LAB EXHAUST VENTILATION SYSTEM ACCEPTANCE DOCUMENT

CERTIFICATE OF ACCEPTANCE		NRCA-PRC-14-F
Lab Exhaust Ventilation System Acceptance Document		(Page 1 of 3)
Project Name:	Enforcement Agency:	Permit Number:
Project Address:	City:	Zip Code:

Compliance Results: **[COMPLIES *or* DOES NOT COMPLY]**	Enforcement Agency Use: Checked by/Date

Intent:	This document is used to demonstrate compliance with acceptance requirements in §140.9(c)3 and Reference Nonresidential Appendix NA7.16 for lab exhaust ventilation systems. Attach additional copies of pages 1 through 2, as required, for all systems that must be tested.

Indicate all types of lab exhaust flow rate controls tested for this project:	
☐	Wind Speed/Direction *(Sections A-1 and B-1 of this document should be completed)*
☐	Contaminant Concentration *(Sections A-2 and B-2 of this document should be completed)*

Wind Speed/Direction Control

Building:	Floor:	Room:	System Reference:

A-1. Wind Speed/Direction Control Construction Inspection (NA7.16.1)

☐	a.	Anemometer sensor factory calibration certificate is valid. (NA7.16.1(a), §140.9(c)3Ciii)
☐	b.	Sensor located at a height outside the wake region of nearby structures and experiences similar wind conditions to the free stream environment above the exhaust stacks. (NA7.16.1(b), §140.9(c)3Ci)
☐	c.	Sensor installed in close proximity to the fan it controls so that it captures a representative wind speed/direction. (NA7.16.1(c), §140.9(c)3Ci)
☐	d.	Sensor wired correctly to controls ensuring proper volume flow rate control. (NA7.16.1(d), §140.9(c)3Cii)
☐	e.	Wind speed/direction look-up table established and matches dispersion analysis results. (NA7.16.1(e), §140.9(c)3Cii)
☐	f.	Verify methodology used to measure volume flow rate. (NA7.16.1(f)) Method used (airflow sensor, static pressure, fan speed to volume flow rate curve, specified-other):

Construction Inspection Compliance: ◯ Complies ◯ Does Not Comply

B-1. Wind Speed/Direction Control Functional Testing (NA7.16.2)

Confirm compliance (Y - yes / N - no) for the control being tested.

Step 1: Confirm minimum look-up table volume flow rate value. (NA7.16.2 Step 1, §140.9(c)3Cii)		
a.	Simulate minimum look-up table wind speed by either covering the anemometer sensor or overriding the curve points so that the current wind speed is below the speed correlating to the minimum stack volume flow rate. With all sensors active and reading below the minimum wind speed, observe and record the minimum volume flow rate at the stack. Stack volume flow rate matches minimum flow rate from look-up table.	
b.	Stack minimum volume flow rate:	cfm
Step 2: Confirm mid-range look-up table volume flow rate value. (NA7.16.2 Step 2, §140.9(c)3Cii)		
a.	Simulate mid-range look-up table wind speed by either inducing a wind current, with an air speed accuracy of +/- 2%, or overriding the curve points so that the current wind speed correlates to a mid-range stack volume flow rate. With all sensors active and reading a mid-range wind speed, observe and record the mid-range volume flow rate at the stack. Stack volume flow rate matches mid-range flow rate from corresponding wind speed in look-up table.	
b.	Stack mid-range volume flow rate:	cfm
c.	Simulated mid-range look-up table wind speed:	fpm
Step 3: Confirm maximum look-up table volume flow rate value. (NA7.16.2 Step 3, §140.9(c)3Cii)		
a.	Simulate maximum look-up table wind speed by either inducing a wind current, with an air speed accuracy of +/- 2%, or overriding the curve points so that the current wind speed correlates to the maximum stack volume flow rate. With all sensors active and reading above the maximum wind speed, observe and record the maximum volume flow rate at the stack. Stack volume flow rate matches maximum flow rate from look-up table.	
b.	Stack maximum volume flow rate:	cfm
c.	Simulated maximum look-up table wind speed:	fpm
Step 4: Test Sensor Calibration/Replacement Warning Operation. (NA7.16.2 Step 4, §140.9(c)3Civ)		
a.	Temporarily override the sensor calibration/replacement period to 5 minutes. Wait 5 minutes. Minimum stack volume flow rate is greater than flow rate corresponding to worst-case wind conditions documented in dispersion analysis and alarm is received by facility operators.	

(Continued on next page)

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Step 5: Test Sensor Failure Operation. (NA7.16.2 Step 5, §140.9(c)3Civ)		
a.	Simulate sensor failure by disconnecting the anemometer. Minimum stack volume flow rate is greater than flow rate corresponding to worst-case wind conditions documented in dispersion analysis and alarm is received by facility operators.	
Functional Testing Compliance: ◯ Complies ◯ Does Not Comply		

Contaminant Concentration Control			
Building:	Floor:	Room:	System Reference:

A-2. Contaminant Concentration Control Construction Inspection (NA7.16.3)		
☐	a.	Contaminant sensor factory calibration certificate is valid. (NA7.16.3(a), §140.9(c)3Dii)
☐	b.	Contaminant sensor located within each exhaust plenum. (NA7.16.3(b), §140.9(c)3D)
☐	c.	Contaminant sensor wired correctly to controls ensuring proper volume flow rate control. (NA7.16.3(c), §140.9(c)3Di)
☐	e.	Contaminant concentration threshold established and matches dispersion analysis results. (NA7.16.3(d), §140.9(c)3Di)
☐	f.	Verify methodology used to measure volume flow rate. (NA7.16.3(e)) Method used (airflow sensor, static pressure, fan speed to volume flow rate curve, specified-other):
☐	g.	If multiple sensors are present, fan control is based on highest concentration reading. (NA7.16.3(f))
Construction Inspection Compliance: ◯ Complies ◯ Does Not Comply		

B-2. Contaminant Concentration Control Functional Testing (NA7.16.4)

Confirm compliance (Y - yes / N - no) for the control being tested.

Step 1: Confirm minimum exhaust demand non-event stack volume flow rate. (NA7.16.4 Step 1, §140.9(c)3Di)		
a.	Ensure no contaminant event is active. Simulate minimum exhaust air demand in all lab spaces. Stack volume flow rate is equal to or greater than corresponding non-event value.	
b.	Minimum non-event stack volume flow rate:	cfm
c.	Simulated minimum exhaust air demand:	cfm
Step 2: Confirm mid-range exhaust demand non-event stack volume flow rate. (NA7.16.4 Step 2, §140.9(c)3Di)		
a.	Ensure no contaminant event is active. Simulate mid-range exhaust air demand in all lab spaces. Stack volume flow rate is equal to or greater than corresponding non-event value.	
b.	Mid-range non-event stack volume flow rate:	cfm
c.	Simulated mid-range exhaust air demand:	cfm
Step 3: Confirm minimum exhaust demand contaminant event stack volume flow rate. (NA7.16.4 Step 3, §140.9(c)3Di)		
a.	Simulate minimum exhaust air demand in all lab spaces. Simulate a contaminant event. Stack volume flow rate is equal to or greater than corresponding event value.	
b.	Minimum contaminant event stack volume flow rate:	cfm
c.	Simulated minimum exhaust air demand:	cfm
Step 4: Confirm mid-range exhaust demand contaminant event stack volume flow rate. (NA7.16.4 Step 4, §140.9(c)3Di)		
a.	Simulate mid-range exhaust air demand in all lab spaces. Simulate a contaminant event. Stack volume flow rate is equal to or greater than corresponding event value.	
b.	Mid-range contaminant event stack volume flow rate:	cfm
c.	Simulated mid-range exhaust air demand:	cfm
Step 5: Test Sensor Calibration Failsafe Operation. (NA7.16.4 Step 5, §140.9(c)3Diii)		
a.	Temporarily override the sensor calibration/replacement period to 5 minutes. Wait 5 minutes. Minimum stack volume flow rate is greater than flow rate corresponding to a contaminant event and alarm is received by facility operators.	
Step 5: Test Sensor Failure Operation (NA7.16.4 Step 6, §140.9(c)3Diii)		
a.	Simulate sensor failure by disconnecting the contaminant concentration sensor. Minimum stack volume flow rate is greater than flow rate corresponding to a contaminant event and alarm is received by facility operators.	
Functional Testing Compliance: ◯ Complies ◯ Does Not Comply		

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DOCUMENTATION AUTHOR'S DECLARATION STATEMENT		
I certify that this Certificate of Acceptance documentation is accurate and complete.		
Documentation Author Name:	Documentation Author Signature:	
Documentation Author Company Name:	Date Signed:	
Address:	CEA/ATT Certification Identification (If applicable):	
City/State/Zip:	Phone:	

FIELD TECHNICIAN'S DECLARATION STATEMENT

I certify the following under penalty of perjury, under the laws of the State of California:

1. The information provided on this Certificate of Acceptance is true and correct.
2. I am the person who performed the acceptance verification reported on this Certificate of Acceptance (Field Technician).
3. The construction or installation identified on this Certificate of Acceptance complies with the applicable acceptance requirements indicated in the plans and specifications approved by the enforcement agency, and conforms to the applicable acceptance requirements and procedures specified in Reference Nonresidential Appendix NA7.
4. I have confirmed that the Certificate(s) of Installation for the construction or installation identified on this Certificate of Acceptance has been completed and signed by the responsible builder/installer and has been posted or made available with the building permit(s) issued for the building.

Field Technician Name:	Field Technician Signature:	
Field Technician Company Name:	Position with Company (Title):	
Address:	ATT Certification Identification (if applicable):	
City/State/Zip:	Phone:	Date Signed:

RESPONSIBLE PERSON'S DECLARATION STATEMENT

I certify the following under penalty of perjury, under the laws of the State of California:

1. I am the Field Technician, or the Field Technician is acting on my behalf as my employee or my agent and I have reviewed the information provided on this Certificate of Acceptance.
2. I am eligible under Division 3 of the Business and Professions Code in the applicable classification to accept responsibility for the system design, construction or installation of features, materials, components, or manufactured devices for the scope of work identified on this Certificate of Acceptance and attest to the declarations in this statement (responsible acceptance person).
3. The information provided on this Certificate of Acceptance substantiates that the construction or installation identified on this Certificate of Acceptance complies with the acceptance requirements indicated in the plans and specifications approved by the enforcement agency, and conforms to the applicable acceptance requirements and procedures specified in Reference Nonresidential Appendix NA7.
4. I have confirmed that the Certificate(s) of Installation for the construction or installation identified on this Certificate of Acceptance has been completed and is posted or made available with the building permit(s) issued for the building.
5. I will ensure that a completed, signed copy of this Certificate of Acceptance shall be posted, or made available with the building permit(s) issued for the building, and made available to the enforcement agency for all applicable inspections. I understand that a signed copy of this Certificate of Acceptance is required to be included with the documentation the builder provides to the building owner at occupancy.

Responsible Person Name:	Responsible Person Signature:	
Responsible Person Company Name:	Position with Company (Title):	
Address:	CSLB License:	
City/State/Zip:	Phone:	Date Signed: