

Biological Safety Cabinet (BSC) Cleaning: Below the Deck

NIH Division of Occupational Health and safety

(Individuals performing this procedure must have documented completion of NIH Laboratory safety training)

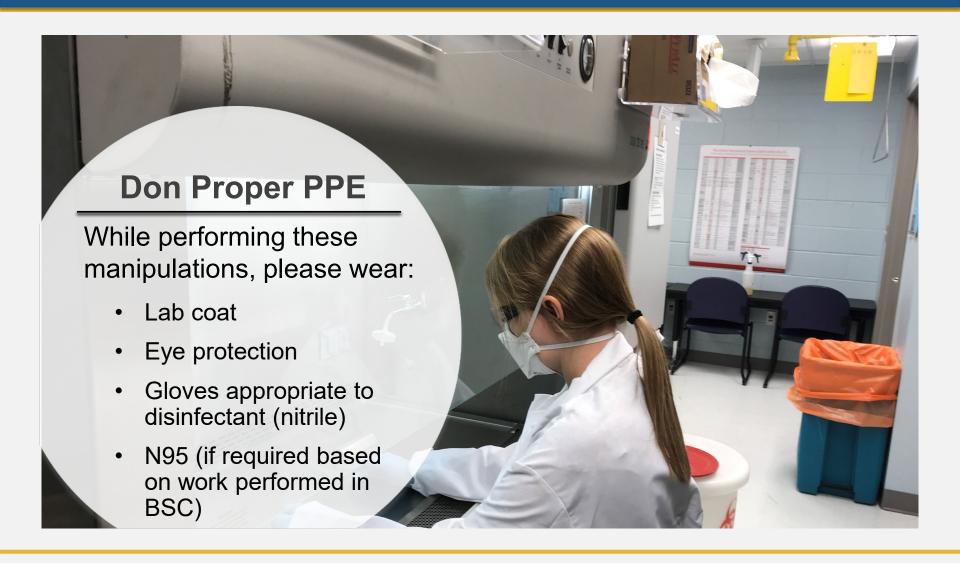
BSC Appearances





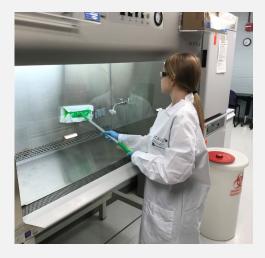
Outer appearances don't always indicate what's inside

Proper Personal Protective Equipment





Initial Cleaning





Initial Cleaning

- Wipe down entire hood with 1:10 Bleach or appropriate disinfectant (~10 minutes). We recommend using a disposable moping product as pictured here, lined with a paper towel.
- Allow the surface to dry
- Follow up with wiping entire surface down with 70% Ethanol



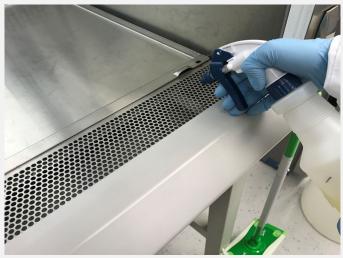
Run Airflow Continuously

- Turn on air flow in the hood and run continuously for 48 hours (weekend) (This helps desiccate biological material contained within the unit)
- As a precaution, tape the opening of the hood to prevent it from being used
- Place a sign informing that the BSC will be out of service until the decontamination process is completed



Workspace Deck Removal





Prepare Workspace Deck for Removal

- Remove screw pins that are holding the front grill in place.
- Spray down the front grill, being sure to saturate the underside.
- Ensuring the drain is closed, SLOWLY pour
 1L diluted bleach down the grill

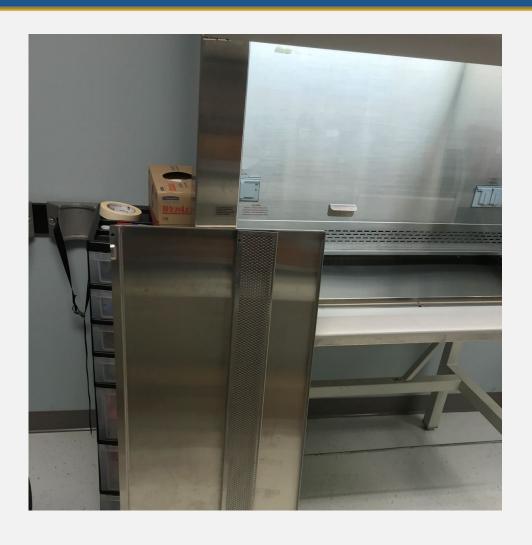
Lower Workspace Deck Cleaning

Open the Lower Deck

- Lift the lower workspace deck and spray down with 1:10 bleach solution, making sure to saturate the entire surface
 - This process may require 2 persons if the BSC is 6 ft or larger
- Allow 10 minutes of contact time for the bleach to disinfect all potentially contaminated surfaces
- Remove any large debris by hand (i.e., kimwipes, pipette tips, etc.)



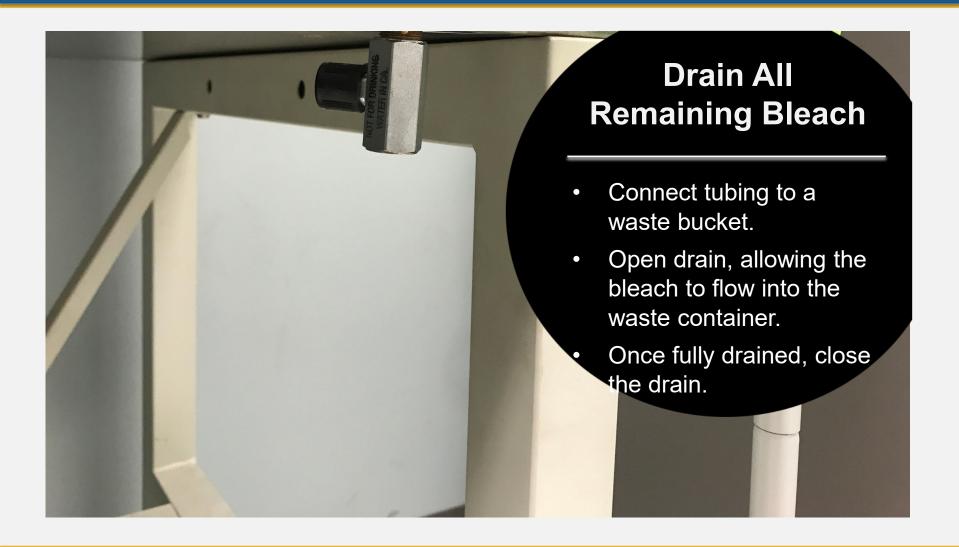
Remove Lower Workspace Deck and Grill



Remove Lower Workspace Deck and Grill

- After 10 minutes, remove both front grill and workspace deck.
- Be careful and obtain help, these items are both heavy and sharp.
- Carefully wipe off all bleach from the front grill and workspace.
- Allow several minutes to air dry.
- Wipe down the front grill and the bench with 70% EtOH to remove all bleach residue.



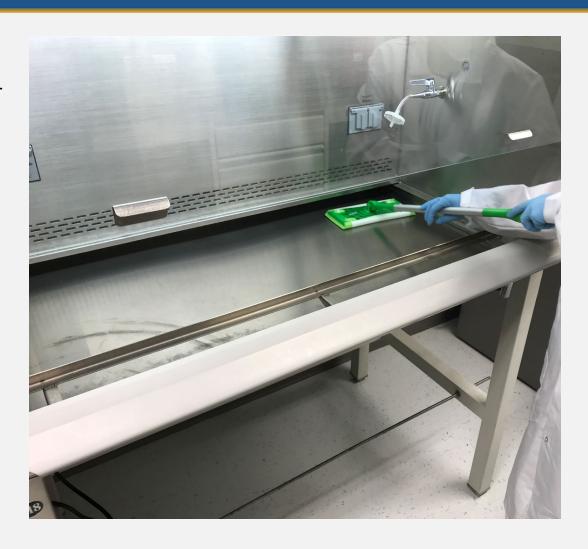




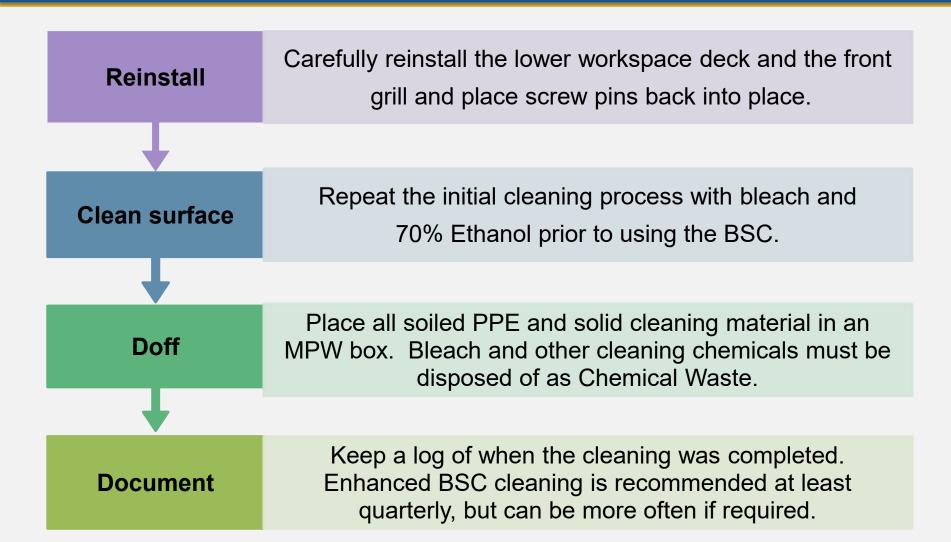
Clean Undersurface of BSC

Clean Undersurface

- With the bleach, grill and workspace deck removed, proceed to clean the undersurface removing all dirty, dust, and debris. Clean out the paper-catch.
- This will likely require multiple paper towels to remove all material
- Allow to air dry
- Repeat cleaning the entire undersurface with 70% Ethanol, to prevent corrosion of stainless steel BSC

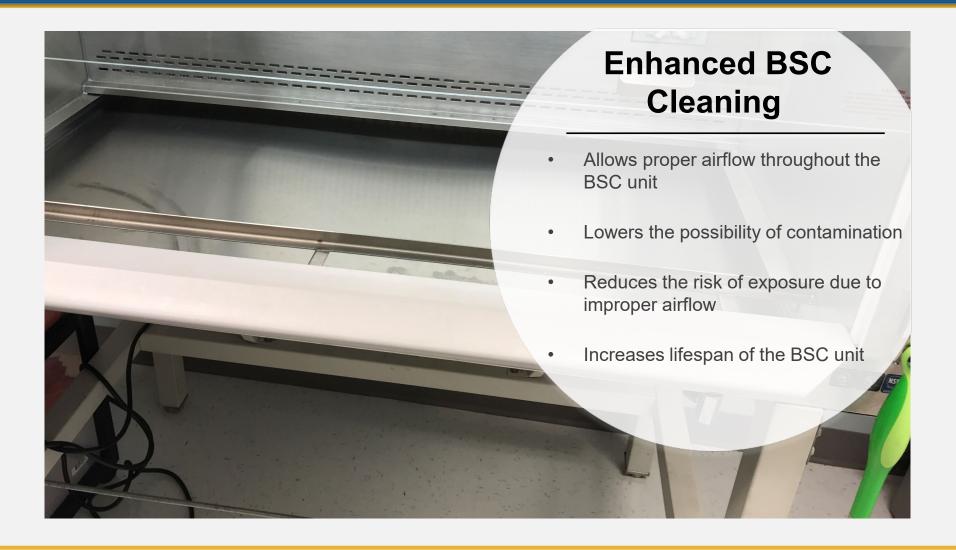


Reassemble the BSC Unit





Enhanced BSC Cleaning





Please contact your DOHS Safety Specialist with any procedural questions.

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