

Washington State Patrol Crime Laboratory Division



LIMSRef

Drug Reference Material Management System

Operations Manual

September 2020

1.	LIMSRef Overview	5
1.1.	“Ref. Info” Tab.....	5
1.2.	“Ref. Source” Tab.....	6
1.3.	“Ref. Type” Tab	6
1.4.	“(Not Used)” Tab.....	6
1.5.	“Ref. Material” Tab	6
1.6.	“Usage Tracking” Tab	9
1.7.	“Attachments” Tab	10
2.	Entering a New Reference	11
2.1.	Introduction	11
2.2.	Checking for Existing References in the Database	11
2.3.	“Ref. Info”	11
2.4.	“Ref. Source”	12
2.5.	“Ref. Type”	12
2.6.	“Ref. Material”	12
2.7.	“Usage Tracking”	14
2.8.	Assigning Reference Numbers	15
2.9.	Printing a Reference Material Barcode Label	15
2.10.	Entering Attachments	15
3.	Entering Material Usage	16
3.1.	Entering Usage	16
3.2.	View Usage Report.....	16
4.	Itemizing Reference Materials	17
5.	Transferring Reference Material.....	18
5.1.	Chain of Custody	18
5.2.	Secure Transactions	18
5.3.	Secure Transport Carriers	18
5.4.	Using “VIA” and “Note”	18
5.5.	Removal from Storage Locations	19
5.6.	Transferring Reference Materials within the Laboratory	19
5.7.	Transferring Reference Materials to Other Crime Laboratories.....	20

5.8.	Receiving Reference Materials from Other Crime Laboratories.....	21
5.9.	Dilute Solutions	22
6.	Consumption and Destruction of Reference Materials	23
6.1.	Consumption.....	23
6.2.	Destruction.....	23
6.3.	Closing the Request	23
7.	DEA Exempt.....	24
7.1.	Reference Numbers	24
7.2.	Adding Exempt Solutions Reference Material	24
7.3.	Verification Documentation.....	24
7.4.	Material Usage Tracking	24
7.5.	Consumption.....	25
8.	Training Kits and Competency Samples.....	26
8.1.	Entering a Training Kit or Competency Sample	26
8.2.	Transferring Training Kits and Competency Samples to Other Crime Laboratories	26
8.3.	Receiving Training Kits and Competency Samples to Other Crime Laboratories	26
9.	Add, Change, and Delete/Inactive Operations	27
9.1.	Changes to Reference Records	27
9.1.1.	Deleting Reference Materials	27
9.1.2.	Chain of Custody Edits	27
9.1.3.	Deleting Material Usage Tracking Requests	27
9.2.	Work Order Handling and Format	27
10.	Reports.....	30
10.1.	Functional Report.....	30
10.2.	Custom Report	30
11.	Document Storage	32
12.	Auditing.....	34
12.1.	Manual Audit.....	34
12.2.	Audit with Recon Tool.....	34
Appendix A – Terminology and Definitions		35
Appendix B - User Roles		37

Appendix C - Barcode Label Information 38

LIMSRef Drug Reference Material Management Operations Manual	Page 4 of 38	Revision September 22, 2020
Approved by CLD Manager	All Printed Copied Uncontrolled	Revision 5

1. LIMSRef Overview

Seven tabs (sections) comprise the case view in LIMSRef:



Ref. Info
Ref. Source
Ref. Type
(Not Used)
Ref. Material
Usage Tracking
Attachments

The following are the Document Conventions:

Area	Appearance and Example
Defined Terminology and Definition	Reference Material
Placeholder text	<lab>
Report Name	"Ref. COC Report"
Report Template	"Ref. COC.rpt"
LIMS-plus Window	"Material #R0-0001" window
LIMS-plus Option List Item	"Storage Location"
LIMS-plus Tab	"Ref. Info"
LIMS-plus Field Name	<u>Category</u>

1.1. "Ref. Info" Tab

Laboratory staff can print the chain of custody report (*Ref. COC Report*) and the reference material report (*Ref. Info Report*) for the Reference Material from this location.

Field (on Left)	Description
Synopsis	This field is used to record miscellaneous reference material information as well as other notes regarding comments, chain of custody edits, deletions, etc.
Related Ref.	This field is used to document relationships between Reference Material items. This may include transfers of Reference Material items between laboratories or the manufacture of a controlled substance from another Reference Material item.
	When selected, this button will bring up the data extension form for this Reference which contains the following fields: <ul style="list-style-type: none">Expiration Date The expiration date for Certified Reference Material is documented in this field in MM/dd/yyyy format.Other Control No. This is a field to be used to enter historic control numbers associated with the Reference Material.SDS Flag It can be checked if the SDS for the substance is on file. This is an optional field.
	Not used


1.2. “Ref. Source” Tab

The “**Ref. Source**” tab is the Reference Material Source.


The **Source Lot #** is the manufacturer’s lot number associated with Reference Material or agency case number if the Reference Material is a secondary or training material type obtained from a law enforcement agency.

If the Reference Material is manufactured in-house or has no unique identifier, a lot number will be assigned by the scientist manufacturing the Reference Material and will be used as the **Source Lot #**.

See section 9.2 for creating Work orders requesting additions of Reference Material Sources which are not already in the database.

The  button can be used if an additional Reference Material Source is needed for the Reference Material.

1.3. “Ref. Type” Tab

The “**Ref. Type**” tab is used to designate the Reference Type. The  button is used to add a Reference Type. Options that are populated in the dropdown include:



- 000 Document
- 001 Training Aid
- 002 Proficiency
- 003 Secondary
- 004 Primary
- 005 Certified Reference Material
- 006 Dilute Solution
- 099 Other

1.4. “(Not Used)” Tab


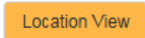
The “**(Not Used)**” tab is not used in LIMSTest.

1.5. “Ref. Material” Tab


The “**Ref. Material**” tab is used to track the specific information about the Reference Material.

Field	Description
	Not used
	When selected, this button will bring up a screen with a dropdown of Reference Definitions.



LIMSTest Drug Reference Material Management System Operations Manual	Page 6 of 38	Revision September 22, 2020
Approved by CLD Manager	All Printed Copied Uncontrolled	Revision 5

	Not used
	When selected, this button will bring up a screen for the storage location and description of the designated Reference Material.



The “Reference Def. Wizard” is used to add a Reference Material to the Reference.


Field	Description
Select Ref. Definition	Displays the Reference Definition and has the following attributes: (1) name, (2) synonyms, (3) CAS number, and (4) molecular formula.
New Source Representative	Used to select the Reference Material Source. The  button will bring up a screen containing the following:
	Ref. Source It is a dropdown of that will bring up the name of the Reference Material Source.
	Badge/Rep No used
Set Ref. Material Sources	Not used
Select Services	Displays the default Material Usage Tracking request.




The “New Reference Submission for Ref. #RX-XXX Ref. Definition-(1of1)” window contains the following information:

Field (on Left)	Description
Ref. Material Source	It is a dropdown of the names of the Reference Material Sources.
Source Rep	It is a dropdown of Reference Material Source representatives. A generic representative option for the Reference Material Source will be included which will be used for most Reference Materials. If the specific name of the Reference Material Source representative for law enforcement agencies is known, it can be selected from the dropdown. The generic representative option for the Reference Material Source will be used when the specific representative name is unknown. Reference Material Source representatives can be added by selecting the  button which will bring up the “New Agency Representative” window. Pertinent information can be entered for the representative. Editing Source Representative information can be done by selecting the  button.
(Not Used 1)	Not used
Inherited COC	Not used
Container (N/A)	Not used
Ref. Material No	It is a pre-assigned number designating the unique number assigned to a Reference Material. Sub-items created will use the primary inventory number with “-01”, “-02”, etc. to uniquely identify the material.

Intended Disposition (N/A)	Not used
Prod. #	It is a field which can be populated with the agency product number, if available.
Origin (N/A)	Not used

Field (on Right)	Description																		
Ref. Definition	It is the dropdown of Reference Definitions and has the following attributes: (1) name, (2) synonyms, (3) CAS number and (4) molecular formula. Reference Definitions which are not listed in the database can be added by creating a Work Order with ITD, see section 9.2.																		
Description	It contains the Reference Definition detail which includes the name, synonyms, CAS number and molecular formula. The synonyms, CAS number and molecular formula are connected with the substance name and are pre-populated in a dropdown.																		
Category	It is a dropdown of the Reference Material control status (Schedule 1-5). Other choices include analog, chemical, DEA exempt, legend drug, paraphernalia, and watched.																		
NCIC Evid Label (N/A)	Not used																		
Notes	It is an optional field that can be used for describing additional information about the Reference Material.																		
Extraction Type (N/A)	Not used																		
	This will bring up a “ Hazardous Material – Special Handling Instructions ” dialog box which allows the user to create warning flags for DEA Form Requirements and for Verification Requirements.																		
	When selected, this button will bring up the “ <i>Ext Data for Ref. Material</i> ” window for this Reference Material: <table> <tr> <td colspan="2">Info field</td></tr> <tr> <td>Labeled Weight</td><td>It is a numerical value</td></tr> <tr> <td>Unit</td><td>It is a dropdown containing possible units of measurement. The unit can also be typed in if it is not available in the dropdown.</td></tr> <tr> <td>Date Opened</td><td>It can be left blank if the information is unknown.</td></tr> <tr> <td>Opened by First Name</td><td>It can be left blank if the information is unknown.</td></tr> <tr> <td>Opened by Last Name</td><td>It can be left blank if the information is unknown.</td></tr> <tr> <td colspan="2">Verification field</td></tr> <tr> <td>Verified Date</td><td>It is the date (MM/dd/yyyy format) the verification was completed.</td></tr> <tr> <td>Verified By First Name</td><td>It is the first name of the person performing the verification.</td></tr> </table>	Info field		Labeled Weight	It is a numerical value	Unit	It is a dropdown containing possible units of measurement. The unit can also be typed in if it is not available in the dropdown.	Date Opened	It can be left blank if the information is unknown.	Opened by First Name	It can be left blank if the information is unknown.	Opened by Last Name	It can be left blank if the information is unknown.	Verification field		Verified Date	It is the date (MM/dd/yyyy format) the verification was completed.	Verified By First Name	It is the first name of the person performing the verification.
Info field																			
Labeled Weight	It is a numerical value																		
Unit	It is a dropdown containing possible units of measurement. The unit can also be typed in if it is not available in the dropdown.																		
Date Opened	It can be left blank if the information is unknown.																		
Opened by First Name	It can be left blank if the information is unknown.																		
Opened by Last Name	It can be left blank if the information is unknown.																		
Verification field																			
Verified Date	It is the date (MM/dd/yyyy format) the verification was completed.																		
Verified By First Name	It is the first name of the person performing the verification.																		


	<u>Verified By Last Name</u>	It is the last name of the person performing the verification.
	<u>Verified Using</u>	It is a dropdown of which instrumental method was used to verify the Reference Material.
	<u>Publication</u>	It is a dropdown of publication sources used to verify a Reference Material.
	<u>Comments</u>	It is a notes field in which the specific source used to verify Reference Material can be described if “z-other” was selected in the “Source” dropdown.
Ref. Material Barcode:	Default set to LIMSRef Inventory Barcode. No adjustments can be made to these fields,	
	Not used	

Field (Middle)	Description
<u>Req#</u>	The Material Usage Tracking request number automatically generated by selecting a Reference Definition.
<u>Service</u>	Material Usage Tracking Request automatically generated by selecting a Reference Definition.
<u>Due Date</u>	Not used
<u>Reason</u>	Not used
	Should not be used to generate additional Material Usage Tracking Requests
	Button becomes available to edit the Material Usage Tracking Request when the “Material Usage Tracking” service is selected.
	Used to delete an automatically generated Material Usage Tracking Request associated with a dilute solution or itemized Reference Material for transfer to another Crime Laboratory.
Request Barcode:	Not used

Field (Bottom)	Description
	Initial Transfer information for the Reference Material

1.6. “Usage Tracking” Tab

The “Usage Tracking” tab is used for tracking the usage of the Reference Material. Use of each field is as follows:

Field	Description
	When selected this button will bring up a series of screens to add a Material Usage Tracking request.
<u>Req #</u>	Material Usage Tracking Request number

<u>Service</u>	The only service available in LIMSRef is Material Usage Tracking
<u>Status</u>	Shows the status of the Material Usage Tracking request.
<u>Req Date</u>	This is the date the Material Usage Tracking request is initiated.
<u>Due Date</u>	Not used
<u>Rel Date</u>	Not used
<u>Milestone</u>	Milestones are not used except when a Reference Material is consumed or destroy. When the reference is no longer available the Material Usage Tracking request will be set to Admin Reviewed to prevent further usage tracking.
<u>Assigned To</u>	The Material Usage Tracking request must be assigned to the generic “*LIMSREF, XXX User” to allow all users to enter usage.
<u>Requesting Agency</u>	This is the Reference Material Source.
<u>Requesting Rep</u>	This is the generic Reference Material Source representative or, if known, the specific Reference Material Source representative.
<u>Lab</u>	The specific crime laboratory associated with the Material Usage Tracking request.
<u>Reason</u>	Not used
<u>Complexity</u>	Not used
<u>Distributed On</u>	Not Used
<u>Rel. Evidence</u>	This shows the Reference Material associated with the Material Usage Tracking Request.

1.7. “Attachments” Tab

The “**Attachments**” tab contains a directory of stored documents associated with a Reference. Verification Data and other documents associated with the Reference Material will be stored within “Case Attachments”.

2. Entering a New Reference


2.1. Introduction


The steps outlined below are the general sequence for entering new References. Depending on the material an alternate sequence of the steps may be necessary. See section 7 for entering DEA Exempt materials.


When a new Reference is entered into the database a Reference Number will be assigned. If there is an existing Reference with the same Source Lot Number (i.e., there already exists a Sigma Lot# 45F1234 for methamphetamine hydrochloride), a new Reference shall be created with a new Reference Number.

2.2. Checking for Existing References in the Database


The “New Ref.” function is selected from the **“File”** menu which will bring up the **“Source Lot # Search”** dialog box. Select a Reference Material Source from the dropdown. If the Reference Material Source is not located in the dropdown a Work Order (see section 9.2) must be initiated to add the Reference Material Source. Reference entry can only proceed if the Reference Material Source is located in the dropdown.

When the Reference Material Source is selected in the dropdown, enter the **Source Lot #** (or case number for secondary references) of the Reference Material and click . It will start to search the database. A dialog box will pop up indicating if there is an existing Reference Number matching the **Source Lot #** in the database or if this does not exist in the database.

If this is a new Reference, a **“XXX Not Found”** dialog box will pop up. Select  button and proceed with entering the information as described starting in Section 2.3.

When a matching Reference is found in the database a **“References matching Source Lot # search”** dialog box will pop up. Since the same source lot number will be allowed for multiple References, the  button will be selected to create the new Reference and entry will proceed with Section 2.3.

2.3. “Ref. Info”




The  button will be selected to enter Certified Reference Material Expiration Date, Other Control No. or SDS Flag information.

- If the Reference Material is a Certified Reference Material, the expiration date will be entered into the **Expiration Date** field. The **Expiration Date** field may be used for Reference Material

LIMSRef Drug Reference Material Management System Operations Manual	Page 11 of 38	Revision September 22, 2020
Approved by CLD Manager	All Printed Copied Uncontrolled	Revision 5

other than Certified Reference Material. Month/Date/Year formatting (e.g., 05/03/2027) must be used when entering the date.

- Enter historic Reference Collection Numbers associated with the Reference Material in the **Other Control No** field.
- The **SDS Flag** box may be selected if SDS tracking is used.

If the Reference is related to another Reference from any WSP Crime Laboratory the **Related Ref.** field will be used to document the association. Click the  button and type the related Reference Number into the “**Ref. Search**” window and select the  button. Document the Reference Number and enter the Reference Material Number along with other pertinent information in the **Notes** field. Select the  button.




Example:

Scenario	Reference #	Notes
Inter lab transfer	R2-0001	Cocaine HCl received from SPO R2-0001-01-03, 0.2 mg on 1/11/2016 by John Doe


2.4. “Ref. Source”



No additional data entry should be needed on the “**Ref. Source**” tab.

2.5. “Ref. Type”

Select the  button which will bring up a “**Select – Ref. Type**” window. From the dropdown select the Reference Type and click the  button. A “**New Type for Ref. Material TMP-XXXXXXX**” window will appear. No additional entries are needed and the  button will be selected.




2.6. “Ref. Material”

Select the  button which will bring up the “**Select – Ref. Definition**” window. Choose the Reference Definition from the dropdown and click  button.









Once a Reference Definition has been selected from the dropdown the “**Reference Definition Wizard**” window will appear. The fields can be highlighted to view or the   buttons may be used to navigate between the fields.

- No changes are needed on the “**Select Ref. Definition**” field.





LIMSRef Drug Reference Material Management System Operations Manual	Page 12 of 38	Revision September 22, 2020
Approved by CLD Manager	All Printed Copied Uncontrolled	Revision 5

- On the “*New Source Representative*” field select the  button to bring up the “Select – Ref. Source Rep” window. In this window the “Ref. Source” will be selected from the dropdown. The corresponding “Rep” will be selected from the dropdown and the  button will be clicked to return to the “Reference Definition Wizard” window.
 - If the specific name of the Reference Material Source representative for law enforcement agencies is known, it can be selected from the dropdown. The generic representative option for the Reference Material Source will be used when the specific representative name is unknown.
- No changes are needed on the “*Set Evidence Sources*” field.
- The creation of a Material Usage Tracking Request is set as default in the “*Select Services*”. The ☒ [NAME] : may be unchecked to prevent an automatically generated Usage Tracking Request.
- After advancing through each field select the  button.


The “New Reference Submission for Ref. # TMP-X” window will appear.

- The Ref. Material Source and Source Rep should already be populated but may be selected from the drop down menus if necessary.
- A product number may be entered in the “*Prod. #*” field.
- The Category field is prefilled to a default for the selected Reference Material. If the Category for the specific Reference Material being entered is different it must be selected from the drop down.
- Alerts for DEA222 and Verification may be selected by using the  button.
 - The alerts are highlighted and transferred between the “*Available Ref. Material Handling*” field and the “*Selected Ref. Material Handling*” field by use of the   buttons.
 -  is selected to return to the “New Reference Submission for Ref. # TMP-X” window.
- If a Material Usage Tracking request is not needed highlight the Material Usage Tracking row. Select the button  to prevent the automatic generation of the request.
- Enter initial Chain of Custody information by selecting the  button to the right of the Chain of Custody fields. The “*Time*” fields will populate with the current date and time but can be adjusted as necessary. If Reference Materials were already entered in this LIMSRef use session the Chain of Custody Fields may be prepopulated and can be cleared using the  button.
 - In the “Initial Transfer” window use the  button to the right of the “From:” field to select the “*Source Representative*”.







LIMSRef Drug Reference Material Management System Operations Manual	Page 13 of 38	Revision September 22, 2020
Approved by CLD Manager	All Printed Copied Uncontrolled	Revision 5

- The “Via:” and “Note:” fields may be used to document shipping information but are not required.
- Highlight the “To:” field. Scan the barcode and enter the secure pin for the lab staff member.
- Highlight the “Then To:” field and either scan the barcode label for the Storage Location or use the  button to select “Storage Location”. In the “Select – Storage Location” window select the storage location. If manually selecting a storage location check the box to the left of the storage location and use the  button to return to the previous window.
 - The navigation tree can be expanded for additional storage locations.
-  is selected to return to the “New Reference Submission” window.
- Select the  button.

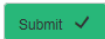
2.7. “Usage Tracking”

LIMSRef is set up to automatically create a “Material Usage Tracking” request when a Reference Definition is selected. This request does not default to an assigned “scientist”. Highlight the Material Usage Tracking row in the table. Right click and select “Edit”. Select “*LIMSRef, <lab> User” from the dropdown list by “Assigned Scientist”. Select the  button.


If there is no associated request:

- Select the  button to bring up the “Select – Ref. Source Rep” window. Select the “Ref. Source” and associated “Rep” from dropdown lists. Use the  button.
- In the “Select – Service” window choose the appropriate Crime Laboratory from the “Lab” dropdown list. Select “Reference Material Management” for the “Department” and “Material Usage Tracking” for the “Service”. Use the  button.
- The “New Request – xxxx – Material Usage Tracking” window will appear. Select the  button.
- Relate the usage tracking to the associated Reference Material in the “Related entities for Usage XXXX” window by highlighting the Reference Number and using the  button. Complete by selecting the  button.
 - The Reference Number will still be a “TMP” number until the New Reference entry is finalized by assigning a Reference Number.

2.8. Assigning Reference Numbers

When all of the required information has been populated select . A window asking “System generated reference number?” will appear. Select “Yes”.


2.9. Printing a Reference Material Barcode Label

- Select the “**Ref. Material**” Tab.
- Highlight the Reference Material.
- Right click and select “Edit”.
- Select the  button.

Place the barcode on the Reference Material container in a manner in which the label will stay flat. If the label is wrapped around the container it will be difficult to scan the label with a barcode scanner. The barcode label may need to be backed with a blank label and adhered in a flag-like manner for small vials.

2.10. Entering Attachments

Reference Data must be entered after the Reference Number has been assigned.

- Scan the Reference Data and save to a retrievable location using a file name descriptive of the file.
- From the “**Attachments**” tab highlight “Reference Attachments”.
- Right click and select “Add New Attachment”.
- Select the file containing the Reference Data for the Reference Material and select [**Open**].
- Select the  button.


LIMSRef Drug Reference Material Management System Operations Manual	Page 15 of 38	Revision September 22, 2020
Approved by CLD Manager	All Printed Copied Uncontrolled	Revision 5

3. Entering Material Usage

Whenever a portion of a controlled substance or legend drug is used or removed, the usage shall be documented. LIMSRef records the current date, time and whoever logs into the workstation (the domain account) as the usage person. To properly capture the usage information the analyst entering the usage must be the one logged into the workstation and into LIMSRef and may not be logged in under another user otherwise the information may not be recorded correctly.

3.1. Entering Usage

The following steps will be followed to enter usage of a Reference Material:

- While in the “**Usage Tracking**” tab highlight the Material Usage Tracking line in the table, right click and select “Add/Edit Usage Tracking”.
- Select the reason the Reference Material is being used from the “Reason” dropdown.
 - When entering a reason for use, if the “z-Other” option is selected the reason for usage must be documented in the “Result Notes” edit box. Examples of this type of usage may be method validation, training, etc.
- Select the  button.

3.2 View Usage Report

The usage information can be verified through the usage report (*RefMaterial_Usage.rpt*) by highlighting the “Material Usage Tracking” request in the table, right clicking and selecting “Print Usage Tracking Report” option. The usages are listed under “Material Usage Tracking”. The “Modified” is the entering date and “Modified By” is the scientist who entered the usage.

LIMSRef Drug Reference Material Management System Operations Manual	Page 16 of 38	Revision September 22, 2020
Approved by CLD Manager	All Printed Copied Uncontrolled	Revision 5


4. Itemizing Reference Materials


Itemizing Reference Materials may occur when a portion of a Reference Material is going to be transferred to another lab or the Reference Material is to be divided into multiple portions which will either be maintained in the Reference Collection or destroyed. This is considered a parent/child Reference Material creation. Dilute solutions prepared for transfer to another laboratory will not be itemized.

The child Reference Material must contain a description of the contents. Custody information is inherited from the parent Reference Material. Child Reference Material Number will be system generated to reflect the relationship with the parent Reference Material. A barcode label will be generated for child Reference Materials.

Reference Materials must be transferred to the possession of the individual prior to itemizing the material. See section 5 for specifics on transferring Reference Materials.

Open a Reference and select the “**Ref. Material**” tab. Right click on the Reference Material to bring up a menu.

- Select “*Itemize w/Ref. Def*”.
 - In the “Select – Ref. Definition” menu select the Reference Definition from the dropdown menu.
- Use the  button.

The “Ref. Definition Wizard” window will appear. Advance through each field. The Ref. Source should already be populated in the “*New Source Representative*” field. After advancing through each field select the  button. In the “New Reference Submission for Ref. #RX-XXX itemize (N/A) 01 – Ref. Definition-(1 or 1)” window populate the appropriate fields and delete the “Material Usage Tracking” request as when a new Reference Material is entered as described in Section 2.6.

LIMSRef Drug Reference Material Management System Operations Manual	Page 17 of 38	Revision September 22, 2020
Approved by CLD Manager	All Printed Copied Uncontrolled	Revision 5

5. Transferring Reference Material

5.1. Chain of Custody

As Reference Materials are received, transferred, consumed, or destroyed in a laboratory, its travels are captured as chain of custody transactions.

Chain of custody for Reference Material begins when the Reference Material is received in the laboratory and does not end until the Reference Material is consumed or destroyed.

5.2. Secure Transactions

Secure transactions are mandatory whenever a laboratory staff member is involved in the Reference Material transfer. Exceptions to this rule are rare and must be approved by local laboratory management and documented in the **Notes** filed of the chain of custody. A transaction is considered “Secure” when a lab staff bar code is scanned and the lab staff member enters his/her PIN.

5.3. Secure Transport Carriers

Ensure you are using a secure means of transport. If in doubt ask your Lab Manager.

Capturing secure transport carrier shipping or tracking numbers is required whenever a secure transport carrier is involved. This can be done by using the **Note** field (refer to section 5.4) during the transfer process or by scanning the shipping confirmation receipt and uploading this document to the “Case Attachments” directory (refer to section 2.10).

5.4. Using “VIA” and “Note”

It is mandatory to use **VIA** field in transfer transactions to indicate the method of receipt and release of Reference Materials when a secure transport carrier is involved in the transfer of Reference Materials between crime laboratories. **VIA** will also be used to indicate “Witness” when Reference Materials are transferred to consumed or destroyed status. Otherwise, the use of **VIA** field is optional.

The use of **Note** is one way to capture secure transport carrier shipping or tracking numbers when a secure transport carrier is involved in the transaction. **Note** may also be used to capture other transfer related comments, as appropriate.

LIMSRef Drug Reference Material Management System Operations Manual	Page 18 of 38	Revision September 22, 2020
Approved by CLD Manager	All Printed Copied Uncontrolled	Revision 5






5.5. Removal from Storage Locations

The Evidence Transfer function allows the documentation of the movement of the Reference Materials. When the **From** field is left blank when creating a transfer, LIMS will automatically pull this information when processing the transfer. Lab staff will use secure transactions when transferring Reference Materials.

5.6. Transferring Reference Materials within the Laboratory

Individual laboratory policy may require documentation of Reference Material movement within the Laboratory in LIMSRef. Reference Materials must be transferred in LIMSRef if they are going to be itemized.

To transfer the Reference Material select the “**Transfer**” menu and “*Transfer*”. The “**Ref. Material Transfer**” window will appear. Transfers to people require the use of the PIN for a secure transaction.

- | | |
|--------------------------------------|--|
| In the From field | Leave blank to default to the current storage location, scan the barcode representing the From location or use the  button to manually select the storage location. <ul style="list-style-type: none">• If the manual selection process is used, select the “<i>Storage Location</i>” and select the appropriate location in the “Select – Storage Location” menu by checking the box. The navigation tree can be expanded for additional storage locations. |
| In the To field | Scan the barcode of the person performing the transfer in the To field and enter the PIN to make this a secure transaction. |
| In the Then To field | If the Reference Material is being immediately transferred to another storage location or person this field will be used. |
| In Material to Transfer field | Highlight the “Ref. Material to Transfer” field. Scan the barcode of the Reference Material or manually select the Reference Material by using the  button. Select  to complete the transfer. <ul style="list-style-type: none">• If the manual selection process is used, select “<i>Lab Case</i>”, enter the Reference Material Number, and select the  button. On the “Evidence for case RX-XXXX” select the Reference Material, right click and select “<i>Add to Transfer</i>”. Then select . The Transferred Reference Material is defaulted to the <i>Parent</i> Reference Material. If a <i>Child</i> Reference Material is being transferred it must be selected. |

5.7. Transferring Reference Materials to Other Crime Laboratories

A portion of a Reference Material may be sent to another Crime Laboratory for their use in the identification of a case samples, training, method validation, etc. A child item will be created (see Section 4) and is transferred to the requesting laboratory in person or by a secure transport carrier. Once the child Reference Material has been transferred to the receiving lab location it will no longer appear on the releasing lab's active inventory.

This procedure applies to bulk material and does not apply to dilute solutions. See section 5.8 for transferring dilute solutions.

To transfer the Reference Material select the “**Transfer**” menu and “*Transfer*”. The “**Ref. Material Transfer**” window will appear and transfers will proceed based on the current location of the child Reference Material.

(A) from a storage location:


In the **From** field

Scan the barcode representing the **From** location or use the  button to select the storage location.


In the **To** field



Scan the barcode of the person performing the transfer in the **To** field and enter the PIN to make this a secure transaction.

In the **Then To** field

The receiving lab will be designated in the **Then To** field by selecting the  button and selecting “*Source Representative*”. In the “**Select – Ref. Source Rep**” window, the appropriate WSP Crime Lab will be selected for the **Ref. Source** field and the generic “WSP – Crime Lab <lab>” for the associated lab will be selected for the **Rep** field.

In **Material to Transfer** field

Highlight the “Ref. Material to Transfer” field. Scan the barcode of the Reference Material or manually select the Reference Material by using the  button.

- If the manual selection process is used, select “**Lab Case**”, enter the Reference Material Number, and select the  button. On the “Evidence for case RX-XXXX” select the Reference Material, right click and select “*Add to Transfer*”. Then select . The Transferred Reference Material is defaulted to the *Parent* Reference Material. If a *Child* Reference Material is being transferred it must be selected.

Select  to complete the transfer.


(B) which is currently located in a user's custody:

In the **From** field

Scan the barcode of the person performing the transfer in the **From** field and enter the PIN to make this a secure transaction.



LIMSRef Drug Reference Material Management System Operations Manual	Page 20 of 38	Revision September 22, 2020
Approved by CLD Manager	All Printed Copied Uncontrolled	Revision 5


In the **To** field

The receiving lab will be designated in the **To** field by selecting the  button and selecting “*Source Representative*”. In the “**Select – Ref. Source Rep**” window, the appropriate WSP Crime Lab will be selected for the **Ref.** Source field and the generic “WSP – Crime Lab <lab>” for the associated lab will be selected for the **Rep** field.

In **Material to Transfer** field

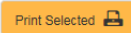
Highlight the “Ref. Material to Transfer” field. Scan the barcode of the Reference Material or manually select the Reference Material by using

the  button. If the manual selection process is used, select “*Lab Case*”, enter the Reference Material Number, and select the  button. On the “Evidence for case RX-XXXX” select the Reference

Material, right click and select “*Add to Transfer*”. Then select . The Transferred Reference Material is defaulted to the *Parent* Reference Material. If a *Child* Reference Material is being transferred it must be selected.

Select  to complete the transfer.

The releasing lab will generate an “*Outbound Evidence Receipt*” and the releasing user will sign this document. The document will be forwarded to the receiving lab along with the Reference Material.

- In the “**Transfer**” tab select “*Print Outbound Receipts*” to bring up the “**Print Outbound Receipts**” window. Select the transfer transaction and use the  button to print the report. Once printed this report will no longer display in the “**Print Outbound Receipts**” window.
- The “*Outbound Evidence Receipt*” may also be printed by accessing the reports area in the “**Administration**” tab. Select “*Crystal*” and then “*Generate Reports*”. Highlight “Outbound Receipt (On Demand)”, right click and select “*Print Report*”. Enter the Reference Material Number (RX-XXXX-XX-XX). Select [OK].



If the Reference Material being transferred is a Schedule 1 or 2 substance obtained with a DEA Form 222, the DEA must be notified of such transfers by use of the Form 222. See the Materials Analysis Technical Procedure (MATP) for specific details on the use of DEA Form 222.


5.8. Receiving Reference Materials from Other Crime Laboratories

Reference Materials received from another crime laboratory will be entered into the receiving lab’s Reference Collection as a new Reference Material. Reference Materials will be entered into the receiving lab’s Reference Collection as a new Reference Material as described in Section 2 with the following alterations in the process:

- (1) The releasing crime laboratory will be selected as the **Reference Source** and the **Source Lot #** will be left blank.

LIMSRef Drug Reference Material Management System Operations Manual	Page 21 of 38	Revision September 22, 2020
Approved by CLD Manager	All Printed Copied Uncontrolled	Revision 5

(2) In the “**Ref. Info**” tab, click the . Make sure the “Use Ref. Mask” is not selected. Fill in the complete Reference Number from the releasing lab using the full Reference Number (e.g., R2-0298). In the notes field describe the Reference Material Number (e.g., R2-0298-01-01) and the date in which this transaction was performed. The releasing laboratory Reference information will be available on the “*Outbound Evidence Receipt*” which will be sent along with the Reference Material. Select .

(3) To populate the **From** field in the “Initial Transfer” window use the  button to the right of the “From:” field to select the “Source Representative”.

In the “**Ref. Source**” dropdown select the appropriate “WSP - Crime Lab from <lab>” which the transfer was received and the generic **Rep** field associated with the transfer laboratory.

(3) The receiving individual will sign the “*Outbound Evidence Receipt*” and will scan this document. Once the new Reference Material has been assigned a Reference Number the scanned version of the “*Outbound Evidence Receipt*” shall be saved as an Attachment as described for Entering Reference Data in Section 2.

5.9. Dilute Solutions

Dilute solutions are considered working solutions which do not require itemization and LIMS transfer between laboratories. When a dilute solution is transferred to another laboratory, the original laboratory will prepare a dilute solution from a Reference Material. Reference usage will be documented for the Reference Material and the “z-Other” option will be selected. Documentation of the usage reason in the **Reason Notes** will specify the working solution is transferred to Laboratory XXX.

Laboratories receiving a dilute solution will not log this working solution into their Reference Collection. The receiving laboratory will treat this as any other in-house working solution and will use the Reference Number assigned by the original laboratory for traceability.

LIMSRef Drug Reference Material Management System Operations Manual	Page 22 of 38	Revision September 22, 2020
Approved by CLD Manager	All Printed Copied Uncontrolled	Revision 5

6. Consumption and Destruction of Reference Materials

6.1. Consumption

Reference Materials that have been completely depleted are considered to be consumed. These items must be transferred to a consumed status to be removed from the active inventory. Such transactions will involve a witness to verify the Reference Material was legitimately depleted. Witness will be indicated in the **VIA** dropdown list when the transfer to the witnessing analyst is made. The analyst responsible for depleting the sample will perform an evidence transfer by secure transaction to the witness. The witnessing analyst will then perform a secure transaction transfer of the Reference Material to the “Consumed” storage location.

6.2. Destruction

Reference Materials which are no longer needed, have expired, or whose quality has deteriorated will be destroyed following the procedure outlined in the Materials Analysis Technical Procedures. An analyst will transfer the Reference Material via secure transaction to another scientist to act as the witness. The witnessing analyst will then perform a secure transaction transfer of the material to the “Destroyed” storage location. Witness will be indicated in the **VIA** dropdown list when the transfer to the witnessing analyst is made.

Any paperwork specifically associated with the destruction of the Reference Material will be added as an Attachment as described for the Entering Attachments in section 2. If multiple Reference Materials are destroyed at the same time, the documents of such destruction will be scanned and imported in the “Document” storage area of the database.

6.3. Closing the Request

Once a Reference Material is consumed or destroyed the "Material Usage Tracking Request" must be “Admin Reviewed” to finalize the request and to prevent additional usage entries.

LIMSRef Drug Reference Material Management System Operations Manual	Page 23 of 38	Revision September 22, 2020
Approved by CLD Manager	All Printed Copied Uncontrolled	Revision 5

7. DEA Exempt


DEA exempt solutions received from Reference Material Sources are handled differently than bulk Reference Materials. This section does not apply to working solutions transferred between laboratories.

7.1. Reference Numbers

The same Reference Number will be used for all DEA Exempt solutions from the same Reference Material Source and the same lot number.

7.2. Adding Exempt Solutions Reference Material

DEA Exempt solutions will be entered into the receiving lab's Reference Collection as a new Reference Material as described in Section 2 with the following alterations in the process:

1. The **Category** is set to a default for the Reference Definition and must be switched to "DEA Exempt".
Example: The Category Reference Definition for delta-9-tetrahydrocannabinol is "Schedule 1" but the Category for a Certified Reference Material in solution is "DEA Exempt".
2. A "Material Usage Tracking Request" is automatically generated when a Reference Definition is selected. The "Material Usage Tracking Request" will be deleted for dilute solutions of by highlighting "Material Usage Tracking" in the table. Select the button  to prevent the automatic generation of the request.
3. Each ampoule or container with the same **Source Lot #** will be assigned a system-generated Reference Material Number following entry of the information on the "**Ref. Material**" tab and a corresponding barcode label will be affixed to the ampoule or container.

7.3. Verification Documentation

Certificates of Analysis for the manufacturer's lot will be added as an Attachment as described for the Entering Attachments in section 2.

7.4. Material Usage Tracking

DEA Exempt solutions do not require Material Usage Tracking and will not have an associated "Request".

LIMSRef Drug Reference Material Management System Operations Manual	Page 24 of 38	Revision September 22, 2020
Approved by CLD Manager	All Printed Copied Uncontrolled	Revision 5

7.5. Consumption

Dilute solutions are intended to be one time use and any remaining solution once the ampoule or container has been opened would be considered a working solution which is no longer part of the Reference Collection. The scientist removing an ampoule or container of DEA Exempt solution from the Reference Collection will transfer the Reference Material from the storage location to themselves via secure transaction and then to the “Consumed” storage location. This must be a secure transaction and a witness is not required.

LIMSRef Drug Reference Material Management System Operations Manual	Page 25 of 38	Revision September 22, 2020
Approved by CLD Manager	All Printed Copied Uncontrolled	Revision 5

8. Training Kits and Competency Samples

Kits or collections of reference materials may be prepared which are intended to be used for current and future trainees as training aids or competency samples.

8.1. Entering a Training Kit or Competency Sample

Follow the Entering a New Reference section (Section 2) to create the Training Kit or Competency Sample. A **Source Lot #** will be created which may describe the nature of the kit (i.e., Pharm_Training, Opiates_Competency, etc.). Be sure to enter **Related References** to associate Reference Materials to the Training Kit or Competency Sample.


A “Material Usage Tracking” request will be generated to track usage of the Training Kit or Competency Sample.

8.2. Transferring Training Kits and Competency Samples to Other Crime Laboratories

Training kits are intended to be maintained in the laboratory in which they are created; however, they may be transferred between laboratories for short term training purposes. The releasing lab will follow the Transferring Reference Materials to Other Crime Laboratories section (section 5.6). **VIA** will be used to document the secure transport carrier, if used.

8.3. Receiving Training Kits and Competency Samples to Other Crime Laboratories

Laboratories receiving training kits or competency samples will use the existing reference number from the releasing lab and will not create a new reference number in the receiving lab. To receive the training kit or competency sample select the “**Transfer**” tab and “*Transfer*”. The “**Ref. Material Transfer**” window will appear and transfers will proceed based on the current location of the training kit or competency sample.

- (1) In the **From** field select the  button . Select “*Source Representative*”. In the “**Select– Ref. Source Rep**” window select the appropriate “WSP - Crime Lab from <lab>” which the transfer was received and the generic **Rep** field associated with the transfer laboratory.
- (2) Scan the barcode of the person receiving the transfer in the **To** field and enter the PIN to make this a secure transaction. **VIA** will be used to document the secure transport carrier, if used.
- (3) The receiving individual will sign the “*Outbound Evidence Receipt*” and it will be added as an Attachment as described for the Entering Attachments in section 2.

LIMSRef Drug Reference Material Management System Operations Manual	Page 26 of 38	Revision September 22, 2020
Approved by CLD Manager	All Printed Copied Uncontrolled	Revision 5

9. Add, Change, and Delete/Inactive Operations

Additions, changes, deletions or inactivating dropdowns, menus, or records will be done via Work Order (see section 9.2) by the FLSB representative at ITD.

9.1. Changes to Reference Records

9.1.1. Deleting Reference Materials

In LIMSRef, Reference Material links to other fields such as requests, results, chains of custody, and other Reference Materials. Deleting Reference Materials can have serious repercussions. For example, if you delete a parent, the chain of custody for the parent and child and any related results will also be deleted. For this reason, deleting Reference Materials can only be performed by LIMS Support.

Requests for deletions are sent to LIMS Support via the Work Order system. The employee requesting the deletion will include their immediate supervisor in the communication chain. If the deletion is due to an expungement, the request for deletion is preserved with the expungement order. The requestor will enter a note in the **Synopsis** field of the “**Ref. Info**” Tab to indicate that a deletion was requested. When the deletion occurs, another note in the **Synopsis** field will be entered by the person performing the deletion (e.g. LIMS Support, etc.) to indicate that the deletion occurred.

9.1.2. Chain of Custody Edits

Chain of custody edits for a given Reference Material will be performed by LIMS Support only. Requests for edits must be submitted via the Work Order system. The initiator will include their immediate supervisor in the communication chain. The initiator will enter a note in the **Synopsis** field of the “**Ref. Info**” Tab to indicate that an edit was requested. A note in the **Synopsis** field of the “**Ref. Info**” Tab will be recorded by the editor (i.e. LIMS Support, etc.) to indicate that a chain of custody edit occurred and that the Work Order is now complete. The initiator will also be notified via email.

9.1.3. Deleting Material Usage Tracking Requests

Material Usage Tracking requests recorded in the Request tab are not typically deleted unless special circumstances arise. A deletion removes all results entered for that request. Deletions are performed by the Program Admin or designee. A note is entered in the **Synopsis** field of the “**Ref. Info**” Tab to indicate that a deletion was done. The note must indicate the following: the date of deletion, the person performing the deletion and a brief explanation for the deletion.

9.2. Work Order Handling and Format

A Work Order can be submitted by both Scientists and/or Program Admin for the following:

LIMSRef Drug Reference Material Management System Operations Manual	Page 27 of 38	Revision September 22, 2020
Approved by CLD Manager	All Printed Copied Uncontrolled	Revision 5

- Delete Reference Material
- Add/Change/Delete Chain of custody

A Work Order shall be created by the Program Admin for the following functions:

- Add/Change/Inactivate Reference Definition
- Add/Change/Inactivate Reference Material Source
- Delete Reference
- Add/Change/Delete Report
- Add/Change/Delete Storage Locations
- Other administration function requests

Work Orders (WO) will be addressed to ITD Help ITDHelp@wsp.wa.gov.

Functionalities	Permission	Work Order Submitter	Examples
Add/Change/Inactivate Reference Definition	System Admin	Program Admin	This WO is for LIMSRef. Please assign to [ITD staff name] Please add the following new Reference Definition. Name: SYN: CAS#: Formula: Inventory Category:
Add/Change/Inactivate Reference Material Source	System Admin	Program Admin	This WO is for LIMSRef. Please assign to [ITD staff name] Example as: Please add the following new Source Manufacture. Name: Applied Science Labs, Inc. Type: Vendor
Add/Change/Delete Source Representative	Program Admin		
Delete Reference	System Admin	Program Admin	This WO is for LIMSRef. Please assign to [ITD staff name] Please delete Reference RX-XXXX
Delete Reference Image	Program Admin		
Delete Material Usage Tracking	Program Admin		
Delete Reference Material	System Admin	Program Admin & Scientist	This WO is for LIMSRef. Please assign to [ITD staff name] Please delete Reference Material RX-XXXX-XX

Add/Change/Delete Chain of custody	System Admin	Program Admin & Scientist	This WO is for LIMSRef. Please assign to [ITD staff name] Example as: Please change the 9/1/2015 10:59:02 AM COC location from E09 to 3S-E09 for RX-XXXX-01
Add/Change/Delete Report	System Admin	Program Admin	
Add/Change/Delete Storage Location	System Admin	Program Admin	This WO is for LIMSRef. Please assign to [ITD Staff name] Example as: Please add the following storage location. Location: Layer 1: Layer 2: Layer 3: Loc_Description:

10. Reports

There are functional reports which can be direct called through LIMS window options and a set of custom reports which can be accessed through the “Crystal” menu options on the “Administration” tab. This section lists both functional reports and custom reports.

10.1. Functional Report

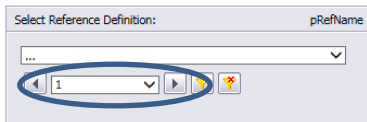
Report Name	Description
<i>Ref. Info Report</i>	A summary report of the general information about the Reference including Reference Material Source information, verification information, usage tracking (except for Certified Reference Materials) and Reference Material list (for Certified Reference Materials). This report can be accessed by right clicking at the “Ref. Info” tab on a Reference and selecting “ Ref. Info Report. ”
<i>Ref. COC Report</i>	A summary report of the entire chain of custody of all the Reference Materials from receipt to destruction/consumption status. This report can be accessed by right clicking at the “Ref. Info” tab and select the “ Ref COC Report ”.
<i>Ref. Material Report</i>	A report of the Reference Material basic, extended, and COC info. This report can be accessed by right clicking on the highlighted Reference Material in the “Ref. Material” tab and selecting the “ Ref. Material Report ”.
<i>Evidence Receipt</i>	It is the receipt and contains the transfer out information for the Reference Material. This report can be accessed through the Transfer function.
<i>1st/2nd Transfer Receipt</i>	It is the 1 st and 2 nd receipt for the transfer of the Reference Material. This report can be accessed through the Transfer function.
<i>Material Usage Tracking Report</i>	This report will list the usage information recorded in the “Material Usage Tracking” request. This report can be accessed by using the “Print Usage Tracking Report” from the “ Usage Tracking ” tab.

10.2. Custom Report

The custom reports can be accessed through the “Crystal” menu option on the “Administration” tab and “Generate Reports” option.

LIMSRef Drug Reference Material Management System Operations Manual	Page 30 of 38	Revision September 22, 2020
Approved by CLD Manager	All Printed Copied Uncontrolled	Revision 5

The following is a list of custom reports which can be generated by highlighting the report, right clicking, and selecting *Print Report*:

Report Category	Report Name	Description
Analysis	<i>Reference Definition Setting</i>	List all Reference Definitions and their Reference Material Category for a selected lab.
	<i>Reference Material Finder (A-L) or (M-Z)</i>	<p>A Reference name is selected from the list to create a report. It lists which labs contain the Reference Material information in their inventory. This is a multipage report and the appropriate page number must be selected to see the Reference Material on the dropdown.</p> 
Evidence Receipt	<i>Outbound Evidence Receipt</i>	This is a stock report used by LIMS-plus via outbound transfer menu.
	<i>Outbound Receipt (On Demand)</i>	A receipt contains who released Reference Material from one lab and who received the Reference Material in another lab. The Reference Material Number must be entered to generate the report.
	<i>Transfer Receipt</i>	The user must entire the Reference Number including place holding zeros to generate a report which lists all the transfers for its Reference Materials. From this report a link can be selected to print a detailed report for each Reference Material transfer transaction. The generated report has an area for signatures of the releasing and receiving individuals if hard copies of transfer documentation with signatures are needed.
Management	<i>View Material</i>	<p>The lab is selected and one of the following options is selected to generate a report of all Reference Materials in the inventory sorted by the selected option:</p> <ul style="list-style-type: none"> Category ID Location Location (for auditing) – report has a column for documenting the weight of the Reference Material in the Reference Collection at the time of the audit Name Consumed Destroyed <p>A specific time frame can be selected or for a report showing all Reference Materials with no specific time range select “No</p>

		Lower Value” for the “Start of Range” and select today’s date for the “End of Range”.
	<i>View Reference</i>	<p>The lab is selected and the user may generate a report sorted by the following options:</p> <ul style="list-style-type: none"> ▪ Category ▪ Expiration Date ▪ ID ▪ Name ▪ Source ▪ Type <p>A specific time frame can be selected or for a report showing all References with no specific time range select “No Lower Value” for the “Start of Range” and select today’s date for the “End of Range”.</p>
Program Admin	<i>AuditTrail_by_User</i>	Lists audit trail records for a selected user in a defined time frame.
	<i>AuditTrail_for_Ref</i>	Lists audit trail records for a specified Reference Number in a defined time frame.
	<i>LIMSREF Report List</i>	A summary of all reports available under each “Report Category”
	<i>LIMSRef Users and Roles</i>	Allows the user to select ALL or a specific lab to create a report of users and their LIMSRef roles.
	<i>Ref Transfer History</i>	Lists all the transfer records for the selected LIMSRef scientist.
	<i>REF_Barcode_Storage</i>	Generates a report of all LIMSRef storage locations in a selected lab.
	<i>REF_Barcode_User</i>	Generates a report for all LIMSRef users in a selected lab.
	<i>Reference Material Source Info</i>	<p>Generates three different reports about the Reference Material Sources</p> <ul style="list-style-type: none"> ▪ Source List ▪ Active Source Type Setting Report ▪ Active Source Setting Detail Report
	<i>Storage Location Settings</i>	Lists the storage location setting for a selected lab.
System Admin	<i>Lab Option Settings</i>	A Summary report of the “Lab Option Settings” for all labs
	<i>Ref Definition Setting All Labs</i>	A Summary report of the Reference Definitions for all labs

11. Document Storage

The “DOC” Reference Number is a specialized place to record general Reference Collection documents for the lab. These documents include manual audit reports, reports from audits with the Recon Tool, licenses, etc. “DOC” Reference Numbers will be designated as R<num>-DOC. For example Spokane Lab documents would be R2-DOC.

Documents that are not directly associated with a specific Reference Material but are related to the Reference Collection as a whole shall be stored in “DOC” Reference Number.

The Case Attachments directory will be used for storage of these documents and folders should be organized by years for recurring documents such as Audit Reports. Individual documents in folders should be clearly labeled to indicate their content. No evidence or requests will be created for “DOC” Reference Number.

LIMSRef Drug Reference Material Management System Operations Manual	Page 33 of 38	Revision September 22, 2020
Approved by CLD Manager	All Printed Copied Uncontrolled	Revision 5

12. Auditing

Auditing the Reference Collection can be performed manually with a report generated from Crystal Reports of the Reference Material or by use of a bar code scanner and the Recon Tool for auditing without weighing of the Reference Material. The Recon Tool is an Excel based workbook used to reconcile scanned Reference Material barcodes with the documented storage locations in the LIMSRef database.

12.1. Manual Audit

The *“View Material”* report will be used for auditing. The *“Sort by Location (for auditing)”* report will generate a report which includes all Reference Materials in the Reference Collection. The *“Sort by Location (10% Auditing)”* will generate a report which includes 10% of the Reference Materials in the Reference Collection.

When the audit is complete the signed Audit Report and IOC documenting the audit will be saved in the “Case Attachments” directory under the lab’s specific “DOC” Reference Number.

12.2. Audit with Recon Tool

Open the recon tool “REFRecon Workbook”. The current date will be pre-populated. Select the laboratory to be audited and the laboratory representative. The “Check Storage” or “Check Possession” option must be selected. If “Check Storage” is selected a location must be selected from the “Storage” dropdown list and a sub-location may be selected from the “Location” dropdown list. If “Check Possession” is selected a staff member must be selected from the “Staff” dropdown list.

Scan the barcode labels from each Reference Material for the selected storage location. The report will indicate which References Materials are correct and which are missing from the selected storage location. This process will be repeated for each storage location. The reports for each location will be printed. These reports and the IOC documenting the audit will be scanned and saved in the imaging module under the lab’s specific “DOC” Reference Number.

LIMSRef Drug Reference Material Management System Operations Manual	Page 34 of 38	Revision September 22, 2020
Approved by CLD Manager	All Printed Copied Uncontrolled	Revision 5

Appendix A – Terminology and Definitions

LIMSRef	Definition
ACN	ACN is “Agency Case Number” in LIMS-plus. It is used as Reference Material Source Lot Number in LIMSRef.
CAS	A CAS Registry Number , also referred to as CASRN or CAS Number , is a unique numerical identifier assigned by Chemical Abstracts Service (CAS) to every chemical substance described in the open scientific literature
COC	It is the Chain of Custody for a Reference Material item
Certificate of Analysis	It is a document issued by Quality Assurance that confirms that a regulated product meets its product specification. They commonly contain the actual results obtained from testing performed as part of quality control of an individual batch of a product.
Certified Reference Material	Reference material characterized by a metrologically valid procedure for one or more specified properties, accompanied by a certificate that provides the value of the specified property, its associated uncertainty, and a statement of metrological traceability.
DEA Exempt	Exempt chemical preparations contain either a narcotic or nonnarcotic controlled substance and one or more adulterating or denaturing agents in such a manner, combination, quantity, proportion or concentration, that the preparation or mixture does not present any potential for abuse.
Item Number	The unique ID within the Reference Example: “01” in R2-0123-01
IOC	Interoffice Communication (IOC) is a form of correspondence that is used as an exchange of written messages within an organization.
Reference	It includes controlled substances, legend drugs or marijuana products which are intended to be used for quality assurance and quality controlled purposes in the Materials Analysis Section. It may be used as primary reference material, secondary reference material, training material, and paraphernalia. The information with its properties of name, vendor, Source Lot#, date received, etc. is entered into LIMSRef with a unique identifier. Each Reference has its own Reference Number. References with the same name and source lot # shall be entered as a separate Reference.
Reference Collection	References retained by the Controlled Substances Sections in WSP Crime Laboratory. Refers to all the References entered in LIMSRef for the lab.
Reference Data	Any documentation related to the verification of Reference Material to include Certificates of Analysis, laboratory generated data, published spectra, etc.
Reference Definition	It refers to the attributes (name, synonyms, CAS number and molecular formula) for a Reference.
Reference Material	It refers to the physical substance, which has been entered as an item for LIMSRef Reference, with weight or quantity. It also has classification information and disclosed chemical substance information properties.

	A subdivided Reference Material item can be added as a child item from the parent Reference Material item in the Reference.
Reference Material Category	It is the classification of the controlled substance. Currently defined Reference Material Category includes: <ul style="list-style-type: none"> • Analog • Chemical • Legend Drug • Non-Controlled • Paraphernalia • Watched • Schedule 1-5 • DEA Exempt
Reference Material Number	It is the unique number to identify the Reference Material Example: R2-0123-01
Reference Material Source	Refers to the manufacture, company, institute, lab, or another law enforcement agency who provides the Reference Material.
Reference Number	It is the unique number to identify the Reference in LIMSRef. Example: R2-0123
Reference Material Usage Tracking	It is the usage tracking records for the Reference Material.
Reference Type	Currently defined Reference Type includes: <ul style="list-style-type: none"> • Document • Training Aids • Proficiency • Secondary • Primary • Dilute Solution • Certified Reference Material • Other
SDS	Safety Data Sheets (SDS) include information such as the properties of each chemical; the physical, health, and environmental health hazards; protective measures; and safety precautions for handling, storing, and transporting the chemical.
Source Lot #	An identification number assigned to a particular quantity or lot of information from a single manufacturer.
Verification Data	Reviewable molecular structural data generated by in-house instruments used to authenticate the chemical identity of the Reference Material.

Appendix B - User Roles

There are five security roles types defined in LIMSRef as:

- 1) Scientist
- 2) Program Admin
- 3) System Admin
- 4) Guest
- 5) Auditor

Each security role has a set of defined permissions to LIMSRef functionalities. The Materials Analysis Chemistry Technical Lead and one other designee will be assigned as Program Admin to do the following:

- a. Add/Change/Inactivate Source Representative
- b. Delete Reference Image
- c. Delete Material Usage Tracking – LIMSRef Scientists may delete “Material Usage Tracking” for DEA Exempt Reference Materials and itemized Reference Materials for transfer between crime laboratories. Any other “Material Usage Tracking” will only be deleted or altered by a Program or System Admin.
- d. Other administration requests

The following table lists the defined access rights for each security role type.

Functional Area	Guest	Scientist	Program Admin	Auditor	System Admin
Reference Definition	View	View	View	View	Add/Change/Inactivate
Source Manufacture	View	View	View	View	Add/Change/Inactivate
Source Representative	View	View	Add/Change/Inactivate	View	Add/Change/Inactivate
Reference Material (Case)	View	Add/Change	Add/Change	View	Add/Change/Delete
Attachment	View	Add/Change	Add/Change/Delete	View	Add/Change/Delete
Material Usage Tracking	View	Add/Change	Add/Change/Delete	View	Add/Change/Delete
Inventory Item (Evidence)	View	Add/Change	Add/Change	View	Add/Change/Delete
Chain Of Custody (COC)	View	View	View	View	Add/Change/Delete
Report	View	View	View	View	Add/Change/Delete

Appendix C - Barcode Label Information

LIMSRef uses 1.25" x 0.375" (with edge 1" x ½") custom label, product # y1110483, from The Brady Companies. There are 1000 labels per roll and the label price is based on the quantity ordered. Please contact the Toxicology Lab for a consolidated reorder.

LIMSRef Drug Reference Material Management System Operations Manual	Page 38 of 38	Revision September 22, 2020
Approved by CLD Manager	All Printed Copied Uncontrolled	Revision 5