reports** menu (figure 63) allows you to run various reports (including standard Crystal Report formats) from the HITS database, to print out location and “empty room” barcodes to use with barcode readers, and to print out labels that show the chemical hazards and proper handling procedures for chemicals.

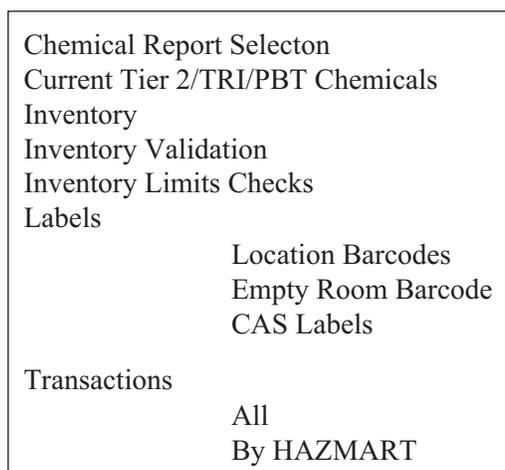


Figure 63. Reports menu.

Chemical Report Selection The **Chemical Report Selection** window (figure 64) allows you to generate a report on the amount (by weight) of chemicals on hand or a report on the amount of chemicals used in a given period of time.

The options are presented in four categories:

Activity to Report For lets you set the activity to use in a report. (Only users with rights to the entire inventory can select **All**.)

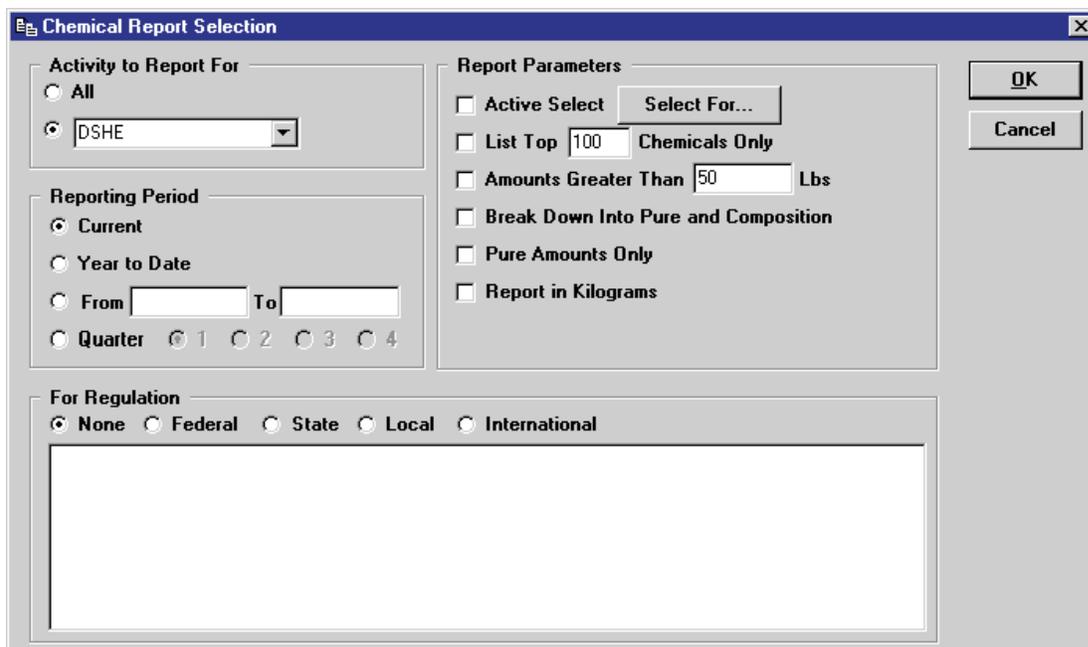


Figure 64. Chemical Report Selection window.

Reporting Period allows you to select from four periods.

- **Current** calculates the current weight of all chemicals for the activity selected.
- **Year to Date** calculates a chemical use report for the current year (including January 1 through the current date).
- **From** calculates a chemical use report for the period between and including the two dates entered.
- **Quarter** calculates a chemical use report for the selected quarter of the current calendar year (1 = January through March, 2 = April through June, 3 = July through September, 4 = October through December).

For Regulation sets the report to display only those chemicals regulated by the selected regulatory level.

Report Parameters allows you to further define the chemicals and the report characteristics, using six parameters:

- **Select for...** button activates the HITS search engine to select report parameters such as name and hazards.
- **Active Select** shows whether selection criteria have been established and are being used. Checking the box activates the search engine if no criteria have been set, or it reactivates the previously selected criteria. Unchecking the box turns off the selection criteria, and all chemicals will be listed.
- **List Top (number) Chemicals Only** causes the database to report only the selected number of chemicals having the greatest value (by weight).
- **Amounts Greater Than (number) Lbs** causes the database to report only chemicals having a current weight or usage level equal to or greater than the number entered.
- **Break Down Into Pure and Composition** splits the weight calculation for a chemical product into pure (a single chemical) and composition (several chemicals). This parameter is available only when the reporting period is set to **Current**.
- **Pure Amounts Only** calculates only products composed of one chemical.
- **Report in Kilograms** changes the reporting weight values from pounds to kilograms.

Current Chemical Inventory Report

The **Current Chemical Inventory Report** (figure 65) is generated when the reporting period is set to **Current**. The chemicals are initially sorted by weight, but they can be resorted by Chemical Abstract Service (CAS) Registry number or by chemical name by clicking the column headers. Right-clicking a chemical will display the **Chemical Information** window (figure 47).

#	CAS	Chemical Name	Total (lbs)
1	7732-18-5	WATER	14233.3
2	112-34-5	DIETHYLENE GLYCOL MONOBUTYL ETHER	2800.3
3	7722-76-1	AMMONIUM PHOSPHATES	1038.5
4	57-13-6	CARBONYL DIAMIDE	1012.9
5	7783-20-2	AMMONIUM SULFATE	1009.2
6	7727-37-9	NITROGEN	885.5
7	64-17-5	ETHYL ALCOHOL	747.6
8	144-55-8	SODIUM BICARBONATE	484.9
9	7782-44-7	OXYGEN	458.5
10	75-09-2	METHYLENE CHLORIDE	318.7
11	1310-73-2	SODIUM HYDROXIDE	258.9
12	8052-41-3	STODDARD SOLVENT	257.5
13	74-86-2	ACETYLENE	220.0
14	1333-74-0	HYDROGEN	200.0
15	13463-67-7	TITANIUM DIOXIDE	195.9
16	107-21-1	ETHYLENE GLYCOL	180.7
17	7440-37-1	ARGON	180.0
18	7647-14-5	SODIUM CHLORIDE	174.3
19	1317-65-3	LIMESTONE	94.9
20	102-71-6	TRIETHANOLAMINE	86.1
21	64742-85-0	DISTILLATES (PETROLEUM)	95.1

Figure 65. Current Chemical Inventory Report.

Chemical Usage Report

The **Chemical Usage** report (figure 66) is generated when the reporting period is set to any option other than **Current**. By default, this report displays the summary statistics for each chemical.

Use the horizontal scroll bar to view all columns. In addition to the data line number, CAS identifier, and chemical name, the report includes the following details:

Start Amount – Weight of the chemical at the beginning of the reporting period.

End Amount – Weight of the chemical at the end of the reporting period.

Added – How much of the chemical was added.

#	CAS	Chemical Name	Start Amount (lbs)	End Amount (lbs)	Added (lbs)	Used (lbs)	HW
1	9010-76-8	SARAN	14.01	14.36	0.35		
2	64742-52-5	SEVERLY HYDROTREATED HEAVY	26.50	29.50	3.00		
3	9000-59-3	SHELLAC	15.42	6.17		9.25	
4	7631-86-9	SILICA, AMORPHOUS, FUMED	0.14	50.14	50.00		
5	12001-26-2	SILICA, MICA	30.00	31.50	1.50		
6	14808-60-7	SILICA, QUARTZ	30.03	43.10	13.07		
7	22708-90-3	SILICIC ACID, ALUMINUM SALT	0.36	0.36			
8	14808-68-7	SILICON DIOXIDE	28.51	28.51			
9	68957-05-1	SILICONE FLUID	0.15	0.15			
10	63149-58-3	SILICONE OIL, HIGH TEMPERATURE	3.60	3.60			
11	68440-59-5	SILOXANES	0.04	0.04			
12	144-55-8	SODIUM BICARBONATE	334.95	484.95	150.00		
13	7647-14-5	SODIUM CHLORIDE	170.07	174.32	4.25		
14	1310-73-2	SODIUM HYDROXIDE	257.64	258.33	0.73	0.04	
15	7681-52-9	SODIUM HYPOCHLORITE	19.95	48.95	29.99	0.99	
16	6834-92-0	SODIUM METASILICATE	7.11	5.83	1.29	2.58	
17	7601-54-9	SODIUM PHOSPHATE, TRIBASIC	1.96	1.96			
18	1300-72-7	SODIUM XYLENE SULFONATE	0.42	1.25	0.83		
19	64742-62-7	SOLVENT DEWAXED RESIDUAL OIL		0.80	0.85	0.05	
20	64742-89-8	SOLVENT NAPHTHA (PETROLEUM, LIGHT)	6.80	8.31	1.51		
21	8052-41-3	STODDARD SOLVENT	203.11	257.83	59.02	2.93	
22	9003-55-8	STYRENE/BUTADIENE COPOLYMER		1.89	1.89		
23	7704-34-9	SULFUR	0.04	0.04			
24	7664-93-9	SULFURIC ACID	0.19	0.19			
25	5329-14-6	SULPHAMIC ACID	0.04	0.04			

Figure 66. Chemical Usage report.

Used – How much of the chemical was used.

HWTS – How much was transferred to hazardous waste.

Removed – How much was removed from the installation (sent back to the manufacturer, transported off-site).

Recycled – How much was recycled.

Burned – How much was burned.

Spilled – How much was reported as spilled.

Unk Disposal – How much was removed via an unknown disposal process.

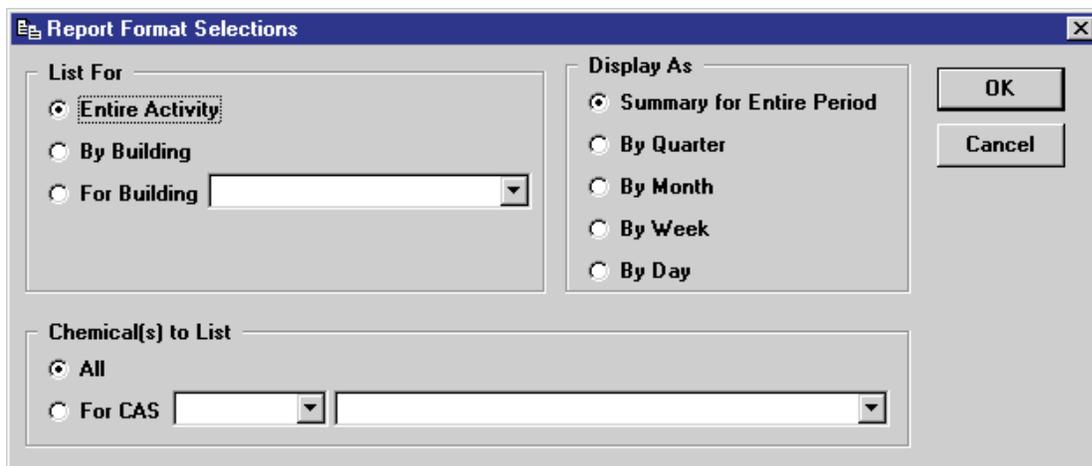


Figure 67. Report Format Selections window.

The **Reset For...** button on the **Chemical Usage** report brings up the **Report Format Selections** window (figure 67), which allows you to reformat the usage report in a variety of ways.

List For resets the report so that a summary value is reported for the entire activity and is reported by building or for one specified building.

Chemical(s) to List allows you to list all of the chemicals reported or to display only one chemical from the list at a time.

Display As lets you divide the reporting period into smaller time intervals.

Note: Using the **Reset For...** button on the **Chemical Usage** report does not delete any of the report data from memory. It just resets the data displayed.

Current Tier II/TRI/PBT Chemicals

The **Report Setup – Tier II/TRI/PBT Chemicals** window (figure 68) allows you to generate reports on the amount (by weight) of Tier II, Toxic Release Inventory (TRI), or persistent bioaccumulative toxin (PBT) chemicals in your inventory.

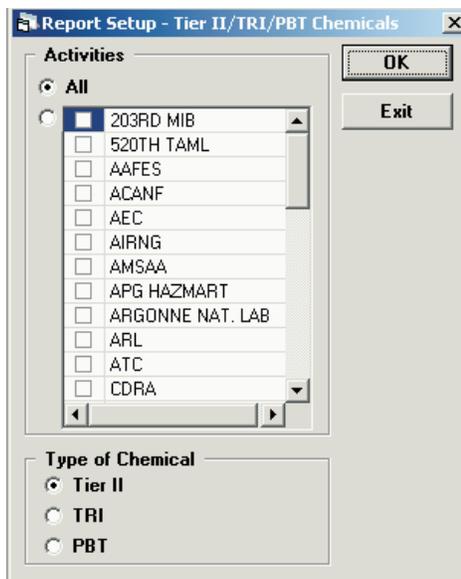


Figure 68. Report Setup – Tier II/TRI/PBT Chemicals window.

Activities lets you select the activity to use in the report. (Only users with rights to the entire inventory can select **All**.)

Type of Chemical lets you select whether to list Tier II, TRI, or PBT chemicals in the report.

OK generates the report.

Exit closes the window.

The **Chemical Inventory Report** shown in figure 69 was generated for Tier II chemicals. Reports are sorted by Chemical Abstract Service (CAS) Registry number, and weights are reported to the building/room level, with the total provided for each CAS number in the inventory.

Clicking the *Print* icon in the toolbar prints the report. Clicking the *Export* icon (envelope with arrow) copies the current window's data to be exported for use in another application. Using this option may require you initially to set the default mail client to Microsoft Outlook.

Tier II Chemical Inventory Report

Activity: DSHE

CAS	Chemical Name	Building	Room	Weight (lbs)
1310-73-2	SODIUM HYDROXIDE	2200	143	0.2
		E5005	N/A	255.7
		E5181	N/A	0.2
				256.1
1336-21-6	AMMONIUM HYDROXIDE	E5181	N/A	1.2
				1.2
25155-30-0	SODIUM DODECYLBENZENE SULFONATE	2200	FIRE N/A	0.1
		300	N/A	0.3
		E5180	N/A	0.1
		E5181	N/A	0.2
				0.7
67-64-1	ACETONE	2200	FLAMMABLE CABINETS BAY #	0.2
		300	N/A	0.3
		3520	N/A	0.3
				0.8
7681-52-9	SODIUM HYPOCHLORITE	2200	143	5.8
		4603	N/A	1.8
		E5181	N/A	2.9
				10.5
7758-29-4	SODIUM PHOSPHATE, TRIBASIC	2200	FIRE N/A	0.1
		300	N/A	0.3
		E5180	N/A	0.1
		E5181	N/A	0.2
				0.7

Figure 69. Tier II Chemical Inventory Report.

The **Export** window (not shown) lets you select the appropriate format (e.g., Microsoft Excel) and destination (e.g., application, disk file). **OK** in the window exports the report and takes you to a standard **Save** dialog box. After saving, the report can be opened in the exported format.

Inventory

The **Report Setup - Inventory** window (figure 70) allows you to generate a condensed container inventory list by location without using the **List Inventory** window in the **Inventory** menu.

Activity lets you select the activity(ies) to which you have access rights.

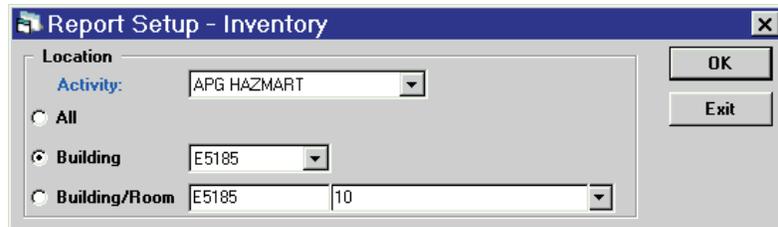


Figure 70. Report Setup – Inventory window.

You can select one of three report options.

- **All** generates a report for all containers in the inventory for the entire selected activity(ies).
- **Building** provides a dropdown list of the buildings to which you have access rights and generates a report for all containers in the inventory for the selected building.
- **Building/Room** provides a dropdown list of the buildings/rooms to which you have access rights and generates a report for all containers in the inventory for the selected building/room.

OK generates the report.

Exit closes the window.

The generated **Inventory Report** (figure 71) is sorted according to the selected option and includes the following data elements:

- Activity
- Location (building or building/room)
- Container
- Trade name
- NSN

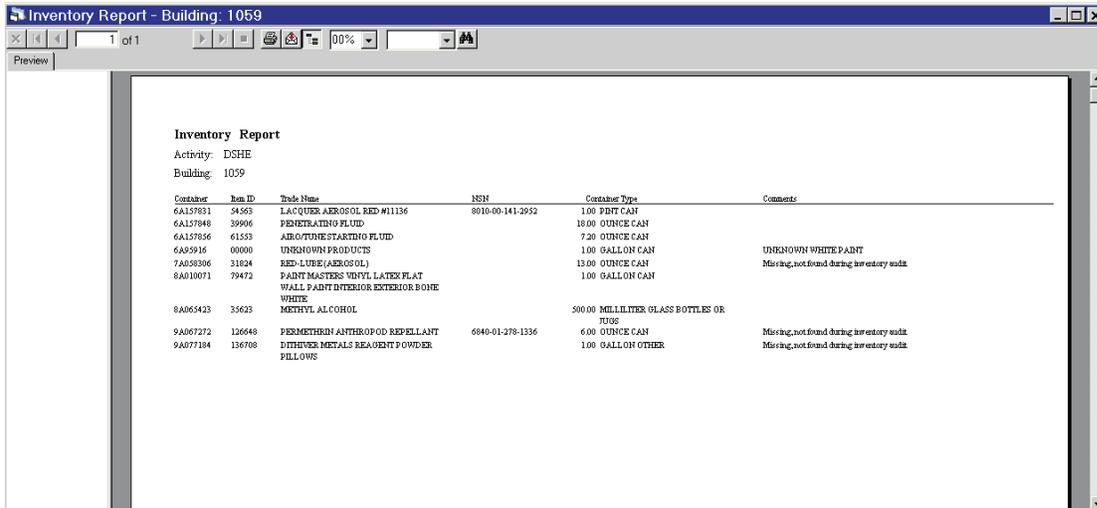


Figure 71. Inventory Report.

- Container type
- Comments (discrepancy messages)

Clicking the *Print* icon in the toolbar prints the report. Clicking the *Export* icon (envelope with arrow) copies the current window's data to be exported for use in another application. Using this option may require you initially to set the default mail client to Microsoft Outlook.

The **Export** window (not shown) lets you select the appropriate format (e.g., Microsoft Excel) and destination (e.g., application, disk file). **OK** in the window exports the report and takes you to a standard **Save** dialog box. After saving, the report can be opened in the exported format.

Inventory Validation

The **Report Setup - Validate** window (figure 72) allows you to generate a report, by location, on all inventory audit data entered into the system over a given period of time. This report retrieves data on your activity's level of accuracy in maintaining your hazardous material inventory. The report provides a summary of the data generated in the **Reader Inventory Comparison** window (figure 23).

The screenshot shows a window titled "Report Setup - Validate". It has a standard Windows-style title bar with a close button (X). The window is divided into two main sections: "Reporting Period" and "Location".

The "Reporting Period" section contains two dropdown menus: "From" set to "Start of Year" and "To" set to "Current Date".

The "Location" section contains a dropdown menu for "Activity" set to "APG HAZMART". Below this are three radio button options: "All", "Building", and "Building/Room". The "Building" option is selected, with a dropdown menu showing "E5185". The "Building/Room" option is also visible, with a dropdown menu showing "E5185" and a text field containing "10".

On the right side of the window, there are two buttons: "OK" and "Exit".

Figure 72. Report Setup – Validate window.

Reporting Period allows you to specify the period of the report. Options include from the start of the year to the current date, from month to month for the current year, or for specific dates.

Activity lets you select the activity(ies) to which you have access rights.

You can select one of three report options.

- **All** generates a report for all buildings audited for the entire selected activity.
- **Building** provides a dropdown list of the buildings to which you have access rights and generates a report for the selected building.
- **Building/Room** provides a dropdown list of the buildings/rooms to which you have access rights and generates a report for the selected building/room.

OK generates the report.

Exit closes the window.

The generated **Inventory Validation Report** (figure 73) reflects the specified level and includes the following data elements:

- Activity
- Location
- Date of inventory audit
- Validation count data
 - Correctly reported
 - Not found in HITS database
 - Recorded at another location, moved to this location
 - Recorded at this location but not listed in reader files
 - Found but previously listed as used, HWTS, recycled, etc.
 - Found but with different quantities listed
 - Added after reader inventory date
 - Used/moved after reader inventory date

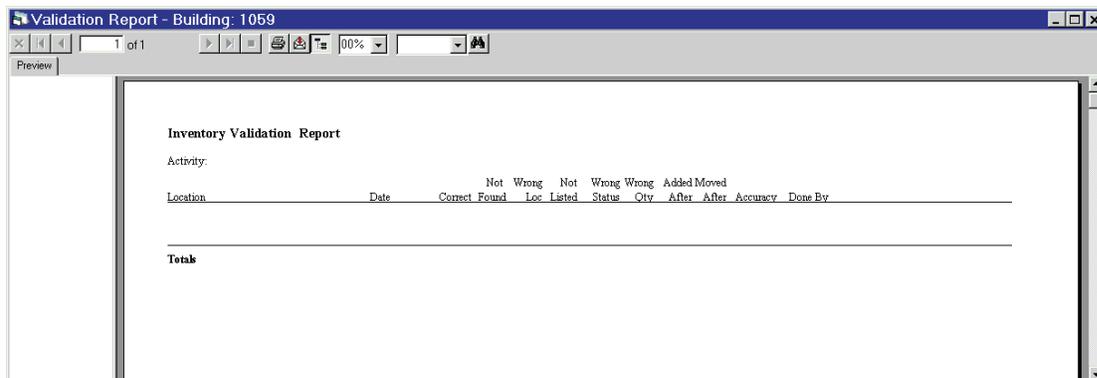


Figure 73. Inventory Validation Report.

- Accuracy
- Done by (person, e-mail, phone number, and e-mail address)

Clicking the *Print* icon in the toolbar prints the report. Clicking the *Export* icon (envelope with arrow) copies the current window's data to be exported for use in another application. Using this option may require you initially to set the default mail client to Microsoft Outlook.

The **Export** window (not shown) lets you select the appropriate format (e.g., Microsoft Excel) and destination (e.g., application, disk file). **OK** in the window exports the report and takes you to a standard **Save** dialog box. After saving, the report can be opened in the exported format.

Inventory Limits Checks

The **Inventory Limits Checks Setup** window (figure 74) lets you generate reports to determine if established low and high **Location Limits (Products menu)** for inventory have been exceeded. For users with access to more than one activity, the window displays a list from which you can select the desired activity. For users with access to only a single activity, selecting the function automatically starts the report.

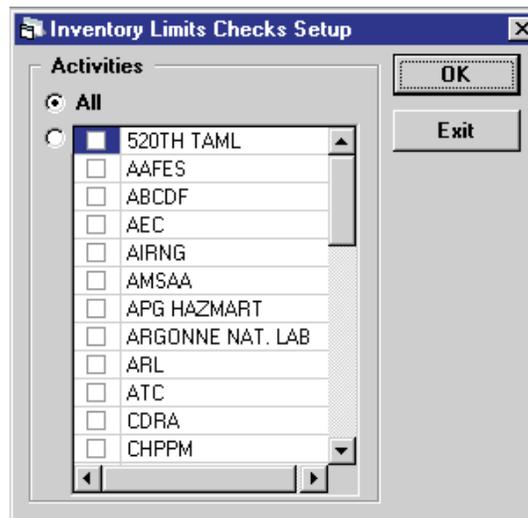


Figure 74. *Inventory Limits Checks Setup* window.

The **Inventory Limits Report**, shown in the **Reports** window (figure 75), lists, by **Activity**, the **Limit**, **Location**, **Limit Type**, **Low Limit**, **High Limit**, and **In Inventory**, using the same measurement unit as the **Limit Type** (i.e., **No. of Containers** or **Weight (lbs)**). Only items that exceed established limits will be reported.

Click the *Print* icon in the toolbar to print the report. Click the *Export* icon (envelope with the arrow) to copy the window's data to be exported for use in another application. Using this option may require that you initially set the default mail client to Microsoft Outlook.

The **Export** window (not shown) lets you select the appropriate format (e.g., Microsoft Excel) and destination (e.g., application, disk file). **OK** in the window exports the report and takes you to a standard **Save** dialog box. After saving, the report can be opened in the exported format.

**Labels –
Location
Barcodes**

Location barcodes are used with barcode readers to scan the inventory. When prompted by the reader to enter the location, you scan the location barcode for that room. Please note that each location in HITS has a unique number assigned by the database, and that number is **not the**

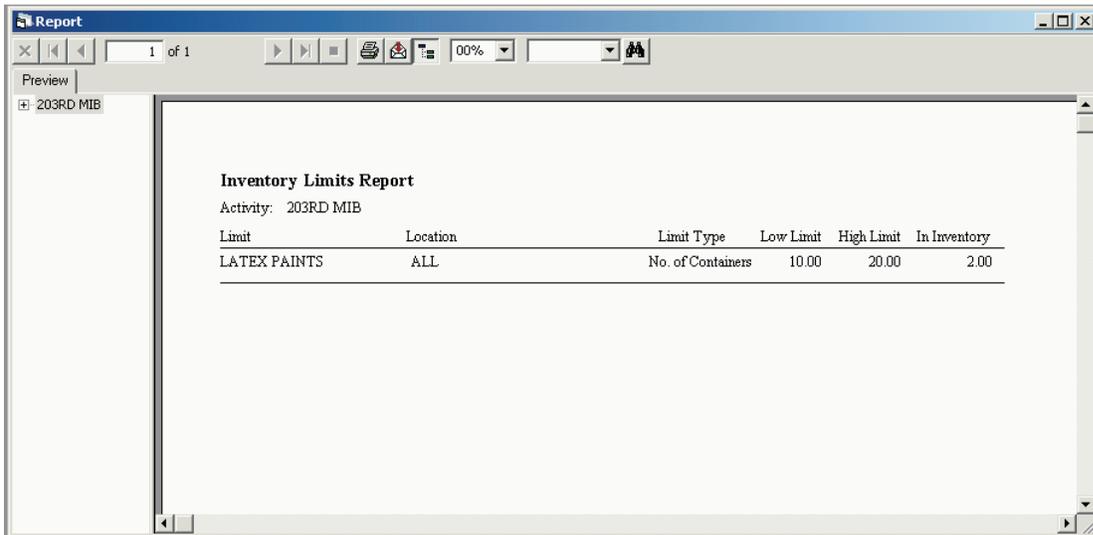


Figure 75. Inventory Limits Report.

same as the building number. From the **Reports** menu, the **Location Barcodes** window (figure 76), lets you print the barcodes for your activity, for all locations within a particular building, or just one barcode for a particular room.

The **Type of Print** options let you format the printing to three sizes:

- **Listing - one per row** fits about 6 barcodes per page.
- **1" x 2 5/8" labels** fits about 30 barcodes per page (Avery label paper #5160).
- **1" x 4" labels** fits about 20 barcodes per page (Avery label paper #5161).

The last two printing options are set up so that they also can be printed on label paper. Therefore, if the location is, for example, a locker, the location barcode can be put on a label and attached to the locker door. With this option, you also can set the starting row and column position for printing on partially used label paper.

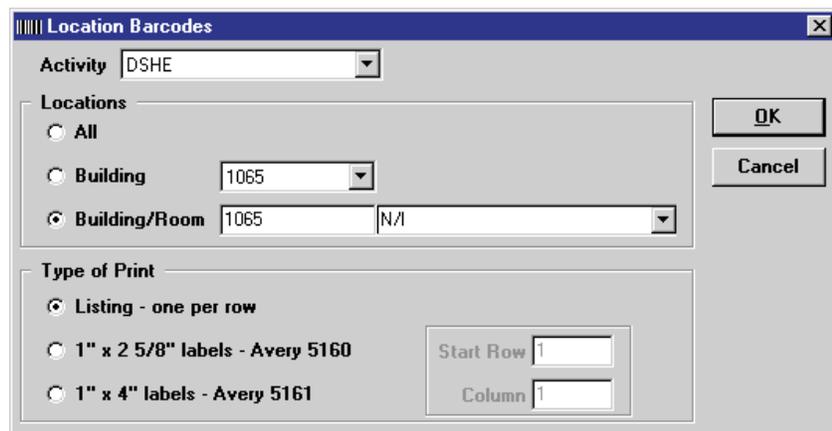


Figure 76. Location Barcodes window.

**Labels –
Empty Room
Barcode**

From the **Reports** menu, the **Empty Room Barcode** window allows you to print a container barcode that says “EMPTYROOM” as the container ID. By scanning that barcode when inventorying a location, you create a record in the reader memory that shows you checked a location and found no hazardous material.

**Labels –
CAS Labels**

From the **Reports** menu, the **CAS Labels** window (figure 77) allows you to print safety labels for chemical containers. Use **Select For...** to develop a list of chemicals, and right-click on each chemical record that you want to add to the **CAS Labels** window.

To change the quantity of labels for a chemical, to delete it from the label list, or to preview the safety label (figure 78), right-click on the chemical. To start printing in a position other than the first row, first column, enter values in the **Start Row** and **Start Column** boxes.

Transactions

The **Report Setup - All Transactions** or **HAZMART Transactions** windows (figure 79) shows the **Report Setup - All Transactions** window) allow you to generate a report on all transactions entered into the system over a given period of time. You can select all transactions entered into the system within your activity or only the transactions entered into the system by the HAZMART.

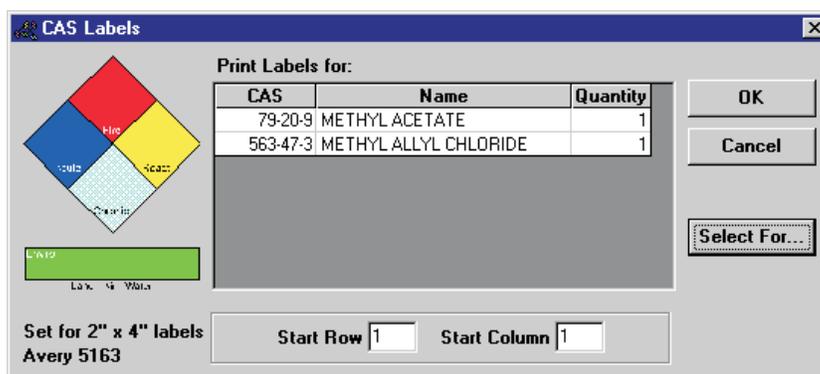


Figure 77. CAS Labels window.

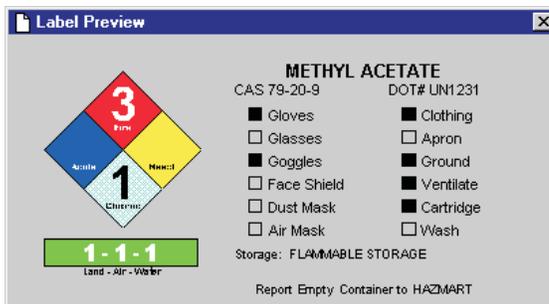


Figure 78. Safety label.

Reporting Period allows you to specify the period of the report. Options include from the start of the year to the current date, from month to month for the current year, or for specific dates.

Activities lets you select the activity for the report. (Only users with rights to the entire inventory can select **All**.)

OK generates the report.

Exit closes the window.

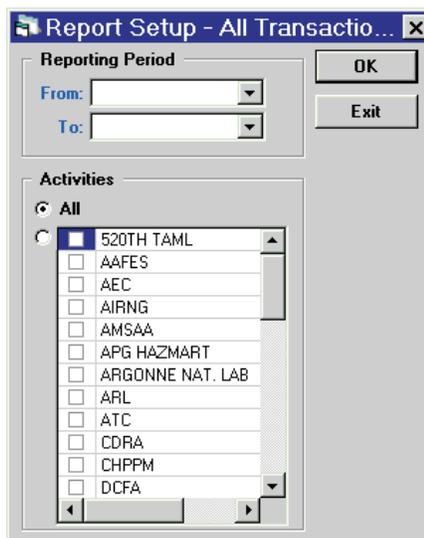


Figure 79. Report Setup – All Transactions window.

A **Transaction History Report** (figure 80) is generated for each building of the selected activity. The transactions for each location are sorted by type (e.g., added to database, emptied, sent to HWTS) and include the transaction data entry date and the name of the person who entered the transaction into the system. The **Preview** tab shows the locations for which data was retrieved. Clicking on a location takes you to that location within the report.

Clicking the *Print* icon in the toolbar prints the report. Clicking the *Export* icon (envelope with arrow) copies the current window's data to be exported for use in another application. Using this option may require you initially to set the default mail client to Microsoft Outlook.

The **Export** window (not shown) lets you select the appropriate format (e.g., Microsoft Excel) and destination (e.g., application, disk file). **OK** in the window exports the report and takes you to a standard **Save** dialog box. After saving, the report can be opened in the exported format.

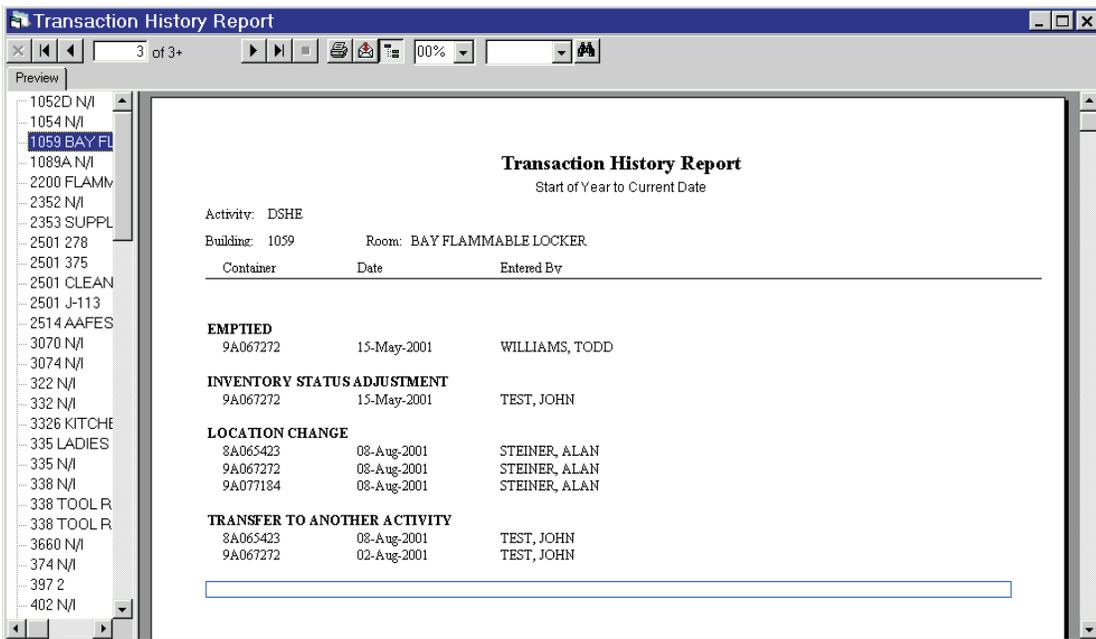


Figure 80. Transaction History Report.

Administrative Menu

The **Administrative** menu (figure 81) allows you to view the names of those within your activity who are assigned to use HITS; it also allows those with Activity Environmental Coordinator (AEC) rights to edit access rights. AECs can change user passwords, editing rights, user status, and location rights within the database. Only the HAZMART can add new users to the system and assign AEC rights. If you have questions about or problems with any user data, call the HAZMART.



Figure 81. Administrative menu.

The **Users** window (figure 82) lists, by selected activity, the last and first names of all HITS users. Only personnel assigned AEC rights can view this window. A user is defined as an individual or workstation with a specific user name and password combination. Inactive users are names that are no longer valid but must be kept in the database because some container history records still refer to them. The inactive records display only when the **Include Inactive Users** box is checked.

Two functions (*View* and *Edit*) may be activated for any listed user by clicking on the name, using the right mouse button. Then right-click on the appropriate function.

From the **Edit User** window (figure 83), existing users and their rights to the database can be viewed and edited. New users can be added only by the HAZMART.

Name, Title, Phone Number, and E-Mail Address are recorded for the user.

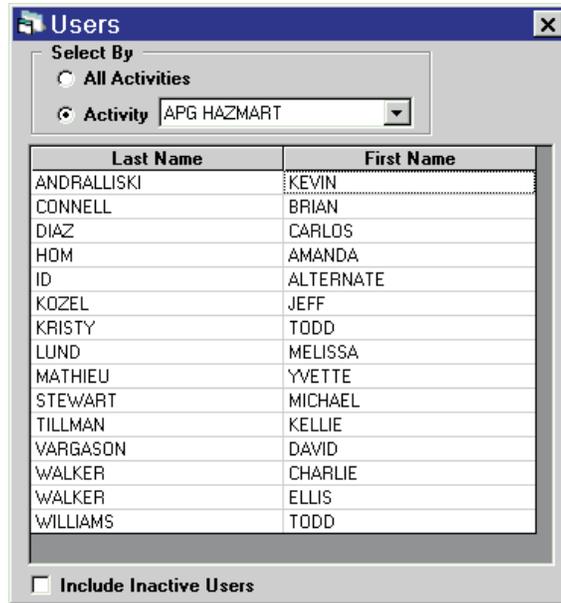


Figure 82. Users.

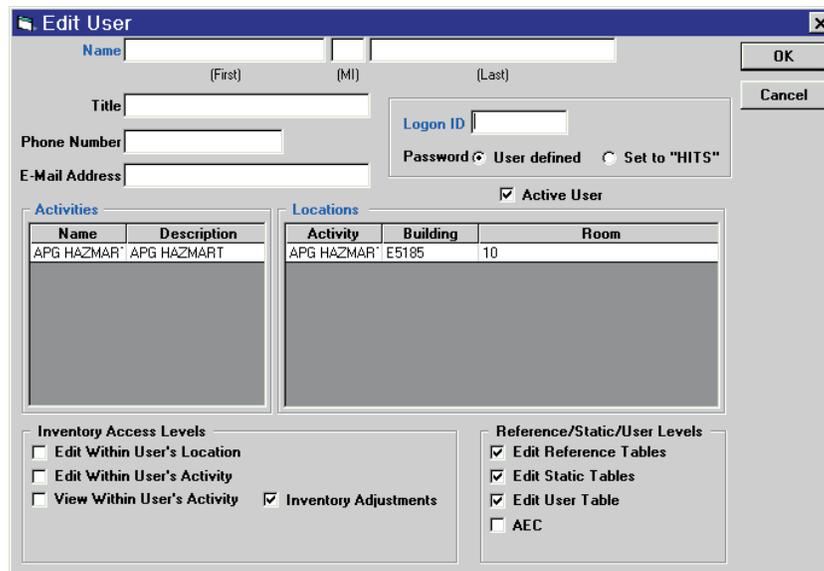


Figure 83. Edit User.

Logon ID lists the user name assigned by the HAZMART during the initial creation of the user account. **Password** designates whether the user's password is **User Defined** or **Set to "HITS"**. The password is always set to "HITS" during the initial creation of the HITS user account and is changed by the user during the initial session. Your AEC or the HAZMART can reset your password to "HITS" in case you forget it. Contact your AEC or the HAZMART if you have a question about or problem with the data.

Activities provides a dropdown list of the activities that the user can access.

Locations provides a dropdown list of the locations that the user can access.

Inventory Access Levels allows the AEC or the HAZMART to select, assign, or edit user access rights to the following levels: **Edit Within User's Location**, **Edit Within User's Activity**, and **View Within User's Activity**. Only personnel assigned AEC rights can be assigned **Inventory Adjustments** access rights.

Reference/Static/User Levels provides the access levels assigned to personnel for administrative functions within HITS. Those available for use by your activity are assigned to a limited number of personnel and include **Edit User Table** and **AEC**, both of which can be assigned only by the HAZMART.

HITS Search Engine

The extensive search capabilities within HITS allow you to quickly find the product, chemical, or manufacturer information you need.

The Search Engine

The HITS search engine is activated by clicking the **Filter For...** button in any window where the button appears. The **Filter For...** button brings up the **Filter Products For...** window (figure 84) in which you can define up to eight selection criteria and can control how the criteria relate to one another.

A selection criterion has three parts:

- **Field to Search** – The data field to be tested.
- **Operator** – How the criteria are to be tested for in the field searched.
- **Criteria** – The values to test for in the field searched.

	Field To Search	Operator	Criteria	
1)	Contains Chemical	has word	FORMALDEHYDE	Select
2)	Physical State	is Liquid		Cancel
3)	<blank>			Clear All
4)	<blank>			
5)	<blank>			
6)	<blank>			
7)	<blank>			
8)	<blank>			
				<input checked="" type="radio"/> And
				<input type="radio"/> Or

Figure 84. HITS search engine *Filter Products For...* window.

Putting the three parts together (field – operator – criteria) defines a selection criteria. For example, to select for a product containing a chemical that has the word “formaldehyde” in it, set **Field to Search** to “Contains Chemical,” **Operator** to “has word,” and **Criteria** to “formaldehyde.”

The fields you can search are displayed as list boxes (one for each of the possible eight selection criteria). The list boxes vary, depending on the window from which the search engine is activated.

Once the search field is set, the search engine displays the operator list for that field. The operators available depend on whether the data field is numeric (table 1), date (table 2), text (table 3), or logical (table 4). When the criteria available for a **Field to Search** is only a select set of values, these values are listed as the **Operator** and no **Criteria** field is displayed. For example, Product State can only be Solid, Powder, Liquid, Gas, or Aerosol; so these values are put in as the Operator with the word “is” in front of each.

The criteria textbox is not displayed on the window until an operator has been selected. If either of the **Null** operators is selected, no criteria parameter is needed and will not be displayed.

Other Search Options

At the bottom of the search engine window are the two options: **And** and **Or**. These set how the selection criteria are to behave as a group. The default condition for the search screen is **And**. This means that only records that meet **all** of the selection criteria will be listed. Changing the condition to **Or** makes the list display the records that meet **any one or more** of the search criteria.

The **Clear All** button deletes all search criteria. To remove just one criterion, set the **Field to Search** to “<blank> .”

To activate the search engine, click on the **Select** button.

Table 1. Numeric operators.

Operator	Description
=	equal to
◇	field is not equal to the criteria
<	field is less than criteria
<=	cell field is less than or equal to criteria
>	field is greater than criteria
>=	field if greater than or equal to criteria
between**	field value is between two criteria values

Table 2. Date operators.

Operator	Description
=	equal to date
◇	field is not equal to the date
<	cell field is less than date
<=	cell field is less than or equal to date
>	field is greater than date
>=	field if greater than or equal to date
between**	field value is between two dates
not between**	field value is not between two dates
is null	field is empty
is not null	field is not empty

** Use a space or a comma to enter the two values to search between

Table 3. Text operators.

Operator	Description	Example
has word	operand occurs in the field as a distinct word	Criteria = Methyl Results = Methyl benzene, sodium methyl
has word (multiple)**	any of several operands occur in the field as distinct words (a or b or c...)	Criteria = Methyl, Benzene Results = Methyl benzene, sodium methyl, benzene, sodium benzene
starts with	starts with string...	Criteria = Methyl Results = Methyl benzene
starts with (multiple)**	any of several operands occur at the beginning of the field	Criteria = Methyl, Benzene Results = Methyl benzene, benzene
ends with	the field ends with the operand	Criteria = Methyl Results = Sodium methyl
ends with (multiple)**	any of several operands occur at the end of the field	Criteria = Methyl, Benzene Results = Sodium Methyl, benzene, sodium benzene
contains	criteria occurs in the field as a substring	Criteria = Methyl Results = Dimethyl acetate
contains (multiple)**	any of several operands occur somewhere in the field	Criteria = Methyl, nitro Results = Dimethyl acetate, trinitrotoluene
is null	field is blank, no data entered	
is not null	field is not blank	
=	equal to	Criteria = Benzene Results = benzene
= (multiple) **	equal to any of a list of multiple entries	Criteria = Benzene, Toluene Results = Benzene, toluene
<>	field is not equal to the operand	Criteria = Benzene Results = everything but benzene
<	field is less than operand	Criteria = C Results = all values starting with A or B
<=	field is less than or equal to operand	Criteria = Benzene Results = all values starting with A or BA or BE up to Benzene
>	field is greater than operand	Criteria = C Results = all values start with D up to Z
>=	field is greater than or equal to operand	Criteria = Benzene Results = Benzene and on

** For multiple entry operators, separate the operands by using the following delimiters: spaces (Level 1), commas (Level 2), or pipes (|) (Level 3). If the criteria you want to use contains one of the delimiters, use a higher level delimiter to separate the operands. For example, if you want to use 'Methyl Ethyl' and 'Benzene' as the operands, use either commas or pipes as the delimiter ('Methyl Ethyl, Benzene' or 'Methyl Ethyl|Benzene').

Table 4. Logical operators.

Operator	Description
is Yes	field is checked
is No	field is not checked

