Bordetella Equipment and Room Decontamination

PURPOSE:

- This procedure provides instructions for decontamination of equipment and molecular rooms used for Bordetella testing

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 Cabinet	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
Liaison MDX		
Stainless steel scissors		

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

<table>
<tr><th>Activity</th><th>Step</th><th>Action (refer to Table 1 for recommended schedule)</th></tr>
<tr><td rowspan="2">Cooling blocks</td><td>3</td><td>Wipe down Nalgene cooling block (rm 1) with Sani-Cloth Bleach Wipe at the end of the day and when visibly contaminated
Allow bleach to sit for 4 – 5 min
Remove bleach with water followed by 70% alcohol</td></tr>
<tr><td>4</td><td>Wipe down aluminum disc cooling block with Sani-Cloth Bleach Wipe after each use.
Allow bleach to sit for 4 – 5 min
Rinse with water
Air dry
Caution: Do not leave bleach on aluminum equipment more than 5 min – the metal will corrode.</td></tr>
<tr><td>Scissors</td><td>5</td><td>Wipe down scissors with Sani-Cloth Bleach Wipe after each use
Allow bleach to sit for 4 – 5 min
Rinse with water
Air dry
Store individually in clean Zip lock bag until use</td></tr>
<tr><td>Hoods, Pipettes and Bench tops

Room 1, 2, 3</td><td>5</td><td>Wipe down hoods, pipettes and benchtops after each procedure and when visibly contaminated
<table>
<tr><th>Location</th><th>Step</th><th>Action</th></tr>
<tr><td rowspan="3">Room 1
5% Extran
70% alcohol</td><td>1</td><td>Allow 5% Extran to sit for approximately 5 min</td></tr>
<tr><td>2</td><td>Remove Extran from surfaces with 70% alcohol</td></tr>
<tr><td>3</td><td>Lay pipettes flat in hood</td></tr>
<tr><td rowspan="3">Room 2 and 3
Sani-Cloth Bleach
Water
70% alcohol</td><td>1</td><td>Allow bleach to sit 4 – 5 min</td></tr>
<tr><td>2</td><td>Remove bleach residue with water followed by 70% alcohol</td></tr>
<tr><td>3</td><td>Lay pipettes flat in hood</td></tr>
<tr><td rowspan="4">Pipettes (additional information)</td><td>1</td><td>Carefully clean the pipettor handle and barrel</td></tr>
<tr><td>2</td><td>Electronic pipettes: Avoid electronic buttons and AC charger socket when cleaning</td></tr>
<tr><td>3</td><td>Manual pipettes: Do not allow cleaning solutions to enter the plunger and gear mechanism</td></tr>
<tr><td>4</td><td>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</td></tr>
</table></td></tr>
<tr><td>UV Hoods</td><td>7</td><td>UV-irradiate hoods at the end of the day
<table>
<tr><th>Step</th><th>Action</th></tr>
<tr><td>1</td><td>Turn off lights</td></tr>
<tr><td>2</td><td>Lower sash</td></tr>
<tr><td>3</td><td>Turn on UV light for 15 min</td></tr>
</table></td></tr>
<tr><td>Tacky matts</td><td>8</td><td>Change tacky mattes in rooms 1, 2 and 3 daily; more frequently if needed</td></tr>
<tr><td>Record</td><td>9</td><td>Fill out daily maintenance log; initial</td></tr>
</table>

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

Room	Step	Action	Frequency
Reagent Prep Room 1	1	Clean hood and UV-irradiate hood	Daily
	2	Clean benchtops, pipettes, racks, and cooling blocks	Daily
	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
Amplification Room 3	1	Clean benchtops	After each procedure; more frequently if required
	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

Historical Record

Version	Written/Revised by:	Effective Date:	Summary of Revisions
1	P. Ackerman	1.23.16	Initial Version
2	P. Ackerman	07.20.16	Reformatted for CMS upload
3	P. Ackerman	03.29.17	Instrument name change from Focus Integrated Cycler to DiaSorin Liaison MDX; fixed hyperlinks for SharePoint upload