

## **Indoor Air Quality Worksheet**

1/2021 JSS

#### **Indoor Air Quality Worksheet**

#### **Overview**

The purpose of this checklist is to provide the EHRS investigator with a guide to ensure thorough and consistent indoor air quality investigations.

#### **Preliminary Investigation & Facility Contact Information**

Facility name:		F	Facility address:
Facility manager or building contact:			
Location of complaint(s):			
Description of area:			
Number of individuals in this work are	a:		
Approximate size of the area in square	feet:		
Air handler that serves the area:			Air handler location:
Other areas served by same air handler	:		
Primary requester/complainants:			
Primary requester/complainant contact	informa	tion:	
Date of request:	D	ate inves	stigation started:
Investigator(s):			
Health Hazard Survey submitted to occ	cupant(s)	Y/N: _	Date sent: Date received:
Number of surveys received:	_ Numb	er of sur	veys with similar complaints:of
Unusual or non air-quality related circu	ımstance	es associa	ated with complaint(s)? See below.
Event	Yes	No	Comments
Construction or renovation work			
Air handling system malfunction			
Leak or flooding			
Unusual weather conditions			
Poor office ergonomics?			
Inadequate lighting or glare?			
Unusually noisy environment			

#### **Work Area Evaluation**

Concern	ОК	Needs Attention	Not Applicable	Comments
Housekeeping				
Carpeting				
Hard Flooring				
Air Diffusers & adjacent surfaces –				
dusty?				
Work surfaces & other flat areas –				
dusty?				
Clutter?				
Water Infiltration				
Any leaks or floods? – Note source				
Any stains or spalling indicative of				
past moisture infiltration?				
Carpets recently cleaned?				
Odors				
Is there an odor? Describe				
Sewage – Check for floor drains &				
dry traps.				
Perfumes – Check for lotions,				
perfumes & air fresheners etc. used				
by occupants.				
Chemical – Check for changes in				
housekeeping, maintenance, pest				
control etc.				
Burning – check fluorescent lamp				
ballasts & electronics.				
New furnishings, paint, carpets, etc.?				
Dead animals – Check ceiling, floor				
& wall cavities, etc.				
Copying or printing in the area?				
Pest Issues	_	1		
Evidence of rodents or insects?				
Describe				
Food stored in work area?				
Penetrations sealed?	1			
Check for diseased animals?	1			
Exterminator involved? Note				
company and activity.				
Windows				
Are there operable windows? Are				
they used?				
Combustion Sources				
Note source	1			

# Ventilation System Evaluation Air Handler Location: \_\_\_\_\_\_\_ Air Handler ID: \_\_\_\_\_\_\_

Component	OK	Needs Attention	Not Applicable	Comments
Outside Air Intake		Attention	Applicable	
Location:			1	T
Location.				
Unobstructed?	1			
Standing water, bird droppings,				
debris in vicinity?				
Odors from outdoors? Describe:				
Cooling tower within 25 feet?				
Exhaust outlet within 25 feet?				
Trash compactor within 25 feet?				
Fume hood exhaust within 25 feet?				
Near parking facility, busy road,				
loading dock?				
Bird Screen				
Unobstructed?				
General Condition				
Size of mesh (1/2" minimum)				
Outside Air Dampers				
Position of dampers. Note time of				
day and weather conditions:				
Operation acceptable?				
Seal when closed?				
Actuators operational?				
Outdoor Air (O.A.) Volume				
Minimum % O.A.				
Measured % O.A.	<u> </u>			
Maximum % O.A.	<u> </u>			
For VAV systems: is O.A. increased				
as total system airflow is reduced?				
Mixing Plenum				T
Clean?	1			
Floor drain tapped?	1			
Internal insulation intact?	1			
Air tightness:				
- of outside air dampers				
- of return air dampers				
- of exhaust air dampers	+			
All damper motors connected?	+			
All damper motors operational?  Mixing air temperature control	+			
setting F				
Freeze stat setting F	1			
riceze stat settingr		1		

Concern	OK	Needs Attention	Not Applicable	Comments
Is mixing plenum under negative		Attention	Аррисавіе	
pressure? Note: If it is under				
positive pressure, outdoor air may not				
be entering.				
Filters				
Type/MERV Rating		T		
Complete coverage?				
(No bypassing)				
Correct pressure drop? (Check				
magnehelic reading "and				
compare to manufacturer's				
recommendations.)				
Contaminants visible?				
Odor noticeable?				
Evidence of filters getting wet?				
Spray Humidifiers				
Humidifier type:				
All nozzles working?				
Complete coil coverage?				
Clean pans with no overflow?				
Drains tapped?				
Biocide treatment working? Note				
biocide if observed.				
Steam Humidifiers		•		
Treated boiler water?				
Standing water?				
Visible growth?				
Mineral deposits?				
Control set point F				
High limit set point F				
Duct liner within 12 feet? If so,				
check for mold growth.				
Bypass Dampers				
Damper operation correct?				
Damper motors operational?				
Cooling Coil				
Inspection access?				
Clean?				
Supply water tempF				
Water carryover?				
Any indication of condensation				
problems?				
Condensate Drip Pans				
Accessible to inspect and clean?				
Clean, no residue?				
No standing water, no leaks?				
Noticeable odor?				
Visible growth (e.g., slime)?				
Drains and traps clear, working?				
Water overflow or indicative stains?				
Corrosion problems?				
Evidence of biocide use in pan?				

Concern	OK	Needs Attention	Not Applicable	Comments
Supply Fan Chambers				
Clean?				
No trash or storage?				
Internal insulation intact?				
Floor drain traps are wet or sealed?				
No air leaks?				
Doors close tightly?				
Supply Fans				
Fan blades clean?			Т	
Belt guards installed?				
Proper belt tension?				
Excess vibration?				
Controls operational, calibrated?				
No pneumatic leaks?				
Heating Coil				
Inspection access?		Τ	Т	<u> </u>
Clean?		1		
Supply water tempF				
Discharge thermostat?				
(air temp. setting F				
Reheat Coils				
Locations of those inspected:		T	T	
Locations of those inspected.				
Clean?				
Obstructed?				
Operational?				
Supply Ductwork				
Clean?				
Sealed, no leaks, tight connections?				
Fire dampers open?				
Access doors closed?				
Lined ducts? Condition of liner.				
Flex duct connected, no tears or		+		
crimping?				
Recent balancing?				
Short circuiting or other air		+		
distribution problems? Note				
location(s):				
location(s).				
Pressurized Ceiling Supply Plenum				
No unintentional openings?				
All ceiling tiles in place?				
Supply diffusers open?		1		
Supply diffusers balanced?				
Noticeable flow of air?		+		
Short circuiting or other air				
distribution problems? Note				
location(s):				
iocation(s).				
L	1	I		

Concern	OK	Needs Attention	Not Applicable	Comments
Return Air Plenum				
Tiles in place?				
No unintentional openings?				
Return grills?				
Noticeable flow of air?				
Transfer grills?				
Fire dampers open?				
Extension of new walls into plenum?				
<b>Ducted Returns</b>	<u> </u>			
Recently balanced?				
Unobstructed grilles?				
Unobstructed return air path?				
Return Fan Chambers	1			
Clean and no trash or storage?				
No standing water?				
Floor drain traps are set or sealed?				
No air leaks?				
Doors close tightly, kept closed?				
Return Fans	1			
Fan blades clean?				
Belt guards installed?				
Proper belt tension?				
Excess vibration?				
Corrosion problems?				
Controls working, calibrated?				
Exhaust Fans	1			
Central?				
Distributed (locations)				
Operational?				
Controls operational?				
Toilet exhaust only?				
Make-up air sufficient?				
Toilet Exhausts	T			
Fans working-occupied hours?				
Registers open, clear?				
Make-up air path adequate?				
Volume according to code?				
Floor drain traps wet or sealable?				
Bathrooms run slightly negative relative to building?				
Print/Copy Room Exhaust				
Room runs negative relative to	T			
building?				
Garage Ventilation				
Operates according to codes?	I			
Fans, controls, dampers all operate?				+
Terminal Equipment – Supply (Fan	Coils &	Induction Unit	(2)	
Housing interiors clean and	Cons &	Induction Units	,	
unobstructed?				
Controls working?				+
Delivering rated volume?				
Recently balanced?				
Filters in place?				
I more in place.	1	ı		1

Concern	OK	Needs Attention	Not Applicable	Comments
Condensate pans clean, drain freely?		Attention	Аррисавіе	
Biocide in drip pan?				
Thermostats				
		T		
Type:				
Properly located?				
Working?				
Set points:F (summer)				
F (winter)				
Space Temperature F				
Room Partitions				
Gap allowing airflow at top?				
Gap allowing airflow at bottom?				
Supply, return each room?				
Stairwells				
Doors close & latch?				
No openings allowing uncontrolled				
airflow?				
Clean & dry?				
No noticeable odors?				
Return Air Plenum				

### **EHRS Sampling**

Sampling Performed	OK	Needs Attention	Not Applicable	Comments
Background IEQ				
Temperature				
Relative humidity				
Carbon dioxide				
Carbon monoxide				
Bioaerosols – Fungi/mold				
Spore Trap Analysis				
Impactor				
Bulk sample identification				
Chemical Sampling				
Note Chemical(s) and reason for				
sampling:				

Summary of Findings		
Summary of findings and action taken:		
Written report submitted by:	Date:	
Report recipient(s):		
Work requests or third-party involvement?		