NOTE: The following datasheets are for use with the Enhanced Accreditation Program only:

BIOSAFETY CABINET FIELD CERTIFIER ACCREDITATION
PRACTICAL EXAM DATA SHEET

DOWNFLOW VELOCITY TEST
NSF/ANSI 49 version
(Time allotted: 50 minutes)

CABINET INFORMATION

Mfr:_____Model #:_____Serial #:_____Type: A1 A2 C1 B1 B2

MEASUREMENT DEVICE INFORMATION

Device:_____Mfr:_____Model #:_____Serial#:_____Cal Due Date:_____

DATA

Number of Rows		Number of Columns		Number of Readings	Distance from Walls / Sash:	Grid Spacing Front-to-Back:	Grid Spacing Side-to-Side:	Probe Height Above Sash
_____	X	_____	=	_____	___/___	_____	_____	_____

You must check one box only: Information provided from ☐ Data Plate ☐ NSF 49 minimum requirements

	Specifications			As-measured (from candidate's data)		
Zones are N/A When Grid is Uniform	Avg. Air Velocity Acceptable Range	Allowable Uniformity (Calculated from airflow avg.) Min	Max	Average Air Velocity	Individual Point Velocity Readings Min	Max
Uniform Only	_____-_____					
Zone _____	_____-_____					
Zone _____	_____-_____					
Zone _____	_____-_____					
Zone _____	_____-_____					

Only use uniform row above to report uniform grid data. When using a zoned grid, enter the zone number to the right of the "Zone____" associated with each row. Report results by zone, not row.

INDIVIDUAL DOWNFLOW VELOCITY POINT READINGS

Zone__														
Zone__														
Zone__														
Zone__														

Reason for failure (if any): _____

Corrective action required:_____

Assume inflow velocity is already at the nominal set point. Note whether the BSC has separate supply/exhaust blowers or an exhaust damper. Check the appropriate corrective action(s) required to balance both inflow and downflow:

Supply blower speed:	Increase	☐	Decrease	☐	No change ☐
Exhaust blower speed /Damper:	Increase/Open	☐	Decrease/Close	☐	No change ☐

Result of this individual test only: Pass Fail

Candidate: _____ Date:_____

Examiner:_____ Date:_____

BIOSAFETY CABINET FIELD CERTIFIER ACCREDITATION
PRACTICAL EXAM DATA SHEET

INFLOW VELOCITY TEST, DIM METHOD
(Time allotted: 30 minutes)

CABINET INFORMATION

Mfr:_____Model #:_____Serial #:_____Type: A1 A2 C1 B1 B2

MEASUREMENT DEVICE INFORMATION

Device:_____Mfr:_____Model #:_____Serial#:_____Cal Due Date:_____

DATA

Capture Hood Dimensions		Openings Covered Using	Instrument Settings
Length	Width	☐ Tape ☐ Plastic ☐ Plates ☐ Other: _____ (Check all that apply)	☐ CFM ☐ LFPM ☐ Inches H_2O ☐ Other:_____ ☐ Temperature Compensation ☐ Back Pressure Compensation ☐ Other: _____. (Check all that apply)
_____	_____		

Work Access Opening Dimensions			Correction Factor (if any)	Formula Used to Calculate Inflow Velocity:
Length	Width	Area		
_____	_____	_____	_____	

Specifications		As-measured (from candidate's data)	
Average Inflow Volume Acceptable Range	Inflow Velocity Acceptable Range	Average Inflow Volume	Inflow Velocity
_____-_____	_____-_____	_____	_____

INDIVIDUAL DIM READINGS

Reason for failure (if any): _____

Corrective action required:_____

Assume downflow velocity is already at the nominal set point. Note whether the BSC has separate supply/exhaust blowers or an exhaust damper. Check the appropriate corrective action(s) required to balance both inflow and downflow:

Supply blower speed:	Increase ☐	Decrease ☐	No change ☐
Exhaust blower speed /Damper:	Increase/Open ☐	Decrease/Close ☐	No change ☐

Result of this individual test only: Pass Fail

Candidate: _____ Date:_____

Examiner:_____ Date:_____

BIOSAFETY CABINET FIELD CERTIFIER ACCREDITATION
PRACTICAL EXAM DATA SHEET

INFLOW VELOCITY TEST, CONSTRICTED ACCESS OPENING METHOD
(Time allotted: 45 minutes)

CABINET INFORMATION

Mfr:_____Model #:_____Serial #:_____Type: A1 A2 C1 B1 B2

MEASUREMENT DEVICE INFORMATION

Device:_____Mfr:_____Model #:_____Serial#:_____Cal Due Date:_____

DATA

Number of Rows		Number of Columns		Number of Readings	Distance From Sides:	Grid Spacing Vertical:	Grid Spacing Horizontal:
_____	X	_____	=	_____	_____	_____	_____

You must check one box only: Information provided from ☐ Data Plate ☐ NSF 49 minimum requirements

Work Access Opening Dimensions			Correction Factor (if any)	Constricted Opening Dimensions		
Length	Width	Area		Length	Width	Area
_____	_____	_____	_____	_____	_____	_____

Formula Used to Calculate Inflow Velocity:

Specifications	As-measured (from candidate's data)	
Calculated Inflow Velocity Acceptable Range	Averages AirVolume (measured in constricted opening)	Calculated Inflow Velocity
_____-_____	_____	_____

INDIVIDUAL CONSTRICTED OPENING VELOCITY POINT READINGS

Reason for failure (if any): _____

Corrective action required (if any):_____

Assume downflow velocity was already at the nominal set point. Note whether the BSC has separate supply/exhaust blowers or an exhaust damper. Check the appropriate corrective action(s) required to balance both inflow and downflow:

Supply blower speed:	Increase	☐	Decrease	☐	No change ☐
Exhaust blower speed /Damper:	Increase/Open	☐	Decrease/Close	☐	No change ☐

Result of this individual test only: Pass Fail

Candidate: _____ Date:_____

Examiner:_____ Date:_____

BIOSAFETY CABINET FIELD CERTIFIER ACCREDITATION
PRACTICAL EXAM DATA SHEET
CALCULATING INFLOW/DOWNFLOW VELOCITY FROM VOLUME – TYPE B2 CABINET
(Time allotted: 40 minutes)

CABINET INFORMATION

Mfr:_____Model #:_____Serial #:_____Type: B2

MEASUREMENT DEVICE INFORMATION

Device:_____Mfr:_____Model #:_____Serial#:_____Cal Due Date:_____

DATA

Measured Total Exhaust Volume	Measured Inflow Volume	Calculated Supply Volume
_____CFM	_____CFM	_____CFM

Downflow Velocity Area at Measurement Height			Front Access Opening Dimensions		
Depth	Width	Area	Sash Height	Width	Area ft^2
_____inches (Front to Back)	_____inches (Side to Side)	_____ ft^2	_____inches	_____inches (Side to Side)	_____ ft^2

Formula Used to Calculate Inflow Velocity:	Formula Used to Calculate Downflow Velocity:

Specifications	
Calculated Inflow Velocity	**Calculated Downflow Velocity**
_____**FPM** **Result:** Pass Fail	_____**FPM** **Result:** Pass Fail
Inflow Velocity Acceptable Range	Downflow Velocity Acceptable Range
_____-_____ **FPM**	_____-_____ **FPM**

Reason for failure (if any): _____

Corrective action required (if any):_____

Supply blower speed: Increase ☐ Decrease ☐ No change ☐
Exhaust blower speed/Damper: Increase/Open ☐ Decrease/Close ☐ No change ☐

Overall result of this individual test only: Pass Fail

Candidate: _____ Date:_____

Examiner:_____ Date:_____

BIOSAFETY CABINET FIELD CERTIFIER ACCREDITATION
PRACTICAL EXAM DATA SHEET
HEPA FILTER LEAK TEST – TYPE A CABINET
(Time allotted: 40 minutes)

CABINET INFORMATION

Mfr:_____Model #:_____Serial #:_____Type: A1 A2 C1 B1 B2

MEASUREMENT DEVICE INFORMATION

Aerosol Photometer: Mfr:_____ Model #:_____ Serial #/Cal Due Date:_____

Aerosol Generator: Mfr:_____ Model #:_____ Serial #/Cal Due Date:_____

DATA

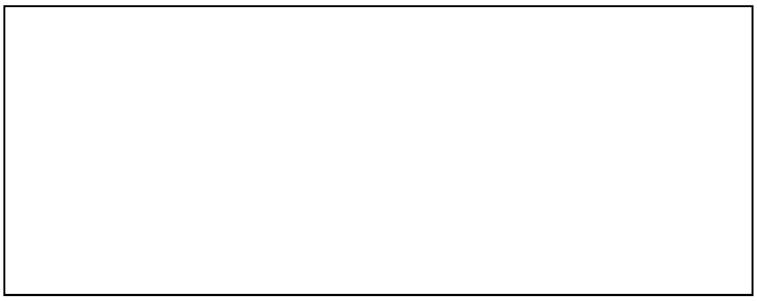
Challenged Air Volume (CFM)	Number of Laskin Nozzles Requested to Use	Theoretical Calculated Upstream Concentration	Aerosol Generator Pressure Oil used / Gauge Setting
_____	_____	_____	_____
Actual Measured Upstream Concentration	Min. Required Upstream Challenge	Sustained Penetration (Leak) Not to Exceed	Total Number of Leaks Found
_____	_____	_____	_____

LEAK LOCATIONS

Check One: ☐ Supply (Downflow) Filter
☐ Exhaust Filter

Back

Left



Right

Front

MARK LOCATION OF LEAKS USING THESE LABELS FOR THE LEAK TYPE: M= MEDIA GA= GASKET GL= GLUE

Reason for failure (if any): _____

Corrective action required (if any):_____

_____

_____

Result of this individual test only: Pass Fail

Candidate: _____ Date:_____

Examiner:_____ Date:_____

BIOSAFETY CABINET FIELD CERTIFIER ACCREDITATION
PRACTICAL EXAM DATA SHEET

EXHAUST HEPA FILTER LEAK TEST – TYPE B CABINET
(Time allotted: 25 minutes)

CABINET INFORMATION

Mfr:_____Model #:_____Serial #:_____Type: A1 A2 C1 B1 B2

MEASUREMENT DEVICE INFORMATION

Aerosol Photometer: Mfr:_____ Model #:_____ Serial #/Cal Due Date:_____

Aerosol Generator: Mfr:_____ Model #:_____ Serial #/Cal Due Date:_____

DATA

Cabinet/Filter Exhaust Volume (CFM)	Number of Laskin Nozzles Used	Theoretical Calculated Upstream Concentration	Aerosol Generator Pressure Oil used / Gauge Setting
_____	_____	_____	_____
Min. Required Upstream Challenge	Sustained Penetration (Leak) Not to Exceed	Sustained Penetration (Leak) Measured	
_____	_____	_____	

Description of Probe Test Methodology: _____

Reason for failure (if any): _____

Corrective action required (if any):_____

_____

_____

_____

_____

Result of this individual test only: Pass Fail

Candidate: _____ Date:_____

Examiner:_____ Date:_____

BIOSAFETY CABINET FIELD CERTIFIER ACCREDITATION
PRACTICAL EXAM DATA SHEET
VIBRATION TEST
(Time allotted: 15 minutes)

CABINET INFORMATION

Mfr:_____Model #:_____Serial #:_____Type: A1 A2 C1 B1 B2

MEASUREMENT DEVICE INFORMATION

Vibration Analyzer: Mfr:_____ Model #:_____ Serial #/Cal Due Date:_____

Meter reads in which of the following? Choose One:	Analyzer Functionality Choose One:	Probe Placement is in center of which of the following?
☐ Inches ☐ Meters ☐ Mil Inches ☐ Centimeters ☐ Micro Inches ☐ Millimeters ☐ Other: _____	☐ RMS ☐ Peak-to-Peak ☐ Other: _____	☐ Work Tray/Surface ☐ Work Area including intake grills. ☐ Other: _____

DATA

Specifications

Probe Location				Maximum Allowable Vibration
Side-to-Side Measurement	Front-to-Back Measurement	Placement Side-to-Center	Placement Front-to-Center	
_____	_____	_____	_____	_____ Inches RMS

Formula for Conversion of As-Measured Data to Inches RMS

As-Measured Data Prior to Conversion

Gross Vibration Level:	Background Vibration Level:	Net Vibration Level:
_____	_____	_____

Final Data

Gross Vibration Level	Background Vibration Level	Net Vibration Level
_____ Inches RMS	_____ Inches RMS	_____ Inches RMS

Reason for failure (if any): _____

Corrective action required:_____

_____

_____

Result of this individual test only: Pass Fail N/A

Candidate: _____ Date:_____

Examiner:_____ Date:_____

BIOSAFETY CABINET FIELD CERTIFIER ACCREDITATION
PRACTICAL EXAM DATA SHEET
LIGHTING INTENSITY TEST
(Time allotted: 15 minutes)

CABINET INFORMATION

Mfr:_____Model #:_____Serial #:_____Type: A1 A2 C1 B1 B2

MEASUREMENT DEVICE INFORMATION

Light Meter: Mfr:_____ Model #:_____ Serial #/Cal Due Date:_____

Meter reads in which of the following? Choose One:			Front to back Centerline is _____ (units) from inside edge of: Choose One:		
☐ Foot-candles	☐ lux	☐ Other: _____	☐ Work Tray	☐ Sash/Glass	☐ Other: _____

DATA

Specifications	
Probe Location	
Readings on both ends of the grid are taken no closer than _____ from: ☐ inside edge of work tray ☐ sidewalls	Calculated Side-to-Side Distance Between Readings _____
Minimum Allowable Light Intensity Average (Based on Obtained Data) _____	Maximum Allowable Background Light Intensity Average _____
Formula for conversion to foot-candles or lux (if other units are used):	

As-Measured Data			
Meter Scale Range _____---_____	Number of Readings _____	Average Light Intensity _____	Avg. Background Intensity _____

INDIVIDUAL LIGHT INTENSITY POINT READINGS

Cabinet Off							
Cabinet On							

Reason for failure (if any): _____

Corrective action required:_____

_____

_____

Result of this individual test only: Pass Fail N/A

Candidate: _____ Date:_____

Examiner:_____ Date:_____

BIOSAFETY CABINET FIELD CERTIFIER ACCREDITATION
PRACTICAL EXAM DATA SHEET
NOISE LEVEL TEST
(Time allotted: 15 minutes)

CABINET INFORMATION

Mfr:_____Model #:_____Serial #:_____Type: A1 A2 C1 B1 B2

MEASUREMENT DEVICE INFORMATION

Sound Meter: Mfr:_____ Model #:_____ Serial #/Cal Due Date:_____

The proper weighting to use for this test is? Choose One: →	☐ db A ☐ db B ☐ db C ☐ Other: _____ ☐ Linear ☐ Micro inches ☐ Millimeters

DATA

Specifications		
Probe Location		
Side-to-Side Measurement	Side-to-Center	Above Work Surface
_____	_____	_____

As-Measured Data Prior to Correction			
Meter Scale Range	Gross Noise Level	Background Noise Level	Correction Factor to Apply (if any)
_____---_____	_____	_____	_____

Specifications			Final Data
Maximum Allowable Noise Level	Maximum Allowable Background Level Prior to Correction	A Correction Factor is Required When the Difference Between the Gross Noise Level and Background Noise Level is:	Net Noise Level
_____	_____	≤ _____	_____

Reason for failure (if any): _____

Corrective action required:_____

_____

_____

Result of this individual test only: Pass Fail N/A

Candidate: _____ Date:_____

Examiner:_____ Date:_____

BIOSAFETY CABINET FIELD CERTIFIER ACCREDITATION
PRACTICAL EXAM DATA SHEET

SITE INSTALLATION ASSESSMENT TEST
(Time allotted: 40 minutes)

CABINET INFORMATION

Mfr:_____Model #:_____Serial #:_____Type: A1 A2 C1 B1 B2

MEASUREMENT DEVICE INFORMATION

Device:_____ Reads: ☐ CFM ☐ LFM Mfr:_____ Model #:_____ Serial#/Cal Due Date: _____

DATA

Airflow Alarm	Total Exhaust CFM	Loss to Alarm. **%** Spec/Observed	Loss to Alarm. **CFM** Spec/Observed	Audible Exhaust Alarm Seconds. Spec./Observed	Visual Exhaust Alarm Seconds. Spec./Observed	Pass/Fail
	_____	_____/_____	_____/_____	_____/_____	_____/_____	_____

Method used to lower exhaust: _____

Interlocks Reason required for Pass or Fail:	Pass/Fail
	_____

Exhaust System Performance	Canopy (Thimble) or Hard Ducted	Static Pressure (positive or negative?)	For Canopy (Thimble) Only: Direction of Visible Smoke	Pass/Fail
	_____	_____	_____	_____

Sash Alarm	Specified Sash Height for BSC	Alarm Activation: Min/Max Height(s) Required by NSF / Height(s) Observed	Audible Sash Alarm(s) Operational?	Visual Sash Alarm(s) Operational?	Pass/Fail
	_____"	_____/_____	YES / NO	YES / NO	_____

Reason for failure (if any): _____

Corrective action required:_____

_____

_____

Result of this individual test only: Pass Fail

Candidate: _____ Date:_____

Examiner:_____ Date:_____

BIOSAFETY CABINET FIELD CERTIFIER ACCREDITATION
PRACTICAL EXAM DATA SHEET

AIRFLOW SMOKE PATTERN TEST
(Time allotted: 20 minutes)

CABINET INFORMATION

Mfr:_____Model #:_____Serial #:_____Type: A1 A2 C1 B1 B2

MEASUREMENT DEVICE INFORMATION

Source of Visible Cold "Smoke":_____ Chemical Composition:_____

DATA

Downflow Test:	☐ Pass	☐ Fail, Reason:
View Screen Retention Test:	☐ Pass	☐ Fail, Reason:
Work Opening Edge Retention Test:	☐ Pass	☐ Fail, Reason:
Sash Seal Test:	☐ Pass	☐ Fail, Reason:

Corrective action required:_____

_____

_____

_____

_____

Result of this individual test only: Pass Fail

Candidate: _____ Date:_____

Examiner:_____ Date:_____

BIOSAFETY CABINET FIELD CERTIFIER ACCREDITATION
PRACTICAL EXAM DATA SHEET

CABINET DECONTAMINTION
(Time allotted: 90 minutes)

Mfr:_____Model #:_____Serial #:_____Type: A1 A2 C1 B1 B2

Decontamination Equipment

Type of equipment:		
Manufacturer:	Model #:	Serial #:
Agent or Chemical Used:		

I. Safety

List Personnel Protective equipment including fit test results within 1 year:
Signage (Verbiage requirements and Location):
Issues to consider prior to performing decon:
Describe emergency protocol:

II. Biosafety Cabinet Information

Mfr:	MN:	Type:		SN:
Cabinet Dimensions - external/internal (circle one)	H:	W:	L:	Vol:
Decon agent calculation:				
Neutralizing agent calculation:				

III. Conditioning

Actual Temp:	Actual RH %:	Required Temp:	Required RH%:

IV. Decontamination Procedure

List materials used to seal cabinet:	
Describe procedure for conditioning:	
Describe process for performing the decon, including equipment location and any external equipment connections:	
Describe how decontaminant is monitored during the process:	
Describe process for neutralization:	
Minimum exposure time:	Neutralization time:

BIOSAFETY CABINET FIELD CERTIFIER ACCREDITATION
PRACTICAL EXAM DATA SHEET

CABINET DECONTAMINTION
(Time allotted: 90 minutes)

V. Post-Decon / Cleanup

As-Left decon agent concentration acceptable concentration limit:_____ppm
Describe the procedure for performing the cleanup, including disposal of materials:

VI. Miscellaneous

Describe validation procedure and criteria:
Describe any differences in procedure if the cabinet blower is inoperable:

Comments: _____

_____

_____

Result of this individual test only: Pass Fail

Candidate: _____ Date: _____

Examiner: _____ Date: _____