# GAS Equipment and Room Decontamination Procedure

**PURPOSE:**

* This procedure provides instructions for equipment and room decontamination

## DOCUMENTATION/RECORDS

* Daily Maintenance Log

## SAFETY CONSIDERATIONS

* Standard precautions. Refer to MB 2.02 Biohazard Containment
* Use of engineering controls: Refer to MB 3.01 Engineering Controls to Prevent Nucleic Acid Contamination

#### MATERIALS REQUIRED

| **Equipment** | **Reagents** | **Supplies** |
| --- | --- | --- |
| BioSafety Hood | Sani-Cloth Bleach Wipes (10%) | Nitrile gloves (powder-free) |
| Pipettes | 70% alcohol | Tacky mats |
| Test tube racks | 5% Extran | Lint free absorbent cloths |
| Disc cooling block |  | Cotton tip swabs |
| Simplexa Integrated Cycler |  |  |

## ABBREVIATIONS

PPE: personal protective equipment

BSC: biosafety cabinet

UV: ultraviolet light

Area/Room 1: Clean room

Area/Room 2: Processing room

Area/Room 3: Amplification room

**PROCEDURE A:** Follow the activities in the table below for equipment and room decontamination

**Equipment and Room Decontamination**

| **Activity** | **Step** | Action (refer to Table 1 for recommended schedule) |
| --- | --- | --- |
| **PPE** | 1 | Gloves and lab coat required |
| **Tube racks**  Room 2 | 2 | Soak tube racks in 5% Extran for minimum of 5 min after each run set-up and when visibly contaminated  * Rinse with water * Air dry |
| **Cooling blocks** | 3 | Wipe down Nalgene cooling block (rm 1) with 5% extran at the end of the day and when visibly contaminatedAllow Extran to sit for 4 – 5 minFollow with 70% alcohol |
| **Cooling blocks** | 4 | Soak aluminum disc cooling block in 5% Extran after each use.Allow to sit for 4 – 5 min  * Rinse with water * Air dry |
| **Hoods, Pipettes and Bench tops**  Room 1, 2, 3 | 5 | Wipe down hoods, pipettes and benchtops at the end of the day and when visibly contaminated   |  |  |  | | --- | --- | --- | | Location | Step | Action | | **Room 1**   * 5% Extran * 70% alcohol | 1 | Allow 5% Extran to sit for approximately 5 min | | 2 | Remove Extran from surfaces with 70% alcohol | | 3 | Lay pipettes flat in hood | | **Room 2 and 3**   * Sani-Cloth Bleach * Water * 70% alcohol | 1 | Allow bleach to sit 4 – 5 min | | 2 | Remove bleach residue with water followed by 70% alcohol | | 3 | Lay pipettes flat in hood | | **Pipettes** (additional information) | 1 | Carefully clean the pipettor handle and barrel | | 2 | Electronic pipettes: Avoid electronic buttons and AC charger socket when cleaning | | 3 | Manual pipettes: Do not allow cleaning solutions to enter the plunger and gear mechanism | | 4 | The above solutions are corrosive and over time can contribute to the electronic components of the pipettes and increased resistance when adjusting volumes on manual pipettes | |
| **UV Hoods** | 7 | UV hoods  |  |  | | --- | --- | | Step | Action | | 1 | Turn off lights | | 2 | Lower sash | | 3 | Turn on UV light for 15 min | |
| **Tacky matts** | 8 | Change tacky mattes in rooms 1, 2 and 3 daily; more frequently if needed |
| **Record** | 9 | Fill out daily maintenance log; initial |

**Table 1: Routine Decontamination Schedule** (*increase frequency if contamination/spills occur*)

| Room | **Step** | **Action** | **Frequency** |
| --- | --- | --- | --- |
|  | 1 | Clean hood and UV-irradiate hood | Daily |
| **Reagent Prep** | 2 | Clean benchtops, pipettes, racks, and cooling blocks | Daily |
| Room 1 | 3 | Replace lab coats | Weekly |
|  | 4 | Replace tacky matt | Daily; more frequently if needed |
|  | 5 | Discard waste | As needed |
| **Specimen Processing**  **Room 2** | 1 | Clean hood | After each procedure |
| 2 | Clean benchtops, pipettes and cooling blocks | After each procedure |
| 3 | Clean specimen racks and scissors | After each use |
|  | 4 | Clean centrifuges and rotors | As needed   * Possible contamination * Spill clean-up |
|  | 5 | Replace lab coats | Weekly |
| 6 | Replace tacky matt | Daily; more frequently if needed |
|  | 7 | Discard waste | Daily |
|  | 1 | Clean benchtops | After each procedure; more frequently if required |
| **Amplification Room 3** | 2 | Clean Liaison MDX | As needed   * Possible contamination * When returning instrument for service |
|  | 3 | Replace lab coats | Weekly |
|  | 4 | Discard amplification waste | After each run (Zip lock) |
|  | 5 | Replace tacky matt | Daily; more frequently if needed |

**REFERENCES**

1. Simplexa™ 3M™ Integrated Cycler Studio 5.0 , 3M™ Integrated Cycler Operator Manual Reference 34-8710-8382-9, PI.MOL1101.UD\_REV. F for use with user defined assays, Focus Diagnostics 2009-2012, Focus Diagnostics, Inc. Cypress, CA [Simplexa Operator Manual](http://khan.childrensmn.org/Manuals/Lab/SOP/MolBio/UserMan/212340.pdf)

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| --- | --- | --- | --- | --- |
| Historical Record | | | |  |
|  | **Version** | **Written/Revised by:** | **Effective Date:** | **Summary of Revisions** |
| 1 | P. Ackerman | 1.23.16 | Initial Version |
|  | 2 | P. Ackerman | 08.16.2016 | Reformatted for CMS; prev GAS 008 v1 |
|  | 3 | P. Ackerman | 03.29.17 | Instrument name change from Focus Integrated Cycler to DiaSorin Liaison MDX; fixed hyperlinks for SharePoint upload |
|  | 3 | J. Laramie/M. Merryman | 03.29.17 | Biennial review: 07.02.18 JL/MLM |
|  | 4 | J. Laramie | 08.13.18 | -Changed use of bleach to 5% extran for decontamination of nalgene block (room 1) and aluminum cold blocks (room 2) |