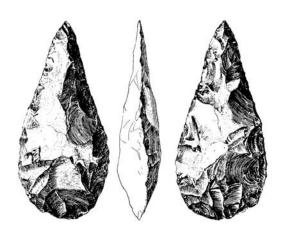


# SECWÉPEMC MUSEUM & HERITAGE PARK 200-330 Chief Alex Thomas Way Kamloops, BC V2H1H1

# SECWÉPEMC MUSEUM & HERITAGE PARK (SMHP)

# REPOSITORY REQUIREMENTS & GUIDELINES FOR THE SUBMISSION OF

# ARCHAEOLOGY MATERIALS Revised May 2022

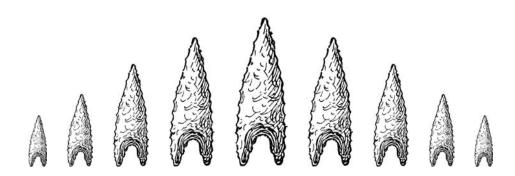


# CONTENTS

1. Introduction

Pg. 3

2.	Making a Repository Request						
3.	Fees and Payments						
4.	What to Submit						
5.	Cleaning						
6.	Cataloguing						
7.	Labelling						
8.	Handling, Packing & Storage						
9.	Submitting Materials						
Appendix A: Repository Request & Agreement Form							
Appendix B: Safety Data Sheets & Safety Tips							
Appendix C: Preparation of Labelling Materials & Tools							
Appendix D: List of Suppliers							



#### 1. INTRODUCTION

The Secwépemc Museum & Heritage Park (SMHP) is committed to ensuring the safe care and preservation of the archaeology materials and associated information in its collections. These guidelines will help support the safe handling and long-term preservation of the archaeological materials being recovered within Sécwepemc territory for submission to the Sécwepemc Museum & Heritage Park.

These repository requirements and guidelines outline the minimum standards required for submission of archaeological materials. If you wish to list the SMHP as a repository on your permit application, please follow the guidelines listed in this document, and make arrangements for administration and repository fees. Finds, samples and all associated documentary records must be prepared, catalogued and safely packed as described in this document before being deposited at the museum by the permit expiry date. The preparation sections of these guidelines are intended for dry site materials. If wet site materials are anticipated or found, please contact the Museum by email.

Questions about SMHP requirements as well as all repository requests and requests to submit materials should be emailed to the SMHP): Attention: kenneth.favrholdt@ttes.ca

2020-02-02

#### **Protocols**

As per the UN Declaration on the Rights of Indigenous Peoples (UNDRIP), Indigenous peoples have the right to practice and revitalize their cultural traditions and customs. This includes the right to maintain, protect and develop the past, present and future manifestations of their cultures, such as archaeological and historical sites... (Article 11)...

... the right to use and control their ceremonial objects; and the right to the repatriation of their human remains." (Article 12)

The Tk'emlúps te Secwépemc asserts proprietorship and stewardship over all its heritage resources within its territory.

The Secwépemc Museum, as an archeological repository, acknowledges that the ownership of Secwepemc artifacts and ancestral remains found within the territory, resides with Secwépemc people.

The processing of archaeological materials found in Secwepemcúl'ecw must be undertaken within the territorial boundaries of the Secwepemc Nation. Archaeological materials must not leave the Nation.

Reports, if prepared outside Secwepemcúl'ecw, should follow separately in a timely fashion.

#### 2. MAKING A REPOSITORY REQUEST

# Request Procedure

Permission to list the SMHP as the repository on a permit application must be requested each time you apply for a new permit. To make a repository request to the SMHP:

- Step 1: Complete & sign a Repository Request & Agreement Form
  - → See Appendix A: Repository Request & Agreement Form
- Step 2: Email the request form & your permit application to the SMHP Museum
  - → kenneth.favrholdt@ttes.ca
- Step 3: Remit application fee of \$150 to the SMHP

 $\rightarrow$ 

#### **Providing Notice**

#### Requests

It is important for the Secwépemc Museum & Heritage Park to plan ahead in order to accommodate requests. Please provide the SMHP with as much advance notice as possible for all requests. Advance notice is particularly important when making arrangements with the museum to deposit materials.

Please provide a minimum of one-month advance notice by emailed to the SMHP Museum (kenneth.favrholdt@ttes.ca)when materials will be ready to be deposited at the museum.

Your requests will be addressed as soon as possible but please be advised that an immediate response may not always be feasible due to various circumstances at the museum. You will receive confirmation by email if the request is approved.

When a permit has been issued, please provide the permit number in writing to the SMHP Museum by email (kenneth.favrholdt@ttes.ca).

# **Unexpected Materials**

In the event that anything unexpected is recovered during the course of a project, such as a greater volume of material, it is essential that you contact the SMHP Museum by email (kenneth.favrholdt@ttes.ca) immediately to provide an update.

#### 3. FEES AND PAYMENTS

The following fee schedule is in place when making requests to list the SMHP as a repository and when depositing materials to the SMHP

Description	Rate
Administrative Fee for listing SMHP on permit	\$150/permit
Box of artifacts/documents – banker's box (901 to 1800 cu in)	\$450/box
Box of artifacts/documents – medium box (451 to 900 cu in)	\$225/box
Box of artifacts/documents – small box (up to 450 cu in)	\$125/box
Box of sampled materials – any size up to banker's box	\$125/box

Arrange to make payment for permit or deposit of items within 14 days. Upon receiving confirmation from the SMHP that the Secwépemc Museum and Heritage Park is to be listed on a permit, arrange for payment to be made within 7 days. After receipt of materials, successful inspection, including inventory lists at SMHP, arrange for payment to be made within 7 days. Note that inventory lists checked against material deposit will be made to assess fees.

Payment can be made through the following methods: Cheque or debit card. Please remit payment to:

Accounts Receivable Re: Archaeological Deposit Tk'emlúps te Secwépemc 220 – 330 Chief Alex Thomas Way Kamloops, BC, V2H 1H1 2020-02-02 Page 6 of 27

#### Costs

When you make a request to use the Secwépemc Museum & Heritage Park (SMHP) as the repository for your project, you are responsible for post-excavation costs including the costs of purchasing preservation quality enclosures to house and transport collected materials.

The costs associated with the conservation treatment of waterlogged materials are also the responsibility of the depositor. If off-site conservation treatments are required for waterlogged materials, the costs of shipping materials for treatment are the responsibility of the depositor.

The costs of long-term preservation and providing access to the archaeological materials once they are deposited at the SMHP are the responsibility of the repository. Your cooperation in the submission process makes it possible for the SMHP to continue to offer this service.

#### 4. WHAT TO SUBMIT

The following items must be submitted to the Museum Curator of the Secwépemc Museum & Heritage Park:

- A cover sheet summarizing all materials being submitted
  - The cover sheet should include the following:
    - $\rightarrow$  Site number(s)
    - → Permit number(s)
    - → Permit holder name, address, contact information and company affiliation
    - → Total number of boxes containing the submitted material with dimensions
    - → List of box contents for each box submitted

Examples: Box 1 – 4 column sample bags

Box 2 - 22 artifacts

Box 3 – Field notes; artifact catalogue; site form; permit report

- ➤ All collected finds and sample materials:
  - All artifacts
  - All faunal materials
  - All sample materials
- All project-associated documentary records (in both hard copy & digital whenever possible) including:
  - All field notes
  - All maps
  - All drawings
  - All photographs and photo logs
  - Site forms
  - External reports including specialist reports, radiocarbon date reports, treatment records etc.
  - Permit reports (Please include two hard copies of final report)
  - Artifact catalogue (Please include two hard copies and one digital copy in an Excel spreadsheet)
- Inventory list of all project materials (2 paper copies and 1 digital copy) including:
  - Inventory of all documentary materials

2020-02-02 Page 7 of 27

• Inventory of collected finds and sample materials

#### Important Note:

Use preservation quality paper to print all hard copy records (i.e. permit reports, artifact catalogue, inventories, etc):

✓ Permalife bond paper from Carr McLean: <a href="https://www.carrmclean.ca/bond-papers.html">https://www.carrmclean.ca/bond-papers.html</a>

#### 5. CLEANING

Cleaning or deciding not to clean is an important part of artifact processing. Best practice includes

- > assessing each artifact to determine if cleaning will be beneficial or detrimental to the object
- > keeping cleaning of archaeological material to a minimum
- > choosing the most appropriate and safest cleaning tools and techniques
- > documenting any cleaning that is performed or alternatively that no cleaning was performed
  - → Cleaning activities or lack of cleaning must always be documented in the artifact catalogue

Cleaning an artifact is an irreversible action and therefore should not be an automatic, unconsidered part of artifact processing. Cleaning should always be approached with care to avoid damage to an artifact or the inadvertent removal of diagnostic information.

In some cases, it may not be advisable to clean an artifact at all (e.g. the artifact itself may be in fragile condition and may be damaged by standard cleaning processes or material adhering to the artifact may be valuable as it contains information etc.). If an artifact does not have obscuring deposits on it, then it is usually best not to clean because this minimizes the potential for damage to the object and saves time/labour.

When artifacts are covered in deposits of some kind and cleaning is necessary, the following factors should be considered to determine how the artifact should be cleaned

- 1. The condition of the object
  - Objects in fragile condition should <u>not</u> be cleaned by typical cleaning processes. When in doubt, do not clean.
- 2. The analytical potential of the object
  - > Do not clean specimens that will be used for scientific analysis
- 3. The context of the artifact
  - Some types of artifacts have a high likelihood of containing important residues/deposits (e.g. vessels can contain remains of their original contents, etc.)
- 4. The material(s) that the object is made of
  - For most materials that require cleaning, gently removing loose, dry deposits with a soft dry brush is the optimal and preferable method of cleaning.
  - Lithic objects that require cleaning can be gently cleaned with water and dried thoroughly.
  - Hygroscopic materials such as bone and organic materials should <u>not</u> be cleaned with water. If cleaning is necessary, use a soft brush to brush off loose dirt etc.
  - Do not clean textiles or leather

2020-02-02

Page 8 of 27

#### Acceptable Cleaning Tools & Techniques

# Dry-brushing

Tools & Materials: Soft-bristled brush (Preferably good quality natural bristle brush)

Light-coloured table or white paper

#### Technique:

- → If the object is in good condition and is suitable for dry-brushing, brush gently in one direction only.
- → Pay attention to what debris is being brushed off. Working on a clean, light-colored table (or a table covered with white paper) will make it easier to see what is being removed.
- → Careful not to brush too forcefully because vigorous brushing can destroy decoration or the surface finish on many materials.

#### Water Washing

Tools & Materials: Water (Preferably distilled water)

Soft-bristled brush (Preferably good quality natural bristle brush)

#### Technique:

- → Briefly wash suitable objects by hand in water. Water washing can also be accompanied by gentle brushing with a soft, natural-bristle brush to remove stubborn deposits.
  - O Always wet an artifact indirectly (i.e. never place an artifact directly under running water as this can dislodge loose surfaces and components which can be lost)
  - O Always support the object as fully as possible when lifting it out of water. (e.g. never pick up an object by just one end or one component as this may cause damage)
  - o Minimize handling when an object is wet because wet objects can be extremely fragile.
  - o Avoid applying pressure to the object
- → After washing, allow artifacts to air dry slowly. Never place wet objects in direct sunlight to dry and never wipe objects with paper towels or direct hot air onto objects to speed up the drying process.
- → This technique is generally suitable for stable, robust, non-porous, non-water-reactive objects that have no surface or structural problems (i.e. lithics).
  - O Always check the object for loose pieces prior to washing as these can easily be lost during washing. If the object has loose pieces and/or appears to be fragile, do not wash it.

#### **Important Note:**

Water washing is <u>NOT</u> appropriate for metals, deteriorated glass, organic materials (such as wood, textiles, bone, antler, leather/skins/fur etc.), fragile objects, objects with loose pigment or other surface decoration, objects with residues or objects to be used for analysis.

#### 6. CATALOGUING

#### Unique Object ID

All heritage objects recovered in BC require a unique catalogue number. Provincial artifact catalogue numbers are obtained from the Royal BC Museum:

https://www.royalbcmuseum.bc.ca/collections/human-history/bc-archaeology

#### Broken Objects:

If an object is broken, the broken pieces of the object should be assigned one catalogue number with the addition of "a b, c..." added for each piece. The artifact catalogue should document the total number of broken pieces.

#### Groups of Objects:

Groups of artifacts, such as unmodified lithic debitage, that have been recovered from a single level/layer from a shovel test or evaluative unit may be bagged as a 'lot' and given one catalogue number. The artifact catalogue must note the number of fragments assigned to each lot.

#### Artifact Catalogue

After assigning a catalogue number to an archaeological object, all primary information about the object must be documented and catalogued in an Excel spreadsheet. Document all materials collected from the site in the Excel spreadsheet in a consistent manner to ensure data quality and facilitate access to the materials:

Refer to SMHP's Archaeology Catalogue Data Entry Guide and Catalogue Template for specific instructions on documenting archaeological materials recovered from your project.

Careful and thorough cataloguing is essential in helping to ensure the long-term preservation and protection of archaeology collections.











## 7. LABELLING

Once a catalog number has been assigned to an object or lot of objects, that number must be attached to the object(s). It's important that all labelling on archaeological objects is:

- Discreet but visible Labels should not obscure important details or spoil the appearance of the object.
- ➤ Safe for the object Both the materials applied to the object and the method they are applied should not damage the object or pose a significant risk to the long-term stability of the object.
- ➤ **Secure** The likelihood of accidental removal of the label must be extremely low.
- **Reversible** Labels must be able to be safely removed intentionally from an object with no trace.

2020-02-02

## **Positioning Labels**

- → Avoid physically unstable surfaces (e.g. crumbling, flaking, powdery etc.)
- → Also avoid placing labels across a fracture or line of weakness
- → Avoid labelling over designs, decorations, painted/varnished/pigmented/waxed areas etc.
- → Avoid areas where the label is likely to be at risk from abrasion (e.g. surfaces on which it normally rests, or where touched during handling)
- → Position the label so that the handling necessary to read it is minimised.
- → Also select a position where the label is unlikely to be visible when the object is on display. Unobtrusive locations such as the bottom or back of an object are often good places to consider. If possible, also select the lower right-hand side of the object (but not if there are decorations, fractures, unstable surfaces etc.).
- → With composite objects, label the part on which the most secure method can be used and choose the least porous surface
- → Do not place a label on diagnostic parts of an archaeological object because this may make the object harder to analyze.
- → Label the least worked side of stone tools or on the cortex of the stone if it is still visible.
- → Label all detachable pieces/broken parts of an object (by adding a lowercase alphabet suffix to the object ID e.g. 2020.123.222a, 2020.123.222b etc.)
- → If directly labelling the object is not suitable then attach a tie-on tag/label and package in a zip closure bag. If a tie-on tag is not possible, then write the object ID on a Tyvek label in pencil and insert both the Tyvek label and object inside a zip closure bag.

#### PAPER LABEL TECHNIQUE

#### **Precautions**

→ This technique is <u>not</u> suitable for all objects. Each object should be assessed on an individual basis prior to adhering a label on it. All labelling decisions should be based on the characteristics of the object including its composition, condition etc.

#### \*\*\*IMPORTANT NOTE:

If there is any doubt, do <u>not</u> directly adhere a label to an object. When in doubt about an object's composition or suitability for a paper label, it's best not to adhere a label directly to the object. Instead, write in pencil on a preservation quality tag and attach it to the object with cotton string (not too tightly). If possible, also package the item in a labelled polyethylene zip-closure bag. If it's not possible to attach a tie-on label to the object, then simply place the object in a labeled polyethylene bag and insert a Tyvek label inside the bag with the object.

- → This technique should <u>NOT</u> be used on:
  - × Porous objects (e.g. non-fired ceramics etc.)
  - × Fragile objects / Objects with unstable surfaces (e.g. highly uneven or friable surfaces such as weathered wood, severely corroded metals, iron, rusty surfaces etc.)

- × Textiles
- × Painted objects
- × Paper
- × Wet archaeology items
- × Skins, furs, leather
- × Fine basketry
- → Always work in a clean workspace when labelling objects
- → Wash hands before labelling and wear nitrile gloves when handling artifacts
- → No food or drink in the work area
- → Practice the labelling technique on non-artifacts first
- → Always label in a well ventilated area
- → Read applicable Material Safety Data Sheets (MSDS) [See Appendix B: Safety Data Sheets & Safety Tips

# **Labelling Preparations**

- 1. Prepare workspace and tools:
  - → Clean and prepare workspace
  - → Wash hands and sterilize tools and containers (See Appendix C: Preparation of Labelling Materials & Tools)
    - Sterilizing tools and containers is important because it prevents impurities from being introduced into the adhesive and ensures that the prepared adhesives will last as long as possible.
- 2. Prepare labelling materials:
  - → Prepare adhesives (See recipes in Appendix C: Preparation of Labelling Materials & Tools)
  - → Prepare paper labels
    - Print object numbers in the following easily readable font and size:

Font Style	Tahoma
Font Size	<ul> <li>Select a font size based on the on the object and the size of the area that is receiving the label keeping in mind that the label should be discreet</li> <li>6-point font will fit most objects &amp; should be used when possible</li> <li>No larger than 10-point font</li> <li>Smaller font may be necessary for very small objects such as teeth</li> <li>It's often helpful to print a few sizes of the same object number in different font sizes and then to select the size that best fits the object</li> </ul>

#### Print using:

- 1. 100% Cotton rag paper
- 2. Xerographic or Laser copier/printer & carbon-based pigmented toner

- a. If a xerographic copier is not available, a laser printer is acceptable providing that the toner is a carbon pigment and it is a toner recommended by the manufacturer
- b. Always print in black and white only
- Cut labels with a paper cutter or scissors
- 3. Select an adhesive that is appropriate for the object:
  - → Before deciding which adhesive to use, each object should be assessed individually. This decision will have to be made for each object on a case by case basis factoring in:
    - The substrate the label will be adhered to (i.e. type of material object is made of)
    - Degradation level of the object
    - How the object will react to a water-based adhesive or a solvent-based adhesive (i.e. will the object react poorly to water or to a solvent?)

### **Important Note:**

Always test the printed label in the chosen adhesive to be certain that the toner used on the label is stable in the adhesive.

Page 13 of 27

## **Solvent-based Adhesives:**

Type of Coating	Types of Objects Suitable for Labelling	Properties
Paraloid B-72 in	Shells	Safe
acetone	Stone	<ul><li> It has excellent stability</li><li> It has excellent resistance to degradation &amp;</li></ul>
	Bone	<ul> <li>discoloration over time (i.e. does not yellow)</li> <li>It is considered to have the best aging properties of</li> </ul>
	Antler	any barrier coat material.  Secure
	Teeth	<ul><li>Durable</li><li>Good durability in flood or high RH</li></ul>
	Claw	Reversible
	Hoof	Reversible and can be removed with acetone solvent
	Horn	77 79
	Ivory	<ul> <li>Handling</li> <li>Handling properties not very good – can be stringy and can bubble</li> </ul>
	Glazed ceramics	<ul> <li>Harder to apply on uneven surfaces</li> <li>Drawbacks: solvent fumes and it is flammable</li> </ul>
	<ul> <li>Metals</li> <li>Exception: Do not use on severely corroded metals, iron, rusty surfaces</li> <li>Glass</li> <li>Exception: Do not apply a label directly on glass that suffers from glass disease</li> </ul>	
	Do <u>NOT</u> use on:	
	painted surfaces or plastics as     the solvents will cause     damage to the object  Porcus surfaces as it will	
	<ul> <li>porous surfaces as it will absorb into the pores of the object</li> </ul>	
	> untreated wood as it can cause staining and it has poorer adhesion to wood	

# Water-based Adhesives:

Methyl Cellulose	Wood	Safe
Methyl Celulose	Hard non-porous materials  Plastics  Some kinds of Basketry  → Exception: Do not apply a label directly if basketry is in fragile condition / Only if in good condition  Some hard, porous materials (but it is safer to not use an adhesive with porous materials)  Do NOT use on:  ➤ Metals  ➤ Ivory	<ul> <li>A good synthetic substitute for wheat starch paste. It has most of the same properties as wheat starch paste but has several advantages:  → it's not a food source for insects  → the prepared paste will not grow mold over time and it can be stored longer requiring less preparation effort overall.</li> <li>It has excellent stability</li> <li>It has excellent resistance to degradation &amp; discoloration over time</li> <li>Secure</li> <li>Durable</li> <li>Although it provides not quite as strong of a bond as wheat starch, it certainly provides a good strong bond</li> <li>Reversible</li> <li>Fully reversible and easily removed with distilled water</li> </ul>
		<ul><li>Handling</li><li>Good handling properties and easy to apply</li></ul>
Wheat Starch Paste	Wood  Hard non-porous materials  Plastics  Some kinds of Basketry  → Exception: Do not apply a label directly if basketry is in fragile condition / Only if in good condition  Some hard, porous materials (but it is safer to not use an adhesive with porous materials)  Do NOT use on:  ▶ Metals  ▶ Ivory	<ul> <li>Non-toxic / No chemicals</li> <li>It has excellent stability</li> <li>Does not harm the object</li> <li>It has excellent resistance to degradation &amp; discoloration over time</li> </ul> Secure <ul> <li>Durable</li> <li>It provides a strong reliable bond</li> </ul> Reversible <ul> <li>Easily removed with distilled water and fully reversible</li> </ul> Handling <ul> <li>Good handling properties and easy to apply</li> <li>Drawbacks: A fresh batch of wheat starch paste would need to be prepared regularly and potentially each time you wanted to use it because the paste will grow mold over a short period of time.</li> </ul>

# Submission Guidelines for Archaeology Materials

# **Labelling Supplies & Tools**

Using preservation quality materials for labelling archaeology objects is important for the long-term stability and longevity of archaeological materials. It's important to use materials that will not be a potential cause of deterioration for the artifact over time. All materials that are used to label archaeological objects must meet the following criteria:

- 1. Be as chemically stable as possible
- 2. Have excellent aging characteristics to ensure the longevity and legibility of the label
- 3. Prevent absorption of labelling inks by porous materials
- 4. Be removable

The below list of materials meets the above criteria and are recommended for labelling archaeological materials.

# **List of Supplies:**

Unbuffered 100% cotton rag paper

Paraloid B-72

Acetone, Reagent Grade

Methyl cellulose A4M

Wheat starch paste

Distilled Water

Pencil (B or HB)

Tyvek tags

Preservation quality acid free paper tags with cotton string

Nitrile gloves

#### <u>Useful Tools for Preparation, Application & Storage:</u>

Artist brushes (Use high quality brushes with secure hairs such as squirrel or sable)

Goat hair brush

Tweezers

Cotton swabs

Small glass jars with plastic airtight lids

Glass beakers

Glass stirring rods

Glass bowls

Double boiler or saucepan

Sieve or strainer (fine, non-metallic mesh)

#### Labelling Method

#### 1. Apply a barrier coat:

- a. Fill an artist brush with the chosen adhesive component (e.g. Paraloid B-72, methyl cellulose, wheat starch paste) but do not overload it to avoid excessive dripping or pooling on the object. With one steady movement, first move the brush in one direction applying it only slightly larger than the size of the paper label to be applied. Then stroke again in the opposite direction using the other side of the brush. These two strokes count as one application, and usually suffice for non-porous surfaces. The barrier coat should not be significantly larger than the area required to label the object.
- b. The barrier coat is meant to prevent labeling inks from penetrating into the object and causing irreversible damage so it's important that a sufficient quantity is carefully applied. If it is necessary to apply more than one application, allow 30-60 seconds between applications.

# 2. Apply the paper label:

a. While the barrier coat adhesive is still tacky, apply the paper label and press to ensure a good bond between the paper and the adhesive. Use tweezers to help place the paper label.

#### 3. Apply a top coat:

- a. Make sure that the paper label is dry before applying the top coat.
- b. Apply the top coat in a single stroke over the paper label making sure that both the base coat and the label are completely sealed with the top coat. Check to make sure that numbers are not smudged by the application of the top coat.
- c. Once the initial top coat dries, apply an additional single application using the same technique as applying the base coat (i.e. With one steady movement, first move the brush in one direction applying it only slightly larger than the size of the paper label to be applied. Then stroke again in the opposite direction using the other side of the brush.). This additional application will reduce the chance that the number will be worn away over time.

#### **NOTES:**

- An alternative option to using the same type of base coat and top coat material would be to use one type of base coat material and a different type of top coat material. For example, use Paraloid B-72 as the base coat and methyl cellulose as the top coat. This method has an advantage if a labelling mistake is made and needs to be removed because the top coat could be removed while leaving the base coat intact. Leaving the base coat intact would be safer for the object.
- Always document the labelling materials and methods used on an object in the artifact catalogue.

#### BAGGING TECHNIQUE FOR LABELLING GROUPS OF SMALL ARTIFACTS

Groups of small fragments/artifacts that have been recovered from a single layer/level can be bagged together as a lot:

- in a 4-mil polyethylene zip-closure bag
- with a Tyvek tag containing the label information (written in 6B pencil).

The Tyvek tag label and the artifact catalogue should both note the total number of fragments in the lot.

An acid-free preservation quality paper tag would also be acceptable. Tyvek is a preferable option, however, because it's chemically stable, acid-free, lightweight and very durable. It also provides resistance to water, mold & pests.

#### 8. HANDLING, PACKING & STORAGE

Careful handling, packaging and storage of archeological objects are crucial for their survival and long-term preservation.

# Handling & Field Preservation

Preservation of archeological materials is an essential aspect of an archaeology project that begins in the field. Field preservation can significantly affect the long-term preservation of objects. While the needs of different types of materials differ, there are a few general principles that should always be followed in the field to help ensure the preservation of all materials:

- Handle objects as little as possible. Do not pick up objects by handles, rims, or other attachments.
- Always fully support an archeological object during handling, packaging and storage:
  - ightarrow Always use both hands, a tray or a supporting container to lift and carry an object.
- ➤ Wear nitrile gloves when handling archaeological artifacts
- Keep food and drink away from work areas when working with archaeological materials
- > Immediately cover objects found in the field to protect them and minimize light exposure etc.
- Use preservation quality materials for packing and storage as well as safe packing and storage methods for all finds (both in the field and during processing).
- Documentary records created in the field and in the office must be created, managed & handled with preservation in mind:
  - → Use preservation quality materials & formats to create documentary materials (e.g. uncompressed .tif files for digital images, PDF/A etc.)
  - → Ensure that there are at least three copies of born digital records, stored on different devices and in different locations (both onsite and offsite).
  - → Avoid folding or rolling paper records
  - → Do <u>not</u> use rubber bands, adhesives (tape, post-it notes etc.), or metal fasteners (staples, paper clips)

#### Packaging, Organization & Storage

Packing and storage materials are the first layer of protection against harmful agents of deterioration. Packing and storage materials are in direct contact with the object and must therefore always be as inert and chemically stable as possible because harmful substances in packing and storage materials will directly and negatively impact the object and accelerate its deterioration. Since packing and storage of excavated artifacts directly affects their long-term survival, good storage practices and preservation quality packing and storage materials are one of the most important aspects of any archaeological project.

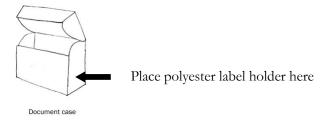
#### Packing & Organization

#### General Packing Guidelines:

- Ensure that all material is dry before it is packaged for storage.
- Boxes should not weigh more than 25 lbs. each.
- Package like materials with like materials
- The heaviest and largest artifacts must be at the bottom of each container.
- Heavy artifacts must be packed separately and never combined in the same box as fragile artifacts to prevent damage and crushing. Always choose a sturdy container that can support the weight of heavy artifacts.
- Store fragile objects or records in rigid containers.
- Do not over pack containers.
- Pack objects with sufficient padding and cushioning materials to prevent movement, damage and impact between hard objects and inner box surfaces
- Use inner boxes or trays with polyethylene foam liners to provide additional protection to the artifacts while also maximizing space whenever possible.

# General Organization Guidelines:

- Label the outside of each box using polyester label holders & preservation quality paper inserts
  - → Ensure that the exterior box label contains information about both the box contents and provenience (Always include the Borden Number on the label)
  - → Label Holder Placement:
    - 1. Flip-top document boxes Place label holder on the bottom of the short end of the box (not flip-top lid)



- 2. Artifact box & tray system Place label holder on the short end of the box, centered just below handle
- Interior boxes that require labels should be labelled with pencil only
- Create a box list for each box. A box list contains an inventory of the contents of a box:
  - → Print the box list on preservation quality paper and place it inside the box.
- Whenever possible, package and store artifacts by sequential number to facilitate access.

# Transportation

When transporting archaeological materials by vehicle, pad the vehicle with foam and blankets to provide cushioning for all of the containers holding the archaeological materials. The containers should also be restrained to secure the materials in the transport vehicle and to prevent sliding and movement during transit.

Polypropylene bins provide good protection in the field and during transportation activities where there are higher risks to objects. When objects are processed later, they can then be rehoused in preservation quality paperboard boxes and trays.

#### Storage Materials & Methods

#### Containers & Padding

Preservation quality bags, boxes, support trays and padding are generally the most suitable storage materials for archaeological materials.

Refer to Appendix D: List of Suppliers for suitable packing and storage materials.

#### **Bags**

Use zip-closure polyethylene bags (min. thickness 4 mil) for individual items, lots etc. Whenever possible, store bags vertically within boxes in a consistent manner to facilitate access and minimize handling.

# Tray and Box Artifact Storage

Organize and pack artifacts so that each object can be easily and safely retrieved without disturbing the rest. This can be achieved by using a tray and box method to layer items. If items are small and lightweight, they can be organized into three or four layers separated by trays within the storage box. Trays make lifting safer and provide additional protection to artifacts. Cushion each tray/layer with polyethylene foam liners. Preservation quality boxes with fitted trays equipped with adjustable interior compartments can be purchased from suppliers and are ideal for the storage of archeological material.

2020-02-02 Page 19 of 27

#### Padding & Cushioning

Use polyethylene foam padding not only to protect individual artifacts and separate them from each other and box surfaces but also within containers to fill voids so that the contents do not shift. Be careful not to overstuff boxes with padding that can exert damaging pressure on fragile objects. Polyethylene foam comes in a variety of forms and sizes that will suite most padding and support needs for archaeological materials. It comes in soft sheets and rolls (which is great for lining trays etc.), as well as pouches (which are great for protecting individual artifacts), as well as a rigid form (Ethafoam) that can be carved and shaped with a foam knife and/or Xacto knife (See cavity packing method below in the Large/Heavy Objects section). Preservation quality unbuffered tissue paper can also be used for padding and cushioning.

Storage Methods for Special Classes of Material

#### Samples & Faunal Materials

Samples such as soil samples and other loose materials should ideally be processed as part of the ongoing project. If this is not possible, document the rationale for keeping the sample(s). Package and store loose materials such as soil samples in polyethylene bags (or Tyvek bags) within polypropylene boxes.

- → To ensure that the bags are strong and will not tear or puncture, use polyethylene bags with a minimum thickness of 6-8 mil. Bags made of Tyvek can also be used.
- → Please submit samples and faunal material in the polypropylene 'stack and nest' storage containers indicated in the List of Suppliers section (Appendix D Packing & Storage Supplies section).
- → Arrange and store samples by type when multiple samples will be submitted.

#### Small/Fragile Objects

Fragile, delicate and very small objects must be specially packaged to ensure proper protection. Pack and store fragile and very small objects and artifacts with extra special significance in individual preservation quality boxes:

→ Use clear polypropylene artifact boxes for fragile, very small or extra special objects.

#### Large/Heavy Objects

Heavy items must be firmly packed together in sufficiently strong containers to support the weight of the object(s). Extra cushioning is usually required using one of the following techniques:

#### Dividers

Use blue board/acid-free B-flute or E-flute corrugated board to separate each item along with polyethylene foam padding to prevent movement and damage. An object can also be tied to trays with cotton twill tape to help immobilize it.

#### Cavity-Packing

Rigid polyethylene foam (i.e. Ethafoam) can also be used to make tray supports with cavities for fragile, round and other three-dimensional objects. Large blocks of Ethafoam can be cut in the shape of the object with a sharp knife such as foam knife or X-acto knife. This cavity-packing technique is useful for restricting the movement of rounded items as well. Make sure that the fit of the object in the cavity is not too tight so that the object can be safely removed. If necessary, a finger grip can be carved on each side to make it easier to remove the object.

→ If the cut edge of the Ethafoam is not smooth, it can be abrasive to objects with fragile surfaces so a barrier material can be used to cover the rough surface such as Tyvek or thin, soft, polyethylene foam.

2020-02-02

#### **Documentary Paper Records**

Place paper records in acid-free/lignin-free folders and store vertically (in most cases) in preservation quality boxes. If oversize, store horizontally.

- → Use preservation quality paper to print all hard copy records
- → Do <u>not</u> use staples or other metal fasteners, rubber bands, adhesives including tapes, post-it notes etc.

#### Oversize & Other Materials

If there are oversize materials or atypical materials as part of your project or if there are materials that require special provisions, care and/or cultural protocols such as wet site objects, burial objects or ancestral remains, please contact the Museum by email.

#### List of Preservation Quality Supplies

Archaeological Objects, Samples & Faunal Material:

Containers for Samples & Faunal Material Storage:

Polypropylene stack & nest storage containers with lids (Grey only)

Polyethylene zip-closure bags (Minimum thickness = 6-8 mil)

#### Containers & Materials for Objects Storage:

Polyethylene zip-closure bags (Minimum thickness = 4 mil)

Artifact Storage Trays & Box System (Acid/lignin-free, buffered, pH 8.5, B-Flute blue/grey corrugated board)

Heavy-Duty Artifact Storage Box (Acid/lignin-free, buffered B-Flute corrugated board box with reinforced bottom)

E-Flute Blue/Grey Corrugated Board (Acid/lignin-free/Buffered) [For custom size trays, dividers, supports etc.]

Polyester Label Holders

Clear Polypropylene Artifact Boxes [For fragile and special objects]

Tyvek

Cotton Twill Tape/ Tying Tape

Polyethylene foam pouches

Polyethylene foam (roll) [For custom size padding]

Ethafoam

Acid-free Tissue (Unbuffered)

#### Documentary Records – Paper:

Permalife bond paper or 100% Cotton rag paper

File Folders - Full-cut Legal size Tab (Acid-free, lignin-free, pH of 8.5, buffered)

Document Boxes (Acid/lignin-free, buffered, pH 8.5, B-Flute Blue/Grey corrugated board)

Document Spacers (Acid/lignin-free buffered pH 8.5) [For providing support & prevent documents from slumping & becoming distorted when a box isn't full]



#### 10. SUBMITTING MATERIALS

To submit archaeological materials to the Secwépemc Museum & Heritage Park, please provide advance notice to the Museum. As you are nearing the end of processing materials from a site, please provide a minimum of one-month advance notice by email. When all materials are ready to be deposited at the museum, please email to make arrangements for the transfer.

➤ Please send email notifications to **kenneth.favrholdt@ttes.ca** 

Acceptance of materials is subject to inspection and approval by SMHP's Museum personnel. When materials are received at the SMHP, they will be inspected to ensure adequacy of artifact and record processing, packaging, and documentation. Collections that do not meet the minimum requirements stipulated in these guidelines will be corrected at the consultant/archaeologist's expense. To avoid this, please follow the guidelines described in this document.

KUKWSTSÉTSEMC! (Thank you!) Date (y/m/d)\_\_\_\_\_

**Appendix A** – Repository Request, Agreement Form, and Artifact Catalogue Form

# Secwépemc Museum & Heritage Park



# **Repository Request Form**

Contact	
Company	
Address	
E-mail	
Phone/Cell	
Site(s)	_
Study Area (attach map)	
Permit Holder	
Project Description	
Project Type	
Project Type	<del></del>

Location\_\_\_\_\_

Methods	
Anticipated	
Materials	
If wet site deposits are anticipated, do you have a re	covery treatment plan V N
	covery treatment plan f N
Please initial the following to agree:	
We do not accept human remains.	
We encourage radiocarbon dating from secure co	ontexts.
I am aware that a change of repository must be a	ccompanied by a permit amendment.
l,	_ (print), agree to abide by the Secwépemc Museum
& Heritage Park repository requirements as of	
	(Signature – Applicant)
Date of Approval	_
	(Signature – Curator/Archivist)

Secwépemc Museum & Heritage Park

Tk'emlups te Secwépemc

200 – 330 Chief Alex Thomas Way

Kamloops, BC, V2H 1H1

# Artifact Catalogue Form

# **Artifact Catalogue**

TteS ID	HCA Permit No.	Temp. Site No.	Borden Site No.	Artifact No.	Unit Type•	Material	Туре	Sub Type	Count	Weight (g)	Length (mm)	Width (mm)	Thick(mm)	Remarks
-														
	1													
1		1	1	I	1			1	ı	I	I	I		

AT Ande									
site	,	Biface	Primary Cl	Antler	Block Shatter	Secondary EU	Basalt	Carving	Tertiary
IS	Bone	Core	Projectile						
M									
Τ									
С									
h									
а									
lc									
е									
d									
0									
n									
У									
F									
а									
k									
е		F Bear SF C	Chert F	lake-Retou	uched F Bird				

\*Unit Types: AT=auger test, CF=chance/monitoring find, EU=evaluative/excavationunit,IS=in situ find, MT=machine test/trench, SF=surface find, ST=shovel test

= Deer Granite Flake-Utilized Groundstone = Dog Metal = Elk Nephrite Human = Fish Obsidian Microblade Ochre Scraper F Inv Rodent - Rabbit Other Shaft - Sheep Other Stone Wedge Hammerstone W/A Quartz

Quartzite Burned
Shell Calcined
Textile N/A
Tooth

Wood

 $\label{thm:continuity} $$^*$Unit Types: AT=auger test, CF=chance/monitoring find, EU=evaluative/excavation unit, IS=in situ find, MT=machine test/trench, SF=surface find, ST=shovel test$ 

# **Appendix B** -- Safety Data Sheets and Safety Tips

For general information about chemicals used in the museum and archives processes see information from the Canadian Conservation Institute (Technical Bulletins) such as "Products Used in Preventive Conservation - Technical Bulletin 32."

For specific information about a variety of chemicals used in museum settings mentioned in this Repository Requirements document Archaeological see: WHMIS Material Data Safety Sheets:

https://www.ccohs.ca/oshanswers/chemicals/whmis\_ghs/general.html

200-330 Chief Alex Thomas Way

Kamloops, BC V2H1H1 | 250.828.9749 |



# Preparation of Labelling Materials & Tools

#### Sterilize Containers & Mixing Tools

Before preparing adhesives:

- > clean an appropriate area to make the adhesive recipes and
- > sterilize all mixing tools and storage containers.

There are a variety of ways to sterilize but the following are some quick and easy methods:

#### ON THE STOVE

Glass & Metal

- Place your glass containers in a big clean pot filled with tepid water making sure that the containers are completely submerged and that there is no air trapped inside them.
- Place a lid on top and turn the stove burner on high. This will allow the temperature of the glass to gradually come up until the water comes to a rolling boil.
- Leave to boil for a minimum of 10 minutes.
- After 10 minutes, turn off the heat and leave the containers submerged in the hot water, until you're ready to fill them.

#### IN THE MICROWAVE

Plastic

- Wet the plastic first because the interaction between the microwave's heat and the water is what causes sterilization.
- Place the plastic in a microwave on high power for approximately two minutes.

#### IN THE DISHWASHER

Glass, Metal & Plastic

If you have a high temperature setting (at least 80°C) or a steam function on your dishwasher, you can simply place the items in your machine, run a hot (rinse) cycle and use the items once the cycle is completed.

#### **Adhesive Recipes**

#### METHYL CELLULOSE PASTE

Although methyl cellulose will dissolve in cold water, adding it directly to cold water will create a lot of lumps. The following method is therefore recommended:

#### Ingredients:

5 T. Methyl Cellulose A4M

4 cups Distilled Water

\*Always use distilled water to avoid introducing contaminants into the paste.

#### Equipment:

Pyrex glass bowl Stirring tool such as a glass stirring rod Glass storage containers with airtight non-metallic lids Saucepan

#### Instructions:

- Heat a third of the distilled water to 90°C
- 2. Add the methyl cellulose powder to the heated distilled water and stir until you have created a slurry. Stir briskly to prevent lumps. (Note: Methyl cellulose will not dissolve in hot water)
- 3. Add the remaining cold distilled water to the slurry and stir until dissolved. Stir briskly to prevent lumps.
- Cover and let stand for several hours. 4.
- 5. Fill small glass jars with the prepared methyl cellulose paste and close with plastic airtight lids.
- The methyl cellulose paste will keep for several weeks and does not require refrigeration. 6.
- 7. When ready to use, decant a small amount into another glass container for use. Never dip your labelling brush into the main supply.

#### WHEAT STARCH PASTE

Ingredients:

30 grams [50 ml] Wheat Starch 300 ml Distilled Water

\*Always use distilled water to avoid introducing contaminants into the paste.

Equipment:

Double boiler or saucepan Graduated glass beakers Sieve or strainer (fine, non-metallic mesh) Stirring tool such as a glass stirring rod Glass storage containers with airtight non-metallic lids

#### Instructions:

#### Preparing the Wheat Starch

- Weigh out 30 grams of wheat start powder or add the powder to the line marking 50 ml on a graduated beaker.
- In another graduated beaker, measure 300 ml of distilled water.
- Gradually pour 50 ml of this water into the container holding the wheat starch powder, stirring continuously until all the lumps have dissolved and the mixture is smooth. Cover the mixture and let stand.

#### Cooking the Wheat Starch

- The paste can be prepared in a double boiler or by using the following procedure:
  - → Pour the remaining 250 ml of distilled water into a beaker.
  - → Set this beaker in a pan containing enough water so that the beaker is surrounded but does not float or tip.
  - → Allow the water in the beaker to come to a boil.
  - → Stir the starch/water mixture and pour it into the boiling water in the beaker, approximately 25 ml at time. Stir continuously as it thickens.
  - → When all the starch/water mixture has been added, continue heating and stirring for another 5 to 10 minutes.
  - → Remove the beaker containing the paste and allow it to cool.

#### Thinning the Wheat Starch Paste

- When the paste reaches room temperature, it will have thickened. If the paste is too thick, thin 5. it by adding distilled water and stirring vigorously.
- Thinning at this point usually creates lumps that can be removed by forcing the paste through a sieve.

#### Storing the Wheat Starch Paste

- 7. Fill small glass jars with the prepared wheat starch paste and close with plastic or non-metallic airtight lids.
- At room temperature, the paste will last for at least 3 days; Refrigerated, it will last for at least 7 days.
- Stored paste must be put through a sieve and thinned before it is used.
- 10. Paste should be discarded as soon as it separates or sours.
- 11. When ready to use, decant a small amount into another glass container for use. Never dip your labelling brush into the main supply.



# Appendix D: List of Suppliers

# Labelling Materials Supplies:

Labelling Components for Archaeological Objects	Materials Recommended	Suppliers
Adhesive Component Materials	Paraloid B-72	Carr McLean https://www.carrmclean.ca/paraloid-b-72-liquid-labeltm.html
	Methyl cellulose paste	Brodart <a href="http://www.brodart.ca/Library-Supplies/Book-Care-and-Repair-Supplies/Cleaners/">http://www.brodart.ca/Library-Supplies/Book-Care-and-Repair-Supplies/Cleaners/</a> /Methyl-Cellulose/?q=Methyl%2bCellulose
	Wheat Starch Paste	Carr McLean <a href="https://www.carrmclean.ca/jin-shofu-wheat-paste.html">https://www.carrmclean.ca/jin-shofu-wheat-paste.html</a>
	Distilled water (Use to make paste)	London Drugs <a href="https://www.londondrugs.com/london-drugs-distilled-water4l/L5111547.html?cgid=foodandpantry-beverages-water-stillwater">https://www.londondrugs.com/london-drugs-distilled-water4l/L5111547.html?cgid=foodandpantry-beverages-water-stillwater</a>
	Acetone, Reagent Grade	BioShop https://www.bioshopcanada.com/secure/detail.asp?Pin= ACE888
Paper	100% Cotton rag paper Photo-Textile Interleaving Tissue – Unbuffered	Carr McLean https://www.carrmclean.ca/index.php/catalog/product/view/id/17092/s/photo-textile-interleaving-tissue-unbuffered/
Printing	Xerographic process or Laser copier/printer	Laser printing is an electrostatic printing process that is nearly identical to the xerographic copy process, which is preferable for long-term stability. Black-and-white laser prints tend to be very stable and permanent since they are made with toner rather than ink and since the toner is essentially black carbon pigment in a resin carrier. Verify specific toner's Material Safety Data Sheet (MSDS) to ensure that it's a carbon pigment.
	Carbon based pigmented toner	Use only the toners specified by the printer or photocopier manufacturer because this usually guarantees the toner's ability to make a firm fusion with the paper.

Labelling Components	Materials Recommended	Suppliers
for Small Fragments or Objects Not Suitable for the Paper Label Method		
Bags	Polyethylene zip-closure bags (Minimum thickness = 4 mil)	The following bags can be purchased in bulk, have good quality seals that have been tested and they come in a variety of sizes and thickness as well:
		International Plastics <a href="https://www.interplas.com/ziplock-bags">https://www.interplas.com/ziplock-bags</a>
		Although, the seals haven't been as rigorously tested as the bags above, 4 mil zip-closure bags can be purchases from a variety of other suppliers as well such as:
		Uline.ca <a href="https://www.uline.ca/Grp_5/Reclosable-Poly-Bags">https://www.uline.ca/Grp_5/Reclosable-Poly-Bags</a>
Tags	Tyvek tags (For inside poly bags)	Carr McLean <a href="https://www.carrmclean.ca/tyvekr-tying-tape-labels.html">https://www.carrmclean.ca/tyvekr-tying-tape-labels.html</a>
		Gaylord Archival <a artifact-%26-collectibles-preservation="" gaylord-archival%26%23174%3b-tyvek%26%23174%3b-prestrung-artifact-tags-%28100-pack%29="" href="https://www.gaylord.com/Preservation/Artifact-%26-Collectibles-Preservation/Labeling-%26-Supplies/Gaylord-Archival%26%23174%3B-Tyvek%26%23174%3B-Artifact-Tags-%28100-Pack%29/p/HYB01358?mpcCode=ZZ&lt;/a&gt;&lt;/td&gt;&lt;/tr&gt;&lt;tr&gt;&lt;td&gt;&lt;/td&gt;&lt;td&gt;Tyvek tags with cotton string&lt;br&gt;(For tying onto objects that&lt;br&gt;cannot be directly labelled)&lt;/td&gt;&lt;td&gt;Gaylord Archival &lt;a href=" https:="" hyb01359"="" labeling-%26-supplies="" p="" preservation="" www.gaylord.com="">https://www.gaylord.com/Preservation/Artifact-%26-Collectibles-Preservation/Labeling-%26-Supplies/Gaylord-Archival%26%23174%3B-Tyvek%26%23174%3B-Prestrung-Artifact-Tags-%28100-Pack%29/p/HYB01359</a>
	Archival paper Tags (For tying onto objects that cannot be directly labelled)	Carr McLean <a href="https://www.carrmclean.ca/artifact-identification-tags.html">https://www.carrmclean.ca/artifact-identification-tags.html</a>
Writing implements	Pencils (B or HB)  → 6B for writing on Tyvek tags  → 2B or HB for writing on	Local suppliers such as art supply stores (e.g. Michaels) https://canada.michaels.com/en/generals-semi-hex- classic-graphite-drawing-pencil-kit/10230376.html
	paper tags	Note: General's Semi-Hex Graphite 6B Drawing Pencils write well on Tyvek
	Eraser White Staedtler Mars-Plastic	Local suppliers such as art supply stores (e.g. Michaels) <a href="https://canada.michaels.com/en/staedtler-mars-plastic-eraser/10192256.html">https://canada.michaels.com/en/staedtler-mars-plastic-eraser/10192256.html</a>
	Artists brushes (for applying adhesives)  → Select a high-quality brush with secure hairs such as squirrel or sable	Local suppliers such as art supply stores
	IDentiPens (for writing on the outside of plastic bags)	Carr McLean https://www.carrmclean.ca/index.php/catalog/product/ view/id/8742/s/identi-pentm/

# Handling & Cleaning Supplies & Tools:

Handling & Cleaning	Materials Recommended	Suppliers
Handling	Nitrile gloves	Carr McLean <a href="https://www.carrmclean.ca/disposable-gloves.html">https://www.carrmclean.ca/disposable-gloves.html</a>
	Tweezers (For placing paper labels)	Carr McLean <a href="https://www.carrmclean.ca/catalogsearch/result/?cat">https://www.carrmclean.ca/catalogsearch/result/?cat</a> <a href="mailto:=0&amp;q=tweezers">=0&amp;q=tweezers</a>
Cleaning Objects	Natural-hair brush (goat hair)	Carr McLean <a href="https://www.carrmclean.ca/natural-hair-brush.html">https://www.carrmclean.ca/natural-hair-brush.html</a>
Cleaning Spills (Acetone)	Diatomaceous Earth	Amazon.ca https://www.amazon.ca/gp/product/B07TVTV498/r ef=ppx yo dt b asin title o04 s01?ie=UTF8&psc=1

# Packing & Storage Supplies:

Archaeology Objects	Materials Recommended	Suppliers
Containers for Samples & Faunal Material Storage	Polypropylene stack & nest storage containers with lids (Grey only)	Global Industrial  18x11x6" (SNT180 & LID181)  https://www.globalindustrial.ca/p/storage/binstotes-containers/shipping-security/shipping-container-without-lid-18x11x6  https://www.globalindustrial.ca/p/storage/binstotes-containers/shipping-security/shipping-container-lid-2
		19.5x15.5x10" (SNT190 & LID191)  https://www.globalindustrial.ca/p/storage/binstotes-containers/shipping-security/shipping-container-without-lid-19-1-2x15-1-2x10  https://www.globalindustrial.ca/p/storage/binstotes-containers/shipping-security/shipping-container-lid-8  Note: Containers & lids sold separately
	Polyethylene zip-closure bags (Minimum thickness 6-8 mil)	International Plastics <a href="https://www.interplas.com/ziplock-bags">https://www.interplas.com/ziplock-bags</a> Note: These bags can be purchased in bulk, have good quality seals that have been tested and they come in a variety of sizes and thickness as well.  Uline.ca <a href="https://www.uline.ca/Grp_5/Reclosable-Poly-Bags">https://www.uline.ca/Grp_5/Reclosable-Poly-Bags</a> Note: Although, the seals haven't been as rigorously tested as the bags above, it would be acceptable to purchase polyethylene zipclosure bags from a variety of other suppliers such as Uline.

Boxes, Trays & Dividers	Artifact Storage Trays & Box System, Acid/lignin-free, buffered, pH 8.5, B-Flute Blue/Grey corrugated board	Carr McLean <a href="https://www.carrmclean.ca/b-flute-artifact-storage-tray-system.html">https://www.carrmclean.ca/b-flute-artifact-storage-tray-system.html</a>
	Heavy-Duty Artifact Storage Box, Acid/lignin-free, buffered B-Flute corrugated board box with reinforced bottom pad (For heavy objects)	Carr McLean https://www.carrmclean.ca/heavy-duty-artifact- storage-tote-box.html
	E-Flute Blue/Grey Corrugated Board, Acid/lignin-free/Buffered (For making custom sized trays, dividers, boxes etc.)	Carr McLean <a href="https://www.carrmclean.ca/multi-use-archival-e-flute-corrugated-board.html">https://www.carrmclean.ca/multi-use-archival-e-flute-corrugated-board.html</a>
	Polyester Label Holders (To label box exteriors)	Carr McLean <a href="https://www.carrmclean.ca/polyester-label-holders.html">https://www.carrmclean.ca/polyester-label-holders.html</a>
	Clear Polypropylene Artifact Boxes (For fragile and special objects)	Carr McLean <a href="https://www.carrmclean.ca/carmacr-artifact-storage-boxes.html">https://www.carrmclean.ca/carmacr-artifact-storage-boxes.html</a>
	Nesting & Other Boxes of Various Sizes (For objects that do not fit the standard artifact tray and box system)	Carr McLean <a href="https://www.carrmclean.ca/nesting-box-storage-system.html">https://www.carrmclean.ca/nesting-box-storage-system.html</a> <a href="https://www.carrmclean.ca/e-flute-corrugated-short-lid-boxes.html">https://www.carrmclean.ca/e-flute-corrugated-short-lid-boxes.html</a>
Padding/Cushioning	Polyethylene foam pouches	Uline <a href="https://www.uline.ca/BL 854/Uline-Foam-Pouches?keywords=foam+pouch">https://www.uline.ca/BL 854/Uline-Foam-Pouches?keywords=foam+pouch</a>
	Polyethylene foam rolls	Uline <a href="https://www.uline.ca/BL-855/Uline-Foam-Rolls?keywords=Polyethylene+foam">https://www.uline.ca/BL-855/Uline-Foam-Rolls?keywords=Polyethylene+foam</a>
		Carr McLean <a href="https://www.carrmclean.ca/polyethylene-foam.html">https://www.carrmclean.ca/polyethylene-foam.html</a>
	Ethafoam	Carr McLean <a href="https://www.carrmclean.ca/ethafoamr.html">https://www.carrmclean.ca/ethafoamr.html</a>
	Foam Knife	Carr McLean https://www.carrmclean.ca/benchmark-foam- knives.html
	X-acto Knife	Carr McLean <a href="https://www.carrmclean.ca/x-acto-knife-and-blades.html">https://www.carrmclean.ca/x-acto-knife-and-blades.html</a>
	Acid-free Tissue, Unbuffered	Carr McLean <a href="https://www.carrmclean.ca/interleaving-tissue.html">https://www.carrmclean.ca/interleaving-tissue.html</a>

Tying / Wrapping / Covering	Cotton Twill Tape/ Tying Tape	Carr McLean https://www.carrmclean.ca/twill-tape.html https://www.carrmclean.ca/unbleached-cotton-tying-tape.html
	Tyvek	Carr McLean https://www.carrmclean.ca/tyvekr-1460c-uv- protected-soft-protective-wrap.html
Bags	Polyethylene zip-closure bags (Minimum thickness = 4 mil)	The following bags can be purchased in bulk, have good quality seals that have been tested and they come in a variety of sizes and good thickness (4 mil) as well:  International Plastics <a href="https://www.interplas.com/ziplock-bags">https://www.interplas.com/ziplock-bags</a> Although, the seals haven't been as rigorously tested as the bags above, it would be acceptable to purchase 4 mil zip-closure bags from a variety of other suppliers as well such as:  Uline.ca <a href="https://www.uline.ca/Grp_5/Reclosable-Poly-Bags">https://www.uline.ca/Grp_5/Reclosable-Poly-Bags</a>

Documentary Records	Materials Recommended	Suppliers
Paper Records (e.g. reports etc.)	Permalife bond paper or 100% Cotton rag paper	Carr McLean: <a href="https://www.carrmclean.ca/bond-papers.html">https://www.carrmclean.ca/bond-papers.html</a>
	File Folders - Full-cut Tab, Acid-free, lignin-free, pH of 8.5, buffered (Legal size)	Carr McLean: <a href="https://www.carrmclean.ca/carmacr-archival-file-folders.html">https://www.carrmclean.ca/carmacr-archival-file-folders.html</a>
	Document Boxes, Acid/lignin- free, buffered, pH 8.5, B-Flute Blue/Grey corrugated board	Note: Oversize file folders are also available from Carr McLean  Carr McLean <a href="https://www.carrmclean.ca/carmacr-corrugated-document-boxes.html">https://www.carrmclean.ca/carmacr-corrugated-document-boxes.html</a>
	Document Spacers, acid/lignin- free buffered ph 8.5 (To provide support and prevent documents from slumping and becoming distorted when a box isn't full)	Carr McLean <a href="https://www.carrmclean.ca/document-spacers.html">https://www.carrmclean.ca/document-spacers.html</a>