INDIANA CTSI Clinical and Translational Sciences Institute

STANDARD OPERATING PROCEDURE
Indiana CTSI Specimen Storage Facility

TITLE: STANDARD OPERATING PROCEDURE FOR SCOTT ELSA EMERGENCY ESCAPE BREATHING DEVICES

CHAPTER: 3-Equipment

SOP #: SF-3-10.02

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SUPERSEDES SOP #: N/A

AUTHORED BY: _____ DATE: 12-9-21
SSF Personnel

APPROVAL: _____ DATE: 12-14-2021
Indiana CTSI SSF Director

QA APPROVAL: _____ DATE: 12.15.2021
Quality Compliance Specialist

1. REVISION
   1.1. Significant changes incorporated in this version include:
      1.1.1. Corrected Step 6.2.1.1 and Appendix D to indicate that cylinders are not secured to wall-mount by Velcro strap.
      1.1.2. Revised Step 6.2.3.1.3 and Section 6.3.1.1 to reference level acceptance criteria of ≥2250 psi to align with SOP for Drager Quick Air EEBA Units, SF-3-9.
      1.1.3. Revised Step 6.2.3.2.4 to account for wall-mount configuration of cylinders.
      1.1.4. Revised Sections 6.3.1 and 6.3.2 to clarify that weekly and monthly maintenance is required for in-service units only.
      1.1.5. Replaced Section 6.3.5.2directives for placing hood back in case with "return to station" directives.
      1.1.6. Revised Appendices A and B to reference acceptance criteria for canisters of ≥2250 psi.
      1.1.7. Appendix D revised per above.

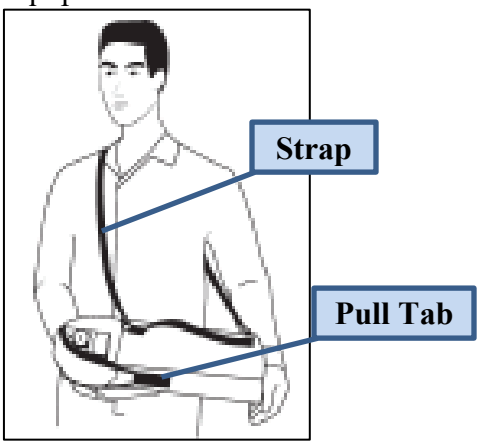
2. PURPOSE
   2.1. This Standard Operating Procedure (SOP) defines the Indiana CTSI Specimen Storage Facility (SSF) policy for the operation and maintenance of the 3M Scott ELSA Emergency Escape Breathing Device (EEBD). This procedure satisfies guidance set forth in ISBER "Best Practices."

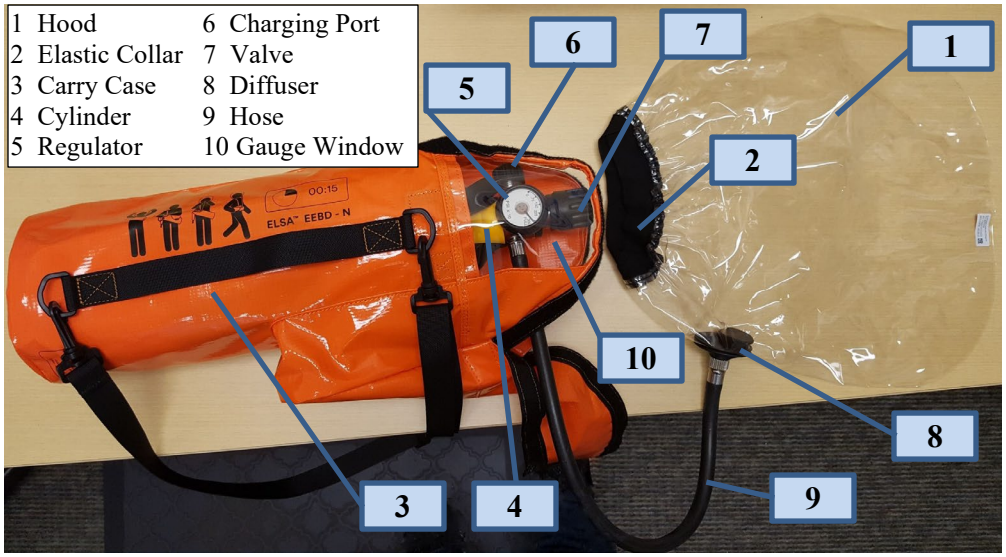
3. PRINCIPLE
   3.1. The 3M Scott ELSA Emergency Escape Breathing Devices are to be utilized when oxygen levels reach critical levels (below 19%) due to catastrophic LN_2 emergencies and supplemental air is required for escape from the environment. In order for the device to be an effective safeguard, personnel must be trained in proper operation. This unit does not need to be specifically fitted for individuals, and the manufacturer states that these devices are unsuitable for rescue purposes.

4. SCOPE
   4.1. The SOP applies to SSF staff and other personnel who are trained per SSF SOPs for access to the TK 252 Liquid Nitrogen Freezer Room. The procedure is to be used by personnel who (1) are in the TK 252 Liquid Nitrogen Freezer Room at the time a low oxygen condition occurs **AND** (2) are unable to vacate the low oxygen level area immediately. It is the responsibility of the SSF staff and SSF-trained personnel to direct non-SSF staff and untrained Collaborating Biorepository Personnel in the use of the units should this be necessary.
   4.2. The M10 BiOS Room (TK 258) is outside the scope of most SSF SOPs per IU Genetics Biobank (IUGB). Use of 3M Scott ELSA EEBD(s) in TK 258 is outside the scope of this SOP, however SSF personnel monitor and maintain 3M Scott ELSA EEBD(s) utilized in TK 258 per the following sections of this SOP:
      4.2.1. Section 6.2.3: Prepare and return to the area for re-use
      4.2.2. Section 6.3: Maintenance

5. MATERIALS
   5.1. Emergency Escape Breathing Device (EEBD) – 3M Scott ELSA EEBD-N 15-minutes (Part number: 8007214)
   5.2. Mild Soap
   5.3. Clean Cloth
   5.4. Airkem 33 disinfectant or equivalent
   5.5. Water - not specified
   5.6. Duct Tape

6. PROCEDURE
   6.1. **Components of the Scott ELSA EEBD**
      6.1.1. Equipment Schematics:





6.1.2. Hood, Diffuser, and Hose Assembly (*referred to as Hood Assembly*) Schematic Reference:

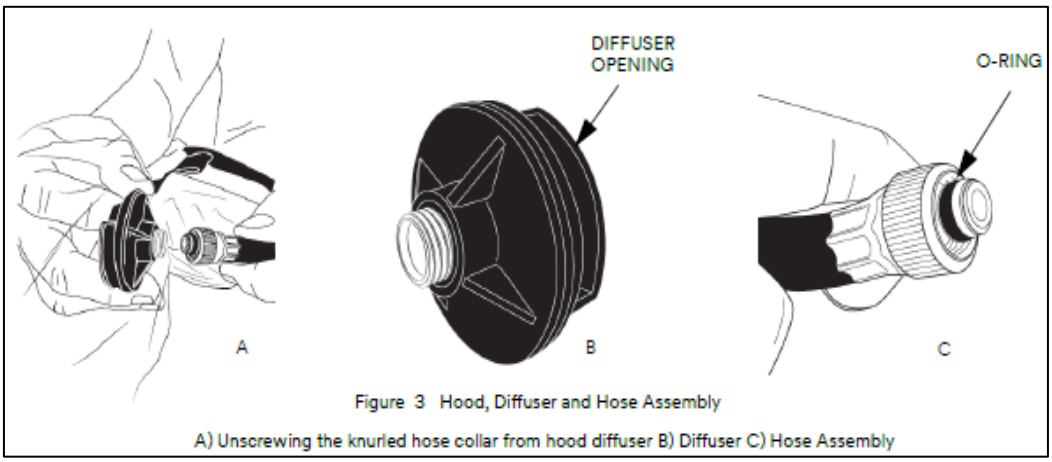


Figure 3 Hood, Diffuser and Hose Assembly

A) Unscrewing the knurled hose collar from hood diffuser B) Diffuser C) Hose Assembly

6.1.2.1. Assembly Components

6.1.2.1.1. Cylinder Assembly – comprised of Cylinder, Regulator, and Valve

6.1.2.1.2. Hood Assembly – comprised of Hood, Diffuser, and Diffuser components per Step 6.1.2.

NOTE: The Hose is not a component of the Hood Assembly.

6.2. **When used for escape from TK 252 and associated area(s) due to low oxygen condition:**

6.2.1. **Don the emergency escape breathing device:**

6.2.1.1. Lift pack to remove from wall mount.

6.2.1.2. With the Scott ELSA EEBD cylinder valve facing up and out, and the opening pull tab easily accessible, place the carry bag on the body so that one arm is through the strap and the strap is draped behind the neck.

6.2.1.3. Lift the pull tab to open the carry bag and expose the hood.

6.2.1.4. Remove hood from pouch and hose from the bag.

6.2.1.5. Open cylinder valve completely, turning counterclockwise, until a rush of air flows into the bag.

6.2.1.6. **DO NOT** put on the hood before opening the valve or if you do not hear the sound of air rushing into the hood when the valve is opened.

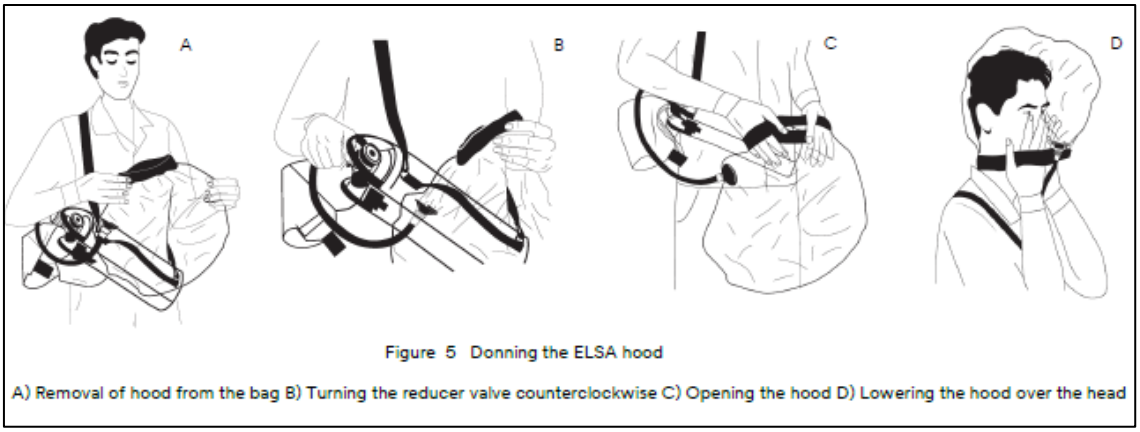


Figure 5 Donning the ELSA hood

A) Removal of hood from the bag B) Turning the reducer valve counterclockwise C) Opening the hood D) Lowering the hood over the head

6.2.1.7. Don hood by opening the elastic collar with both hands and lowering it over the head until the neck seal makes good contact around the neck and the diffuser assembly is in front of the face.

6.2.1.7.1. Ensure the neck seal is secure against the neck with no obstructions such as clothing, long hair, or beards.

Figure 6 ELSA hood fully donned

6.2.1.8. Exit to a safe area.

6.2.1.9. The 3M Scott ELSA EEBD-N Donning Procedure (current version), Appendix E, is posted inside TK 252 and in TK 250.

6.2.2. After reaching a safe environment, remove hood from head.

6.2.2.1. Stretch the elastic collar open with both hands and pull hood off of the head.

6.2.2.2. Close cylinder valve completely.

6.2.2.3. Remove unit by lifting strap over the head.

6.2.3. **Prepare and return to the area for re-use:**

6.2.3.1. Clean and disinfect.

6.2.3.1.1. Cylinder Assembly and Carry Bag

6.2.3.1.1.1. Wipe all surfaces with a mild soapy solution.

6.2.3.1.1.2. Rinse thoroughly with water.

6.2.3.1.1.3. Wipe all surfaces with a disinfectant solution.

6.2.3.1.1.4. Rinse thoroughly with water.

6.2.3.1.1.5. Dry completely.

6.2.3.1.1.6. Place the cylinder assembly back into the carry bag and secure the hook and loop retaining strap.

6.2.3.1.1.7. Orient the cylinder assembly so the gauge is visible through the transparent window.

6.2.3.1.1.8. Document results and actions on Appendix A.

6.2.3.1.2. Hood Assembly

6.2.3.1.2.1. Disassemble the respirator by unthreading the knurled hose collar from the hood diffuser.

6.2.3.1.2.1.1. Refer to Step 6.1.2 schematic and equipment manual, located in the SSF's TK and R3 Management Offices, as needed.

6.2.3.1.2.2. Immerse the hood in the disinfectant solution.

6.2.3.1.2.3. Rinse parts thoroughly in water.

6.2.3.1.2.4. Use care to avoid any scratching or abrasion of the hood.

6.2.3.1.2.5. Air dry completely.

6.2.3.1.2.6. Ensure the white plastic diffuser filter is inside the diffuser ***and the diffuser opening is directed towards the top of the hood.***

6.2.3.1.2.7. Reassemble the respirator by threading the knurled hose collar to the hood diffuser. Hand-tighten the hose collar and ensure it is not cross-threaded.

6.2.3.1.2.7.1. Refer to equipment manual, located in the SSF Management Office, as needed.

CAUTION: ***Care should be taken to ensure that the:***

- ***The white plastic diffuser filter is inside the diffuser.***
- ***Diffuser Opening is directed towards the top of the hood per Step 6.1.2 figure.***
- ***The hose collar is not cross-threaded before hand tightening***
- ***The O-Ring is on the coupling per Step 6.1.2 figure.***

6.2.3.1.2.8. Document results and actions on Appendix A.

6.2.3.1.3. Re-check that the cylinder air level displays minimally 2250 psi per Section 6.3.1.1.

6.2.3.1.3.1. If not, notify SSF Management to schedule a fill for the cylinder and remove the unit from the area.

6.2.3.2. Return to the station for re-use.

6.2.3.2.1. Place the hood on a smooth surface and carefully fold or roll the hood such that it will fit in the carry bag.

6.2.3.2.2. Coil the hose into the carry bag, followed by the folded or rolled hood.

6.2.3.2.3. Close the cover of the carry bag, and verify that the gauge is visible through the transparent window.

6.2.3.2.4. Once above rechecks are satisfactory, return the emergency escape breathing device to the storage wall mount.

6.2.3.2.5. Document results and actions on Appendix A.

6.3. Routine Maintenance and Monitoring

6.3.1. Weekly (for in-service units only)

6.3.1.1. Ensure cylinder displays minimally 2250 psi.

6.3.1.1.1. Verify that the indicator needle on the gauge displays minimally 2250 psi.

6.3.1.1.1.1. Gauge displays psi x 10, therefore when the gauge displays 225, the air level is 225 x 10 = 2250 psi.

6.3.1.1.2. If not filled at least to 2250 psi, remove from the area and notify SSF Management to schedule a fill for the cylinder, see Section 6.3.5.1.

6.3.1.1.3. Document what is observed and any actions taken, if applicable, on Appendix B.

6.3.2. Monthly (for in-service units only)

6.3.2.1. Hood Assembly

6.3.2.1.1. Check for any tears, cracking, cuts or abrasions, discoloration, holes, damaged elastic, or lack of elasticity.

6.3.2.1.2. If present, remove from the area and notify SSF Management to replace.

6.3.2.1.3. Document what is observed and any actions taken, if applicable, on Appendix B.

6.3.2.2. Carry Bag

6.3.2.2.1. Check for any tears, cracking or holes deemed likely to compromise integrity of the case.

6.3.2.2.1.1. Minor tears may be mended by SSF personnel with duct tape.

6.3.2.2.1.2. Request management evaluation of case if unsure about case integrity.

6.3.2.2.2. Ensure all hardware is intact.

6.3.2.2.3. Inspect Velcro for lint or dirt that could prevent it from adhering properly.

6.3.2.2.4. Evaluate additional signs of degradation with SSF Management for determination of replacement – DO NOT REMOVE.

6.3.2.2.5. Document what is observed and any actions taken, if applicable, on Appendix B.

6.3.2.2.6. Return EEBD to station per Section 6.2.3.2.

6.3.2.3. Function testing

6.3.2.3.1. Remove the emergency escape breathing device from the wall mount.

6.3.2.3.2. Place the strap over your neck or shoulder.

6.3.2.3.2.1. Verify the cylinder valve is facing forward.

6.3.2.3.3. Lift the pull tab.

6.3.2.3.4. Remove hood from pouch.

6.3.2.3.5. Open cylinder valve completely.

6.3.2.3.5.1. A rush of air should begin to flow into the bag.

6.3.2.3.5.2. If there is no air flow, remove from service and notify SSF Management to return cylinder to manufacturer, or qualified vendor, for repair/replacement.

6.3.2.3.6. Document observations and any actions taken, if applicable, on Appendix B.

6.3.2.3.7. Return EEBD to station per Section 6.2.3.2.

6.3.3. Disassembly for Equipment Refill, Repair, or Hydrotest
- 6.3.3.1. Grasp the pull tab, open the flap of the carry bag, and remove the hood assembly and hose.
- 6.3.3.2. Disconnect the Hood Assembly from the Hose per Step 6.2.3.1.2.1.
- 6.3.3.3. Open the hook and loop retaining strap and remove the cylinder from the carry bag.
- 6.3.3.4. Retain the Hood Assembly and Carry Bag at the SSF.

6.3.4. Every five years
- 6.3.4.1. Hydrotest the aluminum cylinders:
  - 6.3.4.1.1. Hoosier Fire, Inc. or other qualified vendor
    - 6.3.4.1.1.1. Contact Hoosier Fire, Inc, or qualified vendor to obtain instructions on the process.
    - 6.3.4.1.1.2. Before shipping, empty the cylinder, close valve once empty, and disassemble equipment per Section 6.3.3.
    - 6.3.4.1.1.3. Record the serial number of the unit (VNxxxx) found engraved on the neck of the cylinder on Appendix C.
    - 6.3.4.1.1.4. Transport ONLY the cylinder (not the entire apparatus).
    - 6.3.4.1.1.5. Request transport to qualified local vendor with a qualified hazardous goods courier or ship to non-local vendor.
      - 6.3.4.1.1.5.1. SSF personnel are only permitted to transport completely empty cylinders to a local approved vendor. Cylinders containing any compressed air are not to be transported by SSF personnel in vehicles.
    - 6.3.4.1.1.6. Record date unit is couriered or shipped to vendor on Appendix C.
    - 6.3.4.1.1.7. Upon notification of maintenance completion, schedule a qualified hazardous goods courier to return equipment to the SSF.
  - 6.3.4.1.2. Obtain documentation and/or testing report upon completion and receipt of cylinder. Record serial number (engraved on the neck of the cylinder) of unit received on Appendix C. Verify serial number of unit received is the same serial number recorded for the unit sent out for service.
    - 6.3.4.1.2.1. If report is not acceptable, remove equipment from service. Contact applicable vendor for further directives.
  - 6.3.4.1.3. Document observations and actions on Appendix C. Attach documentation and/or testing report to Appendix C.
  - 6.3.4.1.4. Cylinder will have been refilled as part of the testing. Therefore, perform a leak test and document relevant actions per Section 6.3.5.1.3 once unit has been returned.
  - 6.3.4.1.5. Notify SSF Management if unable to complete testing.

6.3.5. As needed
- 6.3.5.1. Cylinder re-fill (occurs concurrently with hydrotest).
  - 6.3.5.1.1. Assess the unit as follows:

6.3.5.1.1.1. Verify that the cylinder hydrotest date is not past due.
6.3.5.1.1.1.1. If it is past due, do NOT use the cylinder until the hydrostatic re-test is completed as described in Section 6.3.4.
6.3.5.1.1.2. Inspect the cylinder for damage.
6.3.5.1.1.2.1. If damaged, remove from service and notify SSF Management to replace the cylinder.
6.3.5.1.2. Follow Steps 6.3.4.1.1 – 6.3.4.1.3 to refill cylinder.
6.3.5.1.3. After the fill, run a leak test:
6.3.5.1.3.1. Make a solution of water and soap.
6.3.5.1.3.2. Using a clean cloth, wipe the solution around the valve connection, charging port protective cap, and hose attachment.
6.3.5.1.3.3. Look to see if any bubbles are present.
6.3.5.1.3.4. If there are no bubbles present, dry the equipment with a soft cloth.
6.3.5.1.3.5. If bubbles are present (indicative of a leak), notify SSF Management to repair the cylinder.
6.3.5.1.3.6. Immerse the open end of the supply hose in clean water.
6.3.5.1.3.7. If bubbles are detected from the open end of the supply hose, hand tighten the cylinder valve knob until the leak disappears.
6.3.5.1.3.8. If the leak does not disappear, notify SSF Management to repair the cylinder.
6.3.5.1.3.9. If there are no bubbles present, dry the equipment with a soft cloth.
6.3.5.1.3.10. Reassemble equipment per Section 6.3.5.2.
6.3.5.1.3.11. Complete a Function Test as described in Steps 6.3.2.3.3-6.3.2.3.6 and return unit to holder.
6.3.5.1.3.12. Document results and actions on Appendix C.

6.3.5.2. Reassemble Equipment after Refill, Repair, or Hydrotest
6.3.5.2.1. Return cylinder to carry bag with regulator visible through gauge window, and refasten hook and loop retaining strap.
6.3.5.2.2. Reconnect the Hood Assembly to the Hose by reversing directives in Step 6.2.3.1.2.1.
6.3.5.2.3. Return EEBD to station per Section 6.2.3.2.

7. REFERENCES
7.1. ISBER Best Practices-current version
7.2. 3M Scott ELSA Emergency Escape Breathing Device, Operating Manual – located in SSF Management Office
7.3. Hoosier Fire Equipment, Inc.
3863 N. Commercial Parkway
Greenfield, IN 46140
317-891-8375
www.hoosierfire.com

8. DOCUMENTATION
   8.1. Usage and maintenance logs are submitted for review to SSF Management and are maintained per SF-1-6 Controlled Document Management SOP.
   8.2. All Deviations are managed per the SF-1-9 Deviation Management SOP.

9. APPENDICES
   9.1. The current version of each of the following appendices is used to guide and/or implement this SOP:
   APPENDIX A – Scott ELSA Emergency Escape Breathing Device Usage Log (1 Page)
   APPENDIX B – Scott ELSA Emergency Escape Breathing Device Weekly/Monthly Maintenance Log (1 Page)
   APPENDIX C – Scott ELSA EEBD Service Maintenance Log (1 Page)
   APPENDIX D – Collaborating Biorepository Personnel Training (2 Pages)
   APPENDIX E – 3M Scott ELSA EEBD – N Donning Procedure (1 Page)

10. COLLABORATING BIOBANK TRAINING DIRECTIVES
   10.1. CBP comply with Read and Understand training on SOP SF-3-10 (SOP for Scott ELSA Emergency Escape Breathing Device Units) by continuing to and reading Collaborating Biorepository Personnel Training, Appendix D, of this SOP.
   10.2. CBP comply with directives defined in Appendix D.

Scott ELSA Emergency Escape Breathing Device Usage Log Year:							
Serial Number *(Record engraved # from neck of cylinder)*	Date and Time of Use	Clean and Disinfect Cylinder Assembly and Carry Bag *(Expected Result = Completed)*	Clean and Disinfect Hood Assembly *(Normal = Completed)*	Return to Station *(Expected Result = Completed)*	Gauge Reading ≥ 2250 psi (Y or N) *(Expected Result = Y)*	Initials/Date	Comments / Corrective Actions
Reviewed By / Date:							

Month / Year:

Scott ELSA Emergency Escape Breathing Device Weekly and Monthly Maintenance Log

Serial Number: _____ *(Record engraved Serial Number from neck of cylinder)*

Weekly	Observation/Action	Acceptable Range	Acceptable	Initials/ Date	Comments / Corrective Actions (required if not acceptable)
Gauge Reading	☐ ≥ 2250 psi ☐ < 2250 psi - See comment	≥ 2250 psi	☐ Yes ☐ No		
Gauge Reading	☐ ≥ 2250 psi ☐ < 2250 psi - See comment	≥ 2250 psi	☐ Yes ☐ No		
Gauge Reading	☐ ≥ 2250 psi ☐ < 2250 psi - See comment	≥ 2250 psi	☐ Yes ☐ No		
Gauge Reading	☐ ≥ 2250 psi ☐ < 2250 psi - See comment	≥ 2250 psi	☐ Yes ☐ No		
Gauge Reading	☐ ≥ 2250 psi ☐ < 2250 psi - See comment ☐ Not Applicable	≥ 2250 psi	☐ Yes ☐ No ☐ N/A		
Monthly	Observation/Action	Acceptable Range	Acceptable	Initials/ Date	Comments / Corrective Actions (required if not acceptable)
Hood	☐Completed. No Visible defects. ☐Other. See comments.	Completed. No visible defects.	☐ Yes ☐ No		
Carrying Case	☐Completed. No visible defects deemed likely to compromise integrity of the case noted. ☐Other. See comments.	Completed. No visible defects deemed likely to compromise integrity of the case.	☐ Yes ☐ No		
Function Test	☐Completed. Air flow observed. ☐Other. See comments.	Completed. Air flow observed.	☐ Yes ☐ No		

Reviewed By / Date:

Scott ELSA EEBD Service Maintenance Log
Year:

Serial Number: _____ Next Hydrotest Retest Due Date: _____

Hydrotest (every 5 years)	Observation/Action	Acceptable Range	Acceptable	Initials/Date
Pre-shipment Assessment: Cylinder Inspection	❑ Completed. No repairs indicated. ❑ Other. See comments.	Completed / No repairs indicated.	❑ Yes ❑ No	
Record serial number	**S/N:**	Completed.	❑ Yes ❑ No	
Unit drained of air and shipped	❑ Completed. Date_____ ❑ Not Applicable ❑ Other. See comments.	Completed.	❑ Yes ❑ No	
Unit received **S/N:_____**	❑ Completed. S/N recorded before shipping matches S/N recorded upon receipt. Date_____ ❑ Other. See comments.	Completed. Serial numbers match.	❑ Yes ❑ No	
Hydrotesting report received	Testing Date_____ ❑ Completed. No repairs indicated. ❑ Other. See comments.	Completed / No repairs indicated.	❑ Yes ❑ No	
Fill documentation and/or report received	Fill Date_____ ❑ Completed. No repairs indicated. ❑ Other. See comments.	Completed / No repairs indicated.	❑ Yes ❑ No	
After fill: Leak test	❑ Completed. No leaks. No repairs indicated. ❑ Other. See comments.	Completed. No leaks / No repairs indicated.	❑ Yes ❑ No	
After fill: Function test	❑ Completed. Airflow observed. No repairs indicated. ❑ Other. See comments.	Completed. Airflow observed / No repairs indicated.	❑ Yes ❑ No	
Air Cylinder Refill (as needed)	Observation/Action	Acceptable Range	Acceptable	Initials/Date
Pre-shipment Assessment: Cylinder Inspection	❑ Completed. No repairs indicated. ❑ Other. See comments.	Completed / No repairs indicated.	❑ Yes ❑ No	
Record serial number	**S/N:**	Completed.	❑ Yes ❑ No	
Unit drained of air and shipped	❑ Completed. Date_____ ❑ Not Applicable ❑ Other. See comments.	Completed.	❑ Yes ❑ No	
Fill documentation and/or report received	Fill Date_____ ❑ Completed. No repairs indicated. ❑ Other. See comments.	Completed / No repairs indicated.	❑ Yes ❑ No	
Unit received **S/N: _____**	❑ Completed. S/N recorded before shipping matches S/N recorded upon receipt. Date_____ ❑ Other. See comments.	Completed. Serial numbers match.	❑ Yes ❑ No	
After fill: Leak test	❑ Completed. No leaks. No repairs indicated. ❑ Other. See comments.	Completed. No leaks / No repairs indicated.	❑ Yes ❑ No	
After fill: Function test	❑ Completed. Airflow observed. No repairs indicated. ❑ Other. See comments.	Completed. Airflow observed / No repairs indicated.	❑ Yes ❑ No	

Comments / Corrective Actions (required if results are not acceptable)

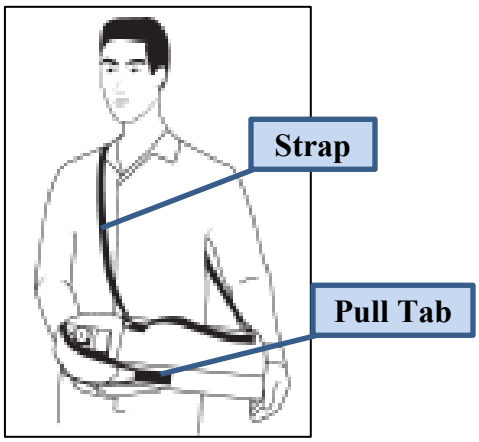
Reviewed By / Date:

Collaborating Biorepository Personnel (CBP) Training

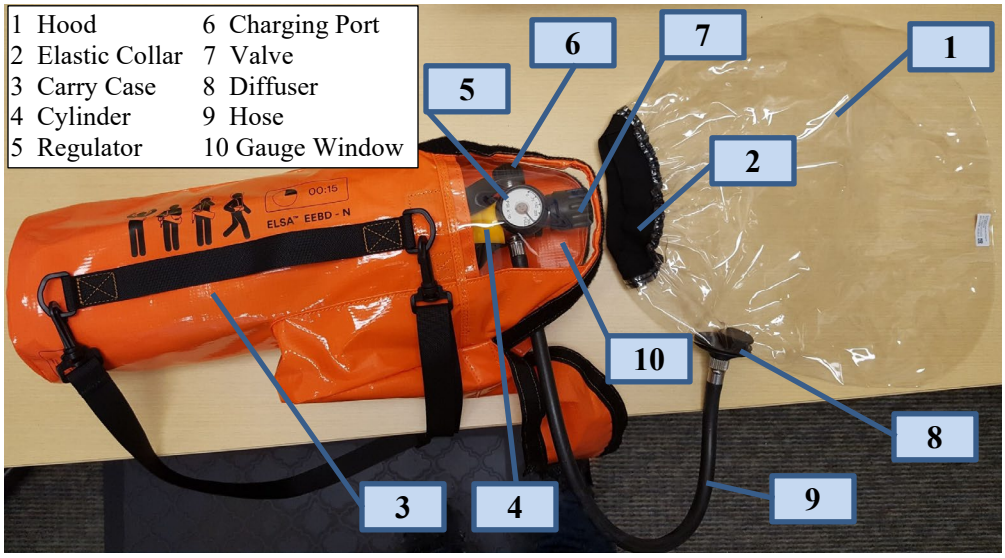
1. This Standard Operating Procedure (SOP) SF-3-10, SOP for 3M Scott ELSA-N Emergency Escape Breathing Device (EEBD) Units, defines use of an ELSA EEBD in the TK 252 Liquid Nitrogen Freezer Room in the Indiana CTSI Specimen Storage Facility (SSF). The ELSA EEBD is used by personnel who (1) are in TK 252 at the time the oxygen level becomes dangerous (below 19%) **AND** (2) are not able to vacate the low oxygen level area immediately.

2. The M10 BiOS Room (TK 258) is outside the scope of SSF Standard Operating Procedures. The IU Genetics Biobank has its own procedures for safely accessing TK 258 and utilizing an EEBD, however the SSF maintains EEBD unit(s) in service in TK 258. Per Step 5 of this Appendix, equipment is returned to the SSF for cleaning after use in either TK 252 OR TK 258.

3. **Components of the Scott ELSA EEBD**



1 Hood	6 Charging Port
2 Elastic Collar	7 Valve
3 Carry Case	8 Diffuser
4 Cylinder	9 Hose
5 Regulator	10 Gauge Window



4. **Donning the ELSA EEBD to escape from TK 252 and associated area(s) due to low oxygen condition:**
   4.1. Lift pack to remove from wall mount.
   4.2. With the Scott ELSA EEBD cylinder valve facing up and out, and the opening pull tab easily accessible, place the carry bag on the body so that one arm is through the strap and the strap is draped behind the neck.
   4.3. Lift the pull tab to open the carry bag and expose the hood.

4.4. Remove hood from pouch and hose from the bag.
4.5. Open cylinder valve completely, turning counterclockwise, until a rush of air flows into the bag.
4.6. **DO NOT** put on the hood before opening the valve or if you do not hear the sound of air rushing into the hood when the valve is opened.

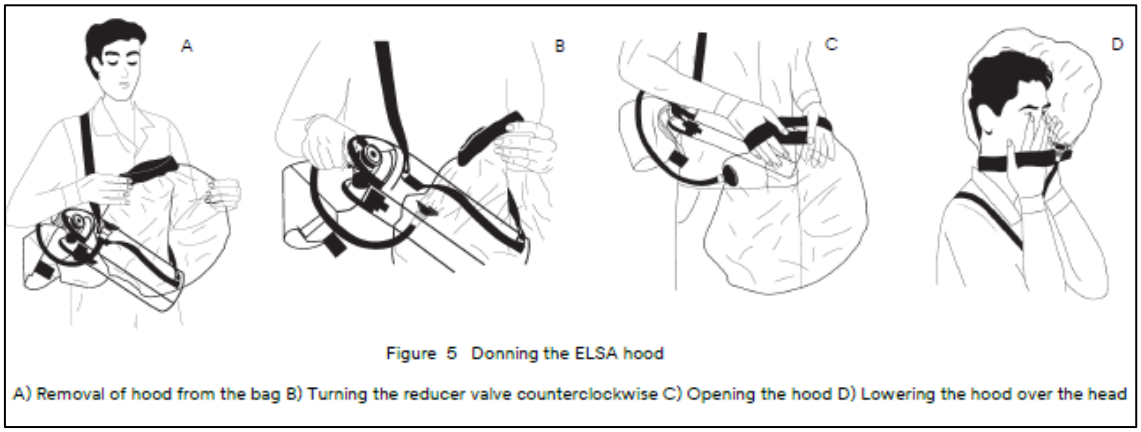


Figure 5 Donning the ELSA hood

A) Removal of hood from the bag B) Turning the reducer valve counterclockwise C) Opening the hood D) Lowering the hood over the head

4.7. Don hood by opening the elastic collar with both hands and lowering it over the head until the neck seal makes good contact around the neck and the diffuser assembly is in front of the face.
4.7.1. Ensure the neck seal is secure against the neck with no obstructions such as clothing, long hair, or beards.

Figure 6 ELSA hood fully donned

4.8. Exit to a safe area.
4.9. Appendix E of this SOP is the 3M Scott ELSA EEBD-N Donning Procedure, and it is posted in TK 252 and the Ante Room (TK 250).
4.10. After reaching a safe environment, remove hood from head.
4.10.1. Stretch the elastic collar open with both hands and pull hood off of the head.
4.10.2. Close cylinder valve completely.
4.10.3. Remove unit by lifting strap over the head.

5. **After using an EEBD in TK 252 OR TK 258:**
5.1. Promptly notify SSF personnel that the ELSA EEBD has been used.
5.2. ***Place the unit in the Equipment Out of Service area on the northern bench in TK 250*** (near the sink) for inspection and maintenance.

6. **Proceed to Appendix E to review the ELSA EEBD Donning Procedure.**

3M™ Scott™ ELSA™ EEBD - N Donning Procedure

1

Put one arm through the strap and place the carry bag on the body with the gauge window facing up and opening pull tab accessible. Adjust the strap to desired length for comfort.

2

Lift the pull tab and remove the hood assembly and hose.

3

Turn the valve counterclockwise until it spins freely. Do not put the hood on before opening. Your rated air supply duration begins when the valve is opened.

4

Immediately don the hood by lowering it over your head with the diffuser assembly in front. Hold your breath—if the hood doesn't inflate, take off the hood and do not use the respirator.

5

Ensure the neck seal is secure with no obstructions such as hair, clothing or beards.

6

Leave the hazardous area holding the air supply unit to keep it from moving excessively.

Pre-Operational Check

Ensure the device is fully pressurized by checking the gauge at the top of the cylinder.

3M™ Scott™ ELSA™ EEBD - N Devices

- 5 Minute **8007212**
- 10 Minute **8007213**
- 15 Minute **8007214**

3MScott.com/ELSA

⚠WARNING These respirators help to protect against certain airborne contaminants. Before use, the wearer must read and understand the User Instructions provided as part of the product packaging. A written respiratory protection program must be implemented meeting all the requirements of OSHA 1910.134 including training, fit testing and medical evaluation. In Canada, CSA standards Z94.4 requirements must be met and/or requirements of applicable jurisdiction, as appropriate. Improper use may result in sickness or death. For correct use, see supervisor and User Instructions, or call 3M PSD Technical Service in USA at 1-800-243-4630 and in Canada at 1-800-267-4414.

This donning poster is a guide only. Users of this product should be trained and be familiar with User Instructions before use.