

# UCD IMPROVE Technical Information #251D

## Box Receiving

*Interagency Monitoring of Protected Visual Environments  
Air Quality Research Center  
University of California, Davis*

*July 15, 2022  
Version 3.0*

Prepared By:	<small>DocuSigned by:</small> <i>Anthony Kawamoto</i> <small>3A49A57FF666452...</small>	Date: <u>10/4/2022</u>
Reviewed By:	<small>DocuSigned by:</small> <i>Jason Giacomo</i> <small>B62B01F81613421...</small>	Date: <u>10/4/2022</u>
Approved By:	<small>DocuSigned by:</small> <i>Marcus Langston</i> <small>0A10CFCF79B0452...</small>	Date: <u>10/4/2022</u>

**DOCUMENT HISTORY**

<b>Date Modified</b>	<b>Initials</b>	<b>Section/s Modified</b>	<b>Brief Description of Modifications</b>
05/04/2021	GRM	All	Updated wording & formatting.
02/01/2022	SRS	All	Previous anthologized version separated into individual TIs.
3/17/2022	GRM	All	Updated wording to accommodate new procedure

## TABLE OF CONTENTS

1. Purpose and Applicability.....	4
2. Summary of the Method .....	4
3. Cautions .....	4
4. Equipment and Supplies .....	4
5. Procedural Steps.....	4
5.1 Remove Labels/Tape.....	4
5.2 Check In Boxes .....	5
5.3 Locate the Flashcard.....	5
5.4 Flagging a Problem .....	6
5.5 Deliver Bins to the Sample Handling Lab .....	6

## LIST OF FIGURES

Figure 1. Bins.....	6
---------------------	---

## 1. PURPOSE AND APPLICABILITY

This TI describes the proper procedures for opening IMPROVE blue boxes and transferring the contents to bins. Its purpose is to establish uniform guidelines for how to perform these tasks.

## 2. SUMMARY OF THE METHOD

IMPROVE blue boxes are not permitted in the sample handling laboratory to reduce the chance of contamination. Contents of these boxes must be removed and placed into matching site bins in the shipping/receiving area for the sample handling lab before getting transferred to the lab. Bins are brought back into the shipping/receiving area after new filters have been loaded. The contents are put back into the blue boxes and shipped out into the field.

## 3. CAUTIONS

Some site codes are very similar. Because of this, it is very important to make sure that filters are placed into the correct bins and that clean filters are shipped out in the proper box.

## 4. EQUIPMENT AND SUPPLIES

- Computer with IMPROVE Filter Processing application (lab app)
- Blue boxes containing sampled filters
- Velcro Labels with site names
- Barcode scanner
- Sticky Notes
- Colored pens (other than red)
- Box Cutter

## 5. PROCEDURAL STEPS

Prior to beginning work, open the Improve Filter Processing laboratory application (lab app). Open Post-sampling then select Box Receiving.

### 5.1 Remove Labels/Tape

When boxes arrive at Drew Avenue, they are stacked on the floor in the side delivery entrance, right outside of the IMPROVE shop. Bring the boxes into the shipping/receiving area for the sample handling lab and place them on the floor in front of the shelves of shipping boxes. IMPROVE bins for all sites are stacked adjacent to the desk.

When opening a box, remove any tape that the operator may have put on the box to secure it for shipping. A box cutter may be used to cut the tape, but do not damage the box in the process. Remove as much of the tape as possible. Do not remove the box-top label located on top of the box in the far-left corner. It should have the site name and three installation dates. Do not remove the shipping label as this must be scanned.

## 5.2 Check In Boxes

- 1) Select a blue box to open, and then locate the associated bin. The Velcro labels have the site code four letters followed by a number (1-9). Site bins are also color-coded. Yellow bins are for the (2-3-2') boxes, and blue bins are for the (3-2-2') boxes. The Velcro label will also have an associated barcode. Attach the designated Velcro label to the corresponding colored bin. Be sure to use a bin of the appropriate color.
- 2) Log in to the computer, the login information can be requested from the laboratory staff in the sample handling lab. Open the Improve Filter Processing application (lab app). Select "Post Sampling" then select "Box Receiving".
- 3) Using the barcode scanner, scan the barcode associated with the site. Do not type in or click the site code, unless using an unlabeled bin.
- 4) Verify the correct box is open by checking the "Box Weeks" with the three bag labels for main site.
- 5) Scan the return label into the "Inbound Tracking Number". The tracking number is validated, if incorrect numbers then verify the correct box was received and write a note in the comments section.
- 6) Remove the bags and place into the correct bin.
- 7) Remove log sheets and flashcard. See section 5.3 for more information. If log sheets and flashcard are the correct ones, then click "correct dates" and "flashcard." If the flashcard number is incorrect then write a comment. If dates are incorrect then inform lead lab tech immediately.
- 8) Remove box top labels and return labels.
- 9) Place the empty box on one of the shelves, grouped alphabetically. If it is a replacement box, place it on the top shelf on top of the desk.
- 10) Go to Section 5.4 for flagging problems.

## 5.3 Locate the Flashcard

Every box should contain at least one flashcard (Compact Flash card or SD card), which is labeled with an eight-digit number on one side and the site code and UC code on the other. Typically, the flashcard is found in the Week 3 bag because the operator removes the flashcard at the end of the week. However, if a flashcard is not there, thoroughly check the other two bags as well as inside of the box. Sometimes it is best to empty the contents of each week to find a flashcard, as it can get stuck in the log sheet or hidden

under cartridges. If a flashcard is not found in the box; in the lab app, do not select the box for the flashcard and type “No Flashcard” in the comment section.

Sometimes a flashcard will have a label that reads “IMPROVE Replacement” instead of a site name.

After pulling out the flashcard, remove the log sheets from each week bag. Place the flashcards to the side. Stack flashcards in the order the boxes were opened.

#### 5.4 Flagging a Problem

Stack all log sheets together by site with week 1 on top and week 3 on bottom. When finished opening boxes, give the pile of log sheets to a lead lab tech along with the flashcards.

If a “NOTIFICATION MESSAGES FOR SELECTED SAMPLER BOX” comes up notify lead lab tech.

If any questions arise while opening boxes or something is unclear, ask a lead lab tech.

#### 5.5 Deliver Bins to the Sample Handling Lab

Loaded bins are carried to the sample handling lab and placed on the holding rack next to the post-processing station. Bins of higher priority are placed on higher racks, while bins of lower priority are placed on lower racks. Bin priority is assigned based of the IMPROVE calendar and site status (Figure 1).

Figure 1. Bins.

