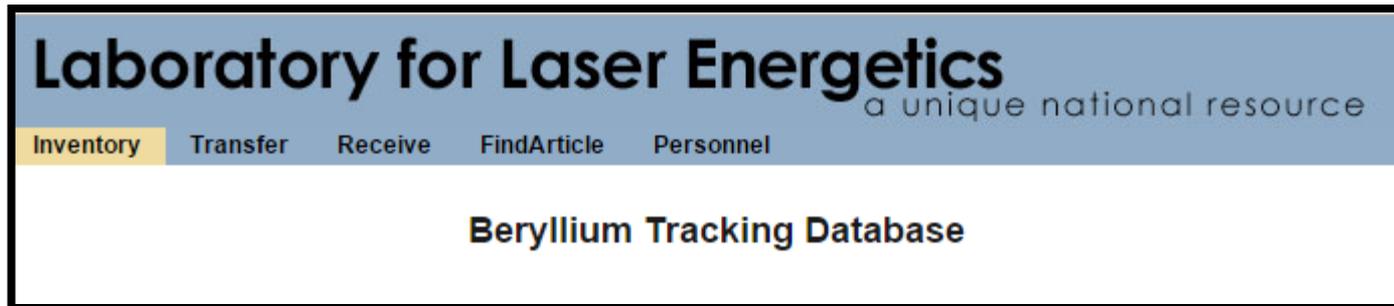


Beryllium Tracking Database User Manual



- **OSHA requires employers to maintain an inventory of hazardous materials.**
- **The LLE Beryllium Tracking Database (BTD) provides an efficient means of tracking, locating, and recording disposition of Beryllium.**
- **All Beryllium users should be familiar with the workflow described in this manual.**

Summary



- **Beryllium Tracking Database locations**
- **Beryllium definitions**
- **Beryllium Tracking Database flowchart**
- **Locating inventory**
- **Transaction history**
- **Editing inventory items**
- **Transferring inventory location**
- **Database access**
- **Adding new inventory**
- **Disposal**

The Beryllium Tracking Database can be found at these locations



Database locations:

- OMEGA Operations > "[Operations](#)"
- EP Operations > "[Operations](#)"
- [LLE Safety Zone](#)

OMEGA Operations Page

Facility | Shot Related | Operations

- Weekly Schedule (Schedule Editor (restricted))
- Quarterly Schedule
- Facility Watchbill
- Diagnostic Status
 - Editor (Restricted)
 - Upcoming Usage
 - Effectiveness Report
 - FAQ
 - TC Ports (Excel) 1/3/2014
- Facility Access and Training
 - Facility Training
 - Facility Access List
 - Facility Access Training Videos
 - Safety Training
- LLE Phonebook

Shot Related:

- Proposal Template
 - Reports
 - Approval (Restricted)
- Shot Request Form
 - Reports (Station)
 - Auditor
 - Unlock (Restricted)
- Shot Images and Reports
- Target Request Forms
 - General Atomics (GA)
 - Schafer
- Film Digitization Request
- Pulse Shape Library
 - Request New
 - Pulse Shape
 - Pulse Shape Request Status
 - Pulse Shape Naming Convention
 - Pulse Shape Request Overview
- Beryllium Tracking**

EP Operations Page

Facility | Shot Related | Operations

- Weekly Schedule (Schedule Editor (restricted))
- Quarterly Schedule
- Facility Watchbill
- Diagnostic Status
 - Editor (Restricted)
 - Upcoming Usage
 - Effectiveness Report
 - TC Ports (Excel) 3/5/2011
- Facility Access & Training
 - Facility Training
 - Safety

Shot Related:

- Proposal Template
 - Reports
 - Approval (Restricted)
- Shot Request Form
 - Reports (Station)
 - Auditor
 - Unlock (Restricted)
 - Configuration
- Target Request Forms
 - General Atomics (GA)
 - Schafer
- Film Digitization Request
- Pulse Shape Library
 - Request New
 - In Fabrication
- Experimental Effectiveness Assessment
 - Editor (restricted)
- Beryllium Tracking**

The Safety Zone
at the Laboratory for Laser Energetics

Home | LLE | Medical Emergency | Training | Chemical | Electrical | Fire | Radiation | Site Map

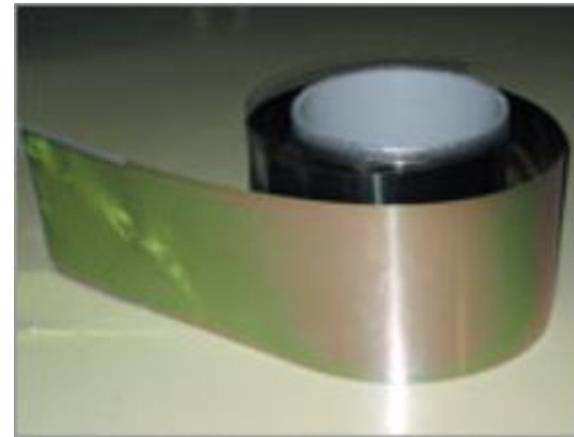
My Training | LLE Safety Suggestions

Class ID	Title	Date	Time	Location
No Training Scheduled				

Class ID	Title	Time	Related links
C_001	Chemical Safety and Hazardous Waste Management	Quiz	<ul style="list-style-type: none"> Chematix Instructions Hazardous Waste Accumulation Label U of R Chemical Hygiene Plan: CHP Appendices 1-11; CHP Appendices 12-16 U of R Environmental Compliance Unit U of R Learners Guide for Responsible Hazardous Chemical Waste Management Lead Encapsulation
C_002	Beryllium Safety Training	Quiz	<ul style="list-style-type: none"> Beryllium Safety Procedures (LLEINST 6706) "About Beryllium" from the U.S. Department of Energy (DOE) Chronic Beryllium Disease Prevention Program, U.S. DOE Interactive Guide to Working Safely w/ Beryllium-containing Processing Materials Beryllium Tracking System Beryllium Workstation Procedures Manual

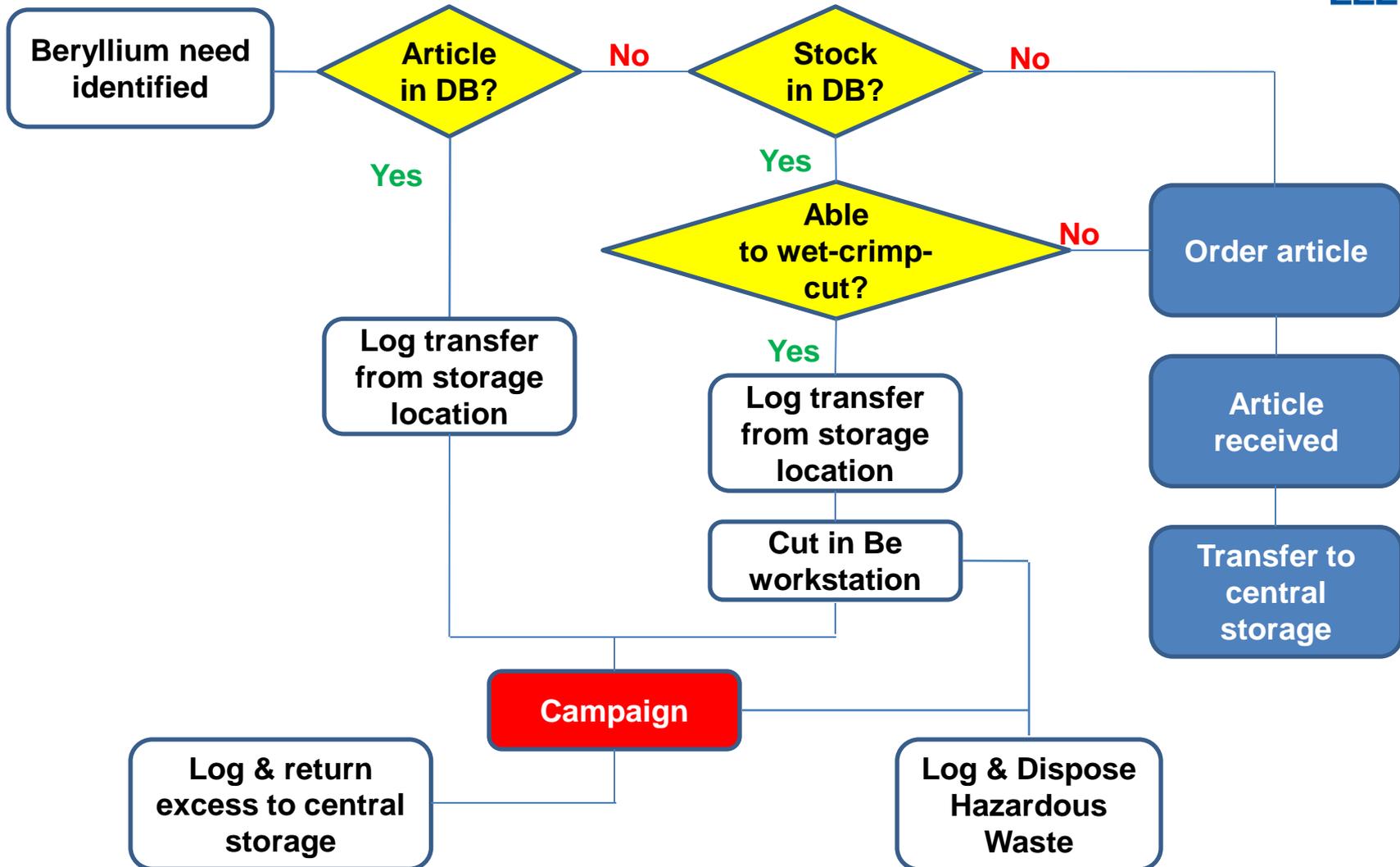
Beryllium articles are treated as a subset of beryllium items

- **Items** include foil, film, stalk, or other shapes that may need to be wet-crimp-cut to size
- **Articles** are *items* that are pre-cut and ready to be used



Ultra-thin beryllium foil

The Database workflow for Beryllium handling and procedures



The BTD “Inventory” tab generates a report based on either location or item



- Location inventory – generates an inventory report for each room authorized to contain beryllium
- Item inventory - item location can be searched either by item number or by using the “Find Item” link

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a unique national resource

Inventory Transfer FindItem History Personnel Locations

Beryllium Tracking Database

Select a Report and 'Go'.

Location Inventory 6106 ▼

Item Inventory

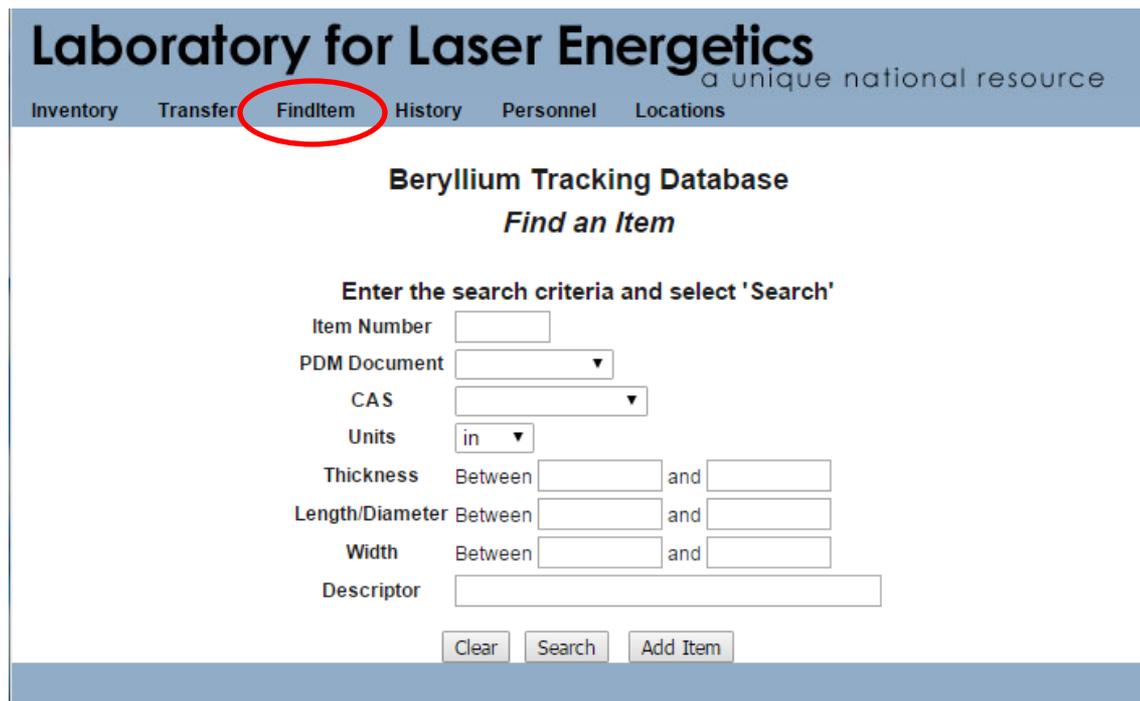
To find an item select [Find Item](#) here.

Generate Report

A specific piece of beryllium can be found using many criteria in the “FindItem” tab

Search by:

- *PDM number*
- *CAS number*
- *Dimensions* - allows the user to search by size parameters
- *Descriptor*



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Inventory Transfer **FindItem** History Personnel Locations

Beryllium Tracking Database
Find an Item

Enter the search criteria and select 'Search'

Item Number

PDM Document

CAS

Units

Thickness Between and

Length/Diameter Between and

Width Between and

Descriptor

The 'Transactions' link will generate a transaction history report for a specific item



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Inventory Transfer **FindItem** History Personnel Locations Reconcile

Beryllium Tracking Database
Find an Item

Enter the search criteria and select 'Search'

Item Number
PDM Document
CAS
Units
Thickness Between and
Length/Diameter Between and
Width Between and
Descriptor

	Item	PDM	Thick	Length/Diameter	Width	CAS	Descript
Transactions	1001	NONE	.025 mm	5 mm	5 mm	7440-41-7	UNKNOW

Beryllium Tracking Database
Transaction History Report

Enter the search criteria and select 'Search'

Item
Source
Dest.
Dates From: to

Item Number	Source		Destination		Qty	By	When	Comments
	Loc	Area	Loc	Area				
1001			6106	SW1 DRAWER	7	tcla	06/30/2017 15:28	Reconcile
1001			6106	SW1 DRAWER	7	ahya	12/07/2016 10:11	Reconcile
1001			6106	SW1 DRAWER	7	tkli	12/05/2016 16:37	Reconcile

The 'History' tab can also provide a transaction report



Populating information to any one of the criteria boxes produces a transaction report for that item

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Inventory Transfer FindItem **History** Personnel Locations Reconcile

Beryllium Tracking Database
Transaction History Report

Enter the search criteria and select 'Search'

Item

Source

Dest.

Dates From: to

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Inventory Transfer FindItem **History** Personnel Locations Reconcile

Beryllium Tracking Database
Transaction History Report

Enter the search criteria and select 'Search'

Item

Source

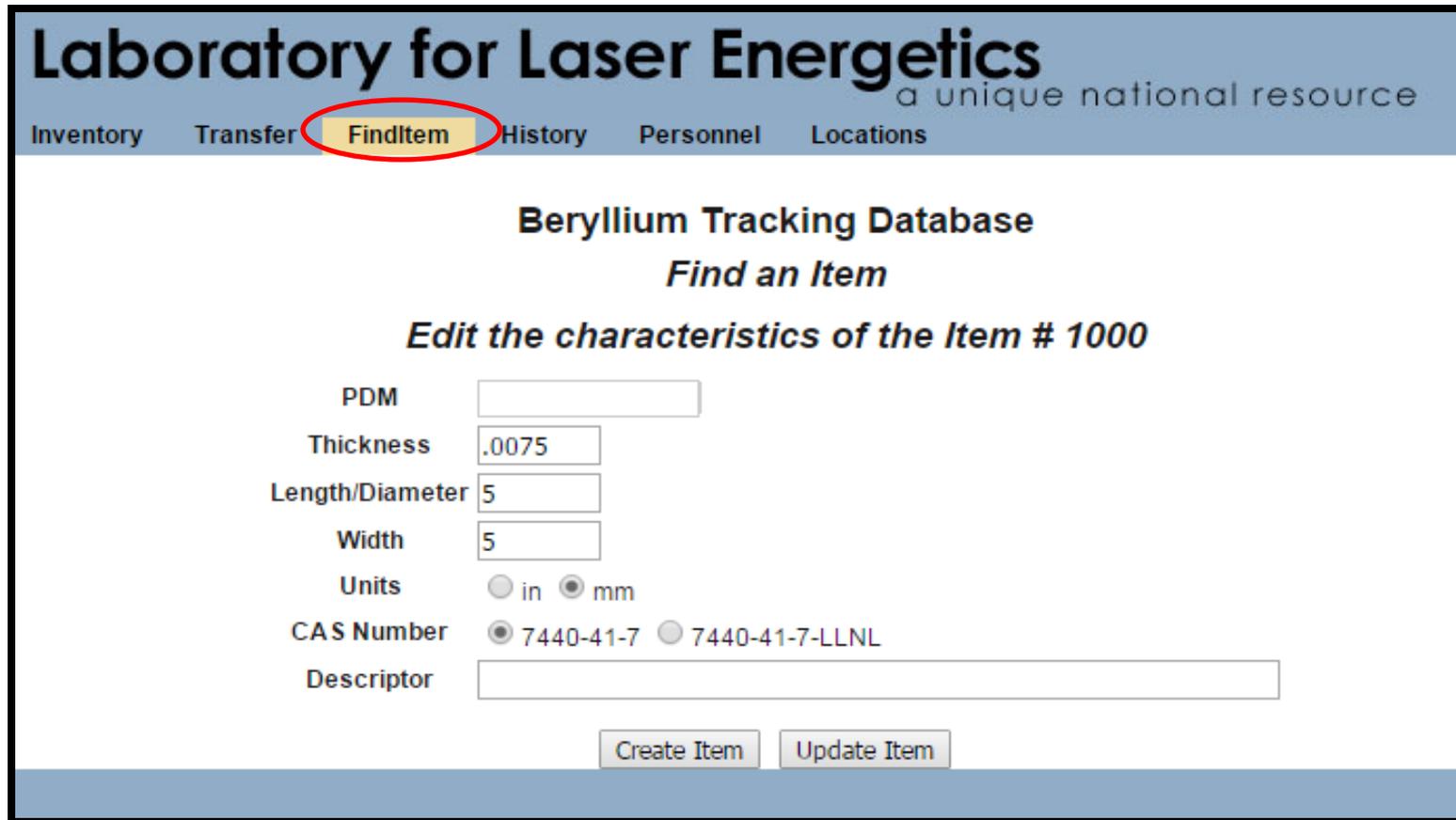
Dest.

Dates From: to

Item Number	Source		Destination		Qty	By	When	Comments
	Loc	Area	Loc	Area				
1001			6106	SW1 DRAWER	7	tcia	06/30/2017 15:28	Reconcile
1001			6106	SW1 DRAWER	7	ahya	12/07/2016 10:11	Reconcile
1001			6106	SW1 DRAWER	7	tkli	12/05/2016 16:37	Reconcile

Information for a specific piece of beryllium can be edited in the “FindItem” tab

The PDM number and descriptor can be added to the existing item



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Inventory Transfer **FindItem** History Personnel Locations

Beryllium Tracking Database

Find an Item

Edit the characteristics of the Item # 1000

PDM

Thickness

Length/Diameter

Width

Units in mm

CAS Number 7440-41-7 7440-41-7-LLNL

Descriptor

“Find Item” links are located in the “Inventory” tab and the “Transfer” tab



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Inventory Transfer FindItem History Personnel Locations

Beryllium Tracking Database

Select a Report and 'Go'.

Location Inventory

Item Inventory

To find an item select [Find Item](#) here.

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Inventory **Transfer** FindItem History Personnel Locations

Beryllium Tracking Database

Transaction Log

To find an item, select [Find Item](#) here.

To check inventory, select [Check Inventory](#) here.

Item

Quantity

Source

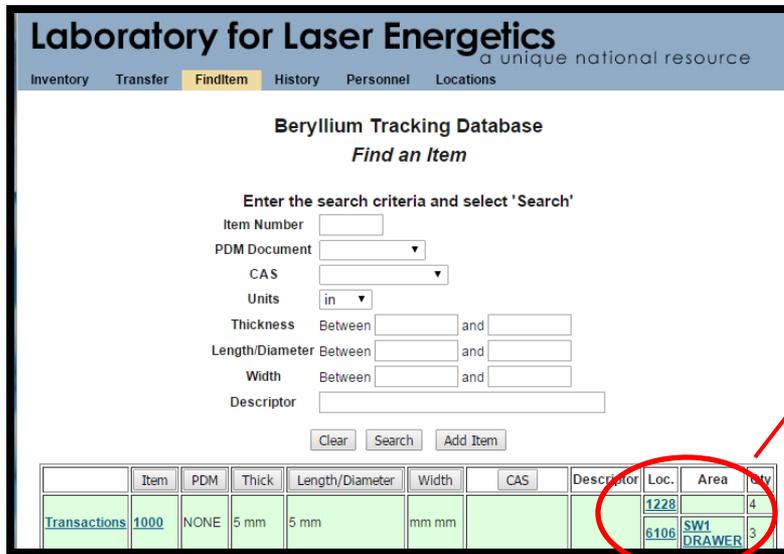
Destination

Comments

Storage Area

Selecting “location” or “area” link in the ‘FindItem’ tab will auto-fill information to perform a Transfer

- Click on the location or area hyperlink to indicate the item to be transferred
- Quantify how many items you would like to transfer and select the destination location



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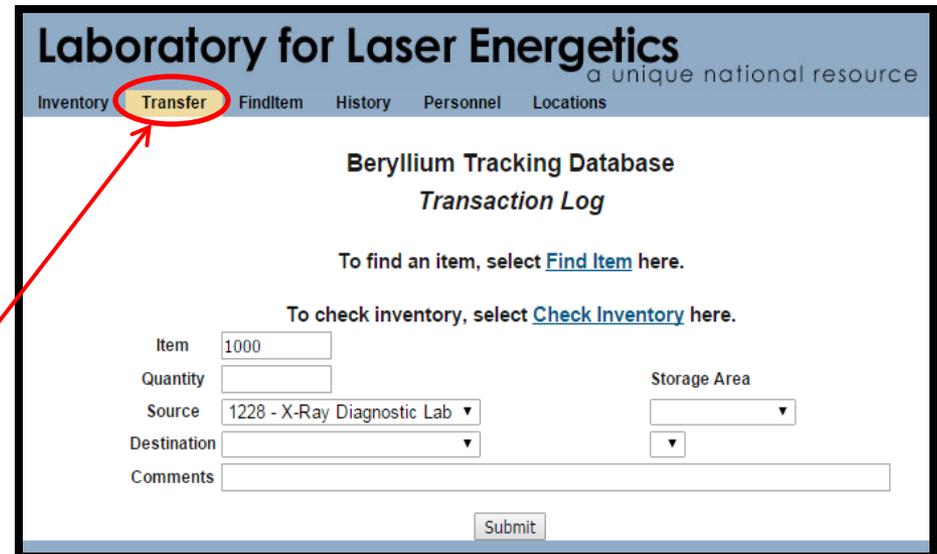
Inventory Transfer **FindItem** History Personnel Locations

Beryllium Tracking Database
Find an Item

Enter the search criteria and select 'Search'

Item Number
PDM Document
CAS
Units
Thickness Between and
Length/Diameter Between and
Width Between and
Descriptor

	Item	PDM	Thick	Length/Diameter	Width	CAS	Descriptor	Loc.	Area	Qty
Transactions	1000	NONE	5 mm	5 mm	mm mm			1228		4
								6106	SW1 DRAWER	3



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Inventory **Transfer** FindItem History Personnel Locations

Beryllium Tracking Database
Transaction Log

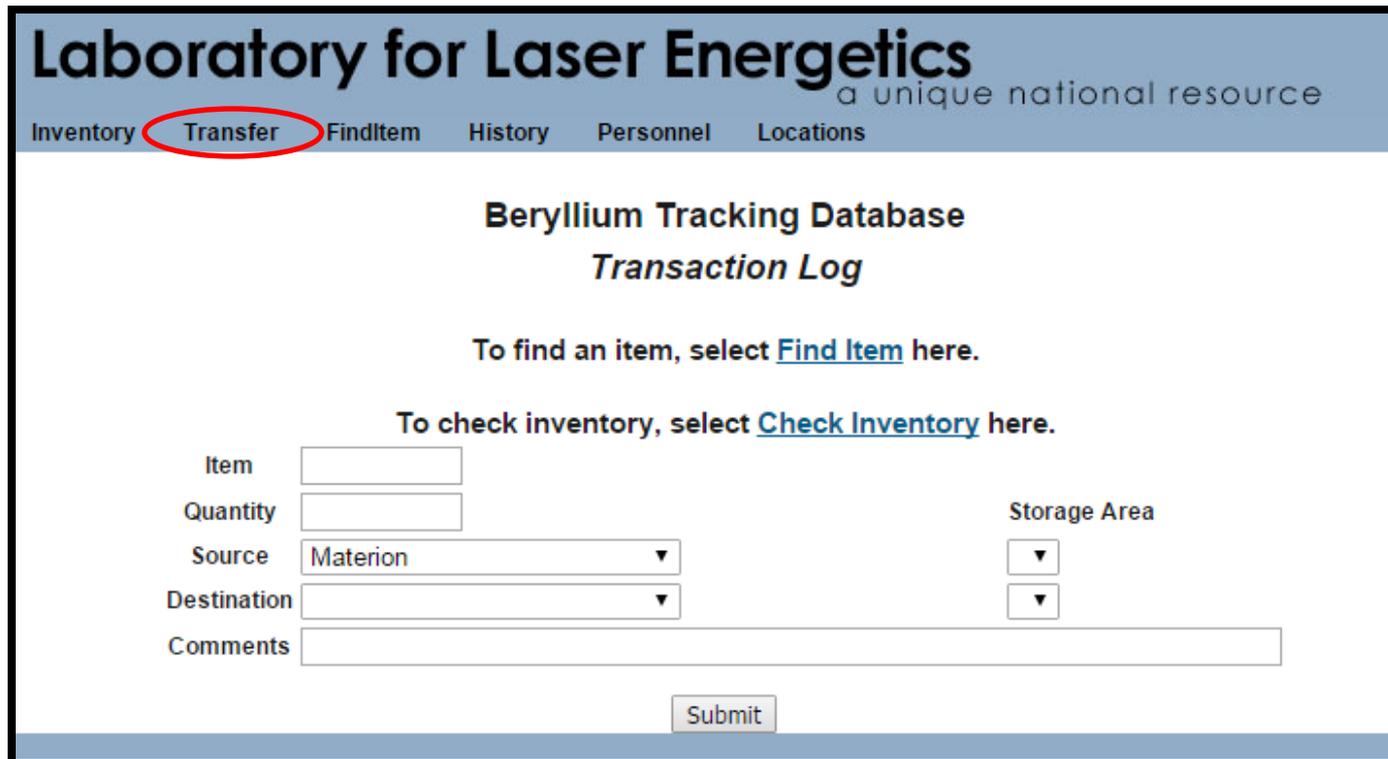
To find an item, select [Find Item](#) here.

To check inventory, select [Check Inventory](#) here.

Item
Quantity
Source
Destination
Comments

The “Transfer” tab is used to move beryllium from one database location to another

After the transfer has been submitted, the transaction is complete



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Inventory **Transfer** FindItem History Personnel Locations

Beryllium Tracking Database
Transaction Log

To find an item, select [Find Item](#) here.

To check inventory, select [Check Inventory](#) here.

Item
Quantity
Source
Destination
Storage Area

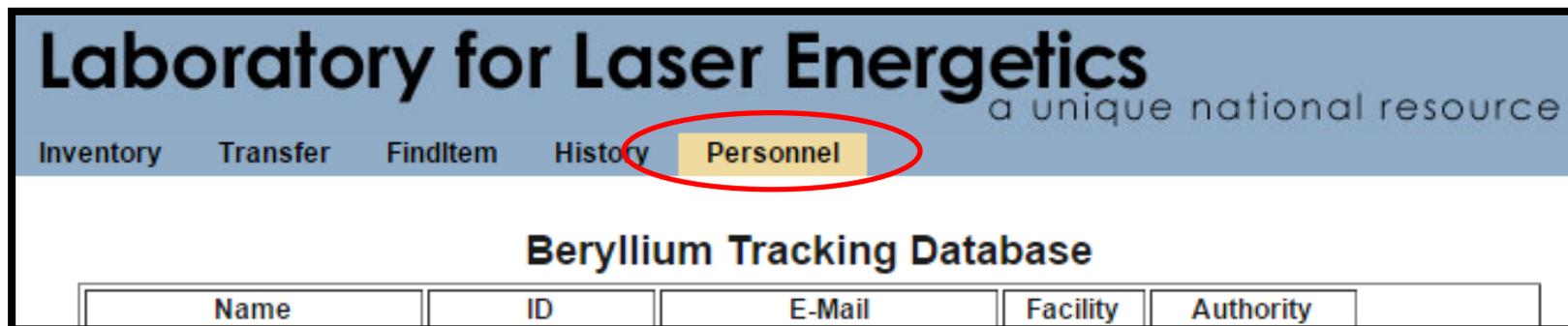
Comments

Only approved users of beryllium are allowed to access the database



Personnel access will be maintained by the Mechanical Engineering Procurement Specialist (MEPS) and consist of:

- **Users - Anyone who transfers and receives beryllium articles**
- **Database Administrators – those who are allowed to add and remove users**
- **Officers - Safety Officers**
- **Mechanical Engineers - Mechanical engineers who are involved with beryllium design and development**



The 'Location' tab provides the rooms authorized to contain beryllium



This tab provides the room number, description of the room, and storage area(s)

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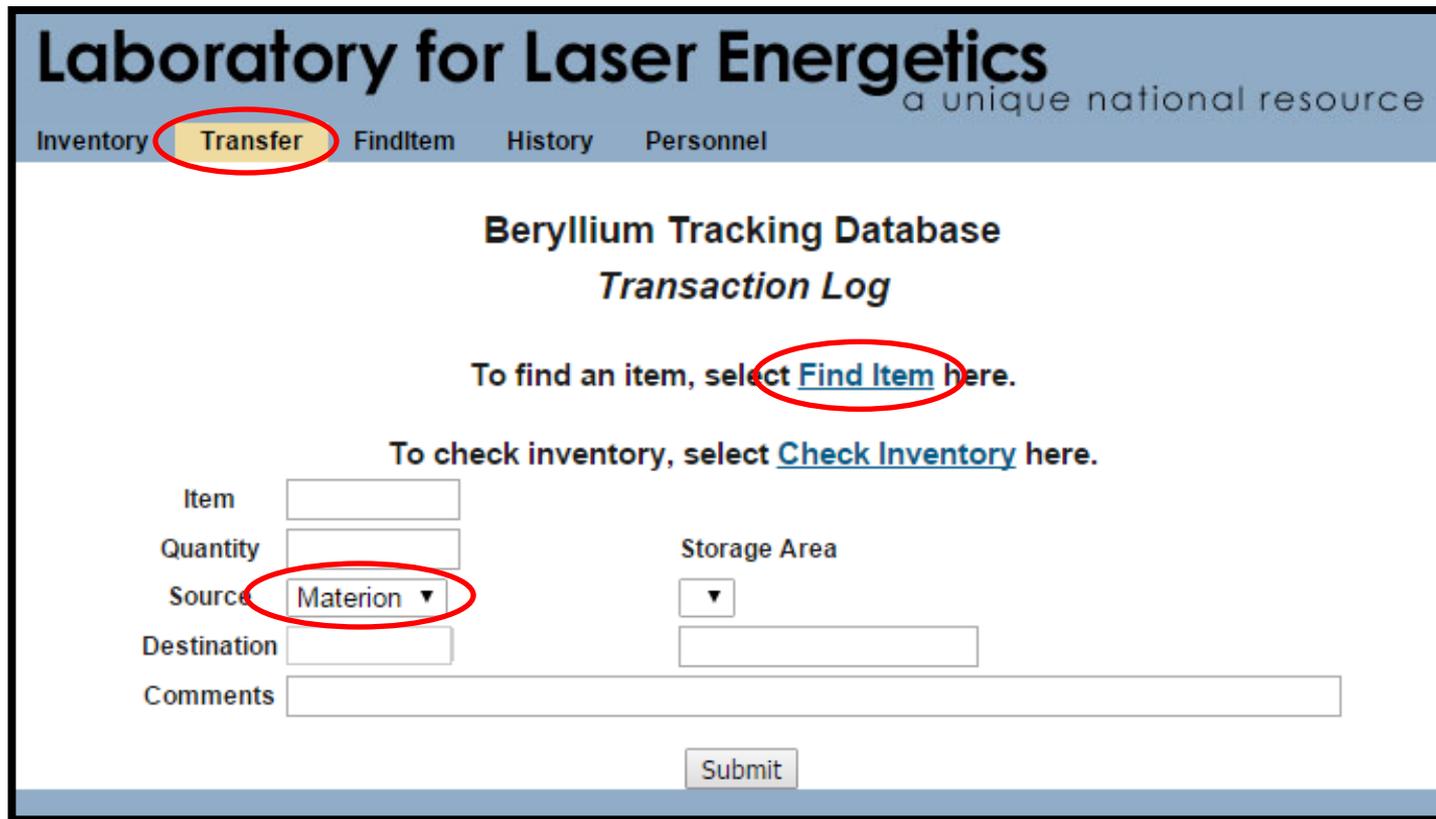
Inventory Transfer FindItem History Personnel **Locations**

Beryllium Tracking Database

ID	Descrip	Storage 1	Storage 2	Storage 3	Storage 4	Storage 5	
1228	X-Ray Diagnostic Lab	BE DRAWER					Save_1228
146	La Cave	SSCA DRY BOX	VIDMAR DRAWER				Save_146
247	Omega Target Bay	BE DRAWER					Save_247
2828	Target Fab.	BE DRAWER					Save_2828
6106	EP Workshop	SW1 DRAWER					Save_6106
							Save_New

Only the Mechanical Engineering Control Specialist can enter new items into the BTD

- In the “Transfer” tab select the source "Materion”
- Select “Find Item” to enter the dimensions of a new article



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Inventory **Transfer** FindItem History Personnel

Beryllium Tracking Database
Transaction Log

To find an item, select [Find Item](#) here.

To check inventory, select [Check Inventory](#) here.

Item

Quantity

Source **Materion** ▼

Storage Area

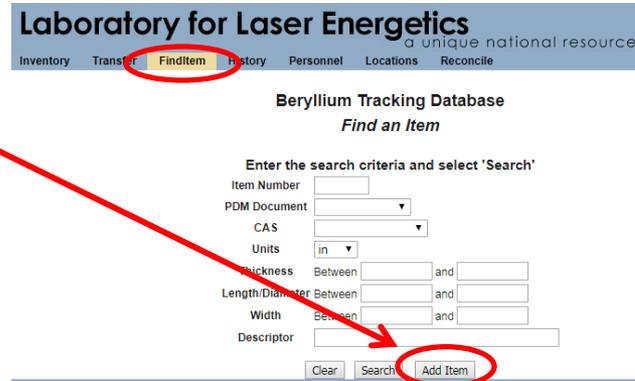
Destination

Comments

*Materion is the beryllium manufacturer used by LLE- 44036 South Grimmer Blvd, Fremont, CA 94538

“Add Item” in the “FindItem” tab will allow the information of a new item to be entered

- Select “Add Item”:



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Inventory Transfer **FindItem** History Personnel Locations Reconcile

Beryllium Tracking Database
Find an Item

Enter the search criteria and select 'Search'

Item Number

PDM Document

CAS

Units

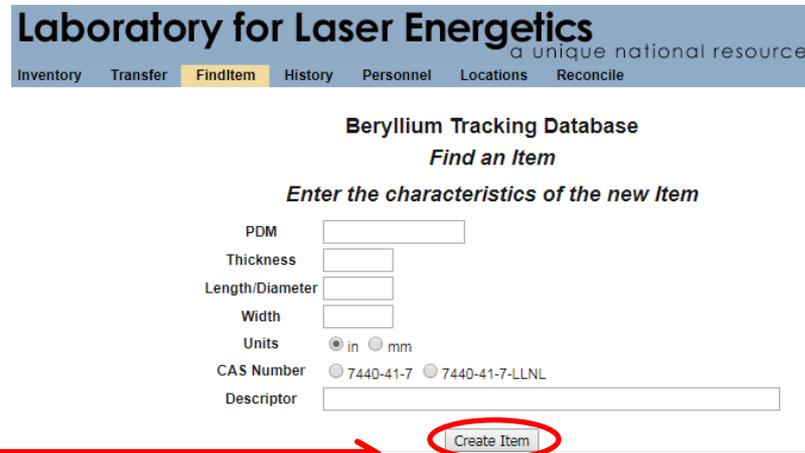
Thickness Between and

Length/Diameter Between and

Width Between and

Descriptor

- Enter relevant information



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Inventory Transfer **FindItem** History Personnel Locations Reconcile

Beryllium Tracking Database
Find an Item

Enter the characteristics of the new Item

PDM

Thickness

Length/Diameter

Width

Units in mm

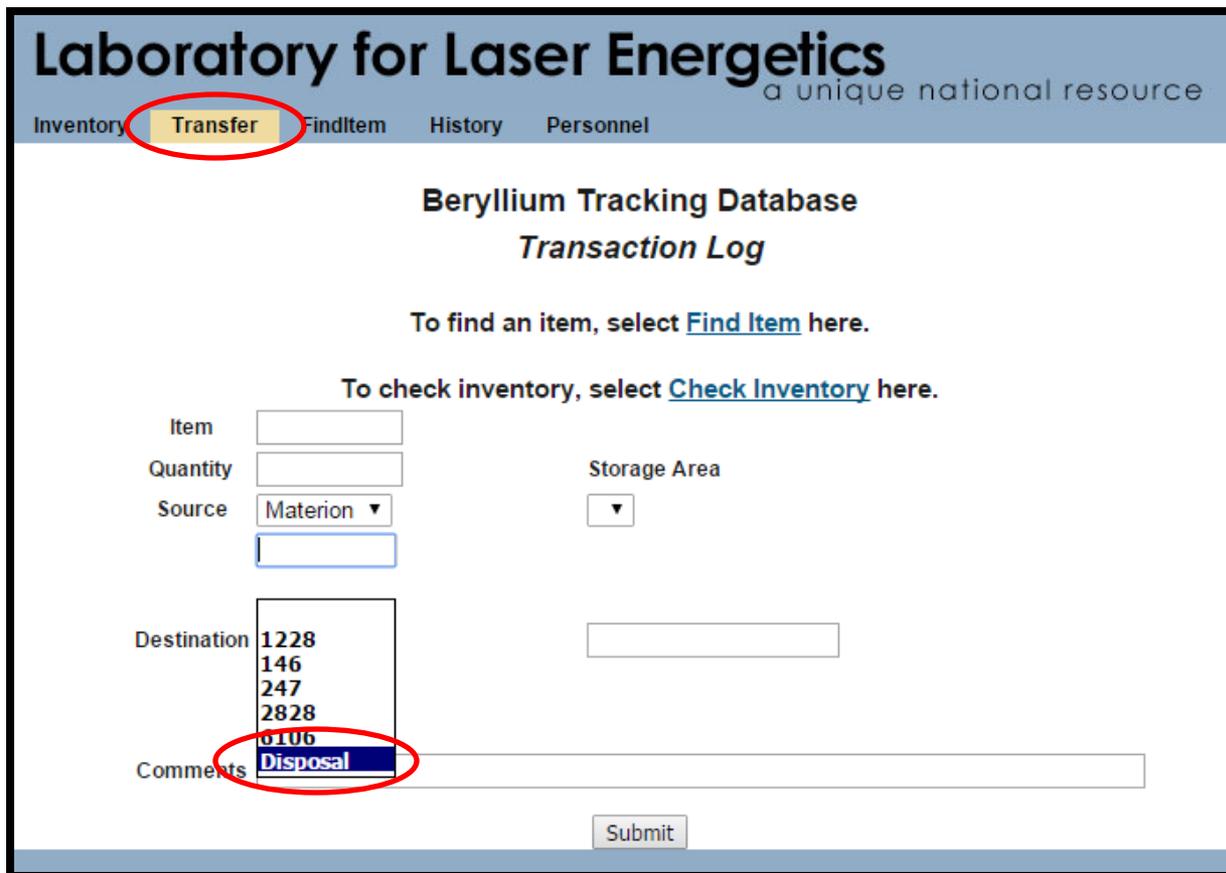
CAS Number 7440-41-7 7440-41-7-LLNL

Descriptor

- Click “Create Item”

Use the “Transfer” tab to dispose of items

To discard an item, perform a “Transfer” and select “Disposal” as the destination



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Inventory **Transfer** FindItem History Personnel

Beryllium Tracking Database
Transaction Log

To find an item, select [Find Item](#) here.

To check inventory, select [Check Inventory](#) here.

Item

Quantity

Source

Storage Area

Destination
146
247
2828
0106
Disposal

Comments

Physical inventory is reconciled in the BTD every 6-months by the Chemical Safety Co-op Student



- The reconciliation process ensures that the reported amount of beryllium in each area matches the physical inventory and provides an opportunity to make database corrections
- These updates also refresh the LLE Chemical Inventory Database

CASNUMBER	NAME	ACQUIRED	INVENTORIED	QUANTITY	MEASURE	LOCATION	STORAGEARE
7440-41-7	BERYLLIUM	1/14/2015	1/5/2015	28.651687013	g	6106	SW1 DRAWER
7440-41-7	BERYLLIUM	1/14/2015	1/9/2015	2241.4176	g	2828	BE DRAWER
7440-41-7	BERYLLIUM	1/14/2015	1/13/2015	43.563304772	g	247	BE DRAWER
7440-41-7	BERYLLIUM	1/14/2015	1/3/2015	11.2376	g	1228	BE DRAWER