

RISK MANAGEMENT...

managing risk with responsibility

Aston A. Henry, Supervisor
Risk Management Department

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November 9, 2009

Signature on File

TO: Ms. Wanda Ross, Principal
Indian Trace Elementary School

FROM: Edward See, Project Manager
Risk Management Department

SUBJECT: Indoor Air Quality (IAQ) Assessment
Various Rooms (see attached)

For Custodial Supervisor Use Only	
<input type="checkbox"/>	Custodial Issues Addressed
<input type="checkbox"/>	Custodial Issues Not Addressed

On October 13, 2009 Robert Krickovich and I conducted an assessment of various rooms at **Indian Trace Elementary School**. This evaluation included observations of the flooring system, ceiling tiles, false ceiling plenum, environmental surfaces, interior and exterior walls, and the accessible ventilation equipment. Additionally, environmental parameter measurements were taken to include temperature, relative humidity, and carbon dioxide. The detailed findings, along with the recommended corrective action can be found on the attached IAQ Assessment Worksheets.

The IAQ assessment did identify one or more existing conditions impacting IAQ and has generated appropriate work orders to correct deficiencies in systems and maintenance that could contribute to decreased indoor air quality. At the time of the assessment, these concerns were not an immediate health or safety concern to building occupants. However, due to individual sensitivities and predisposing health factors, it is possible that some building occupants may elicit a health response to agents and / or conditions identified during the evaluation. Therefore, to further improve IAQ, prevent development of future IAQ-related problems, and to reduce the potential for IAQ-related complaints by building occupants, the IAQ Assessment Team recommends appropriate follow up of each item identified and listed in the attached evaluation.

Please ensure that your Head Facilities Serviceperson receives a copy of this correspondence so that the recommendations requiring their attention can be addressed. In an attempt to separate IAQ issues from general maintenance items, the attached assessment may contain direction for site based staff to generate a work order through COMPASS. Within two weeks a representative from the Custodial/Grounds Department will conduct a follow-up visit to ensure that all issues have been appropriately addressed.

Should any questions arise, or if the current concerns continue after the attached recommendations have been addressed, please feel free to contact me at 754-321-1900.

cc: Dr. Leontine Butler, Area Superintendent
Jan Beal, Area Director
Jeffrey S. Moquin, Executive Director, Support Operations
Aston Henry, Supervisor, Risk Management
James Carballo, Project Manager, Facilities and Construction Management
Ralph Eckhardt, Broward Teachers Union
Roy Jarrett, Federation of Public Employees
Mark Dorsett, Manager 1, Physical Plant Operations Division, Zone 1
Roy Norton, Manager Custodial/Grounds, Physical Plant Operations Division
Robert Krickovich, Coordinator, LEA, Facilities and Construction Management

ES/tc
Enc.

IAQ Assessment

Location Number 3181

Indian Trace Elementary School

Evaluation Requested October 6, 2009

Time of Day 8:30 am

Evaluation Date October 13, 2009

Outdoor Conditions Temperature 80.5 Relative Humidity 85.8 Ambient CO2 498

Fish	Temperature	Range	Relative Humidity	Range	CO2	Range	# Occupants
132	74.8	72 - 78	57.2	30% - 60%	1358	Max 700 > Ambient	19
Noticeable Odor		Visible water damage / staining?		Visible microbial growth?		Amount of material affected	
No		Yes		No		1 ceiling tile	
Ceiling Type	2 x 4 Lay In		No		None		
Wall Type	Drywall		No		None		
Flooring	12 x 12 Vinyl		No		None		

	Clean	Minor Dust / Debris	Needs Cleaning	Corrective Action Required
Ceiling	No	Yes	Yes	Remove and replace ceiling tile
Walls	Yes	No	No	
Flooring	Yes	No	No	
HVAC Supply Grills	Yes	No	No	
HVAC Return Grills	Yes	No	No	
Ceiling at Supply Grills	Yes	No	No	
Surfaces in Room	Yes	No	No	

Observations

Findings:

- Occupant advised that the room is too hot and humid and there are excessive odors.
- CO2 level was slightly elevated at the time of the assessment
- Non-approved chemicals in room
- Dust and debris on A/C filters
- 1 stained ceiling tile
- Evidence of pests in cabinet under sink
- Old fresh air intake next to the parent drop off driveway is closed and re-routed to roof.

Site Based Maintenance:

- Remove non-approved chemicals from room. Chemicals not approved by SBBC can have a negative impact on indoor air quality.
- Remove and replace A/C filters
- Remove and replace stained ceiling tile. If stain returns, contact COMPASS to generate a work order to evaluate for cause.
- REMINDER: Ensure that all doors and windows to the outside remain closed at all times. Open doors and windows allow untreated humid air to enter occupied areas.
- Contact COMPASS to generate a work order for pest control
- Continue to monitor this location for any signs of microbial growth as well as dust and debris accumulation and clean as appropriate

Physical Plant Operations:

- Evaluate HVAC system for proper operation and repair as appropriate to lower CO2 level

IAQ Assessment

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Indian Trace Elementary School

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Time of Day 8:30 am

Evaluation Date October 13, 2009

Outdoor Conditions Temperature 80.5 Relative Humidity 85.8 Ambient CO2 498

Fish	Temperature	Range	Relative Humidity	Range	CO2	Range	# Occupants
206	74.7	72 - 78	65.4	30% - 60%	766	Max 700 > Ambient	2
Noticeable Odor		Visible water damage / staining?		Visible microbial growth?		Amount of material affected	
Ceiling Type		No		No		None	
Wall Type		No		No		None	
Flooring		No		No		None	

	Clean	Minor Dust / Debris	Needs Cleaning	Corrective Action Required
Ceiling	Yes	No	No	
Walls	Yes	No	No	
Flooring	Yes	No	No	
HVAC Supply Grills	Yes	No	No	
HVAC Return Grills	Yes	No	No	
Ceiling at Supply Grills	Yes	No	No	
Surfaces in Room	Yes	No	No	

Observations

Findings:

- Humidity level was slightly elevated at the time of the assessment

Site Based Maintenance:

- Continue to monitor this location for any signs of microbial growth as well as dust and debris accumulation and clean as appropriate

Physical Plant Operations:

- Evaluate HVAC system for proper operation and repair as appropriate to lower humidity level

IAQ Assessment

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Evaluation Date October 13, 2009

Outdoor Conditions Temperature 80.5 Relative Humidity 85.8 Ambient CO2 498

Fish	Temperature	Range	Relative Humidity	Range	CO2	Range	# Occupants
206J	72.1	72 - 78	60	30% - 60%	738	Max 700 > Ambient	2
Noticeable Odor		Visible water damage / staining?		Visible microbial growth?		Amount of material affected	
No		No		No		None	
Ceiling Type	2 x 4 Lay In		No	No	None		
Wall Type	Drywall		Yes	No	1 square foot		
Flooring	12 x 12 Vinyl		No	No	None		

	Clean	Minor Dust / Debris	Needs Cleaning	Corrective Action Required
Ceiling	Yes	No	No	
Walls	No	Yes	Yes	Repair as appropriate
Flooring	Yes	No	No	
HVAC Supply Grills	Yes	No	No	
HVAC Return Grills	Yes	No	No	
Ceiling at Supply Grills	No	Yes	Yes	Clean as appropriate
Surfaces in Room	Yes	No	No	

Observations

Findings:

- HVAC supply vent blowing on the wall causing paint to bubble and peel
- Humidity level was not elevated but was at top end of acceptable range

Site Based Maintenance:

- Continue to monitor this location for any signs of microbial growth as well as dust and debris accumulation and clean as appropriate

Physical Plant Operations:

- Evaluate current adjustable HVAC supply vent for replacement with a stationary vent that blows away from the wall
- Repair and repaint wall as appropriate
- Evaluate HVAC system for proper operation and repair as appropriate to lower humidity level

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Evaluation Date October 13, 2009

Outdoor Conditions Temperature 80.5 Relative Humidity 85.8 Ambient CO2 498

Fish	Temperature	Range	Relative Humidity	Range	CO2	Range	# Occupants
301	72.9	72 - 78	56.1	30% - 60%	654	Max 700 > Ambient	18
Noticeable Odor		Visible water damage / staining?		Visible microbial growth?		Amount of material affected	
Yes		No		No		None	
Ceiling Type	2 x 4 Lay In		No	No	None		
Wall Type	Drywall		No	No	None		
Flooring	12 x 12 Vinyl/Carpet		No	No	None		

	Clean	Minor Dust / Debris	Needs Cleaning	Corrective Action Required
Ceiling	Yes	No	No	
Walls	Yes	No	No	
Flooring	Yes	No	No	
HVAC Supply Grills	Yes	No	No	
HVAC Return Grills	Yes	No	No	
Ceiling at Supply Grills	Yes	No	No	
Surfaces in Room	Yes	No	No	

Observations

Findings: (Media Center)

- Musty odor in room
- No signs of water intrusion or microbial growth identified. Environmental parameters were within acceptable range.
- Paint peeling on outside West wall at bottom - minor
- FISH 302 (roof A/C unit) - Filters were not taped together and air handler unit missing side panel.
- FISH 306 AHU #20 and #21 - standing water and rust in drain pan

Site Based Maintenance:

- FISH 302 - ensure that filters are taped together properly
- Continue to monitor this location for any signs of microbial growth as well as dust and debris accumulation and clean as appropriate

Physical Plant Operations:

- FISH 302 - replace side panel on air handler unit
- FISH 306 - AHU #20 and #21 - Clean coils and drain pans

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Outdoor Conditions Temperature 80.5 Relative Humidity 85.8 Ambient CO2 498

Fish	Temperature	Range	Relative Humidity	Range	CO2	Range	# Occupants
407	73.8	72 - 78	52.6	30% - 60%	1154	Max 700 > Ambient	38
Noticeable Odor		Visible water damage / staining?		Visible microbial growth?		Amount of material affected	
Ceiling Type		No		No		None	
Wall Type		No		No		None	
Flooring		No		No		None	

	Clean	Minor Dust / Debris	Needs Cleaning	Corrective Action Required
Ceiling	Yes	No	No	
Walls	Yes	No	No	
Flooring	Yes	No	No	
HVAC Supply Grills	Yes	No	No	
HVAC Return Grills	Yes	No	No	
Ceiling at Supply Grills	Yes	No	No	
Surfaces in Room	Yes	No	No	

Observations

Findings:
 - Non-approved chemicals in room (Clorox bleach and Pine Sol)

Site Based Maintenance:
 - Remove non-approved chemicals from room. Chemicals not approved by SBBC can have a negative impact on indoor air quality.
 - Continue to monitor this location for any signs of microbial growth as well as dust and debris accumulation and clean as appropriate

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Outdoor Conditions Temperature 80.5 Relative Humidity 85.8 Ambient CO2 498

Fish	Temperature	Range	Relative Humidity	Range	CO2	Range	# Occupants
409	74.7	72 - 78	50.8	30% - 60%	950	Max 700 > Ambient	22
Noticeable Odor		Visible water damage / staining?		Visible microbial growth?		Amount of material affected	
No		No		No		None	
Ceiling Type	2 x 4 Lay In		No	No	None		
Wall Type	Drywall		No	No	None		
Flooring	12 x 12 Vinyl		No	No	None		

	Clean	Minor Dust / Debris	Needs Cleaning	Corrective Action Required
Ceiling	Yes	No	No	
Walls	Yes	No	No	
Flooring	Yes	No	No	
HVAC Supply Grills	Yes	No	No	
HVAC Return Grills	Yes	No	No	
Ceiling at Supply Grills	Yes	No	No	
Surfaces in Room	Yes	No	No	

Observations

Findings:

- No issues identified

Site Based Maintenance:

- Continue to monitor this location for any signs of microbial growth as well as dust and debris accumulation and clean as appropriate

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Fish	Temperature	Range	Relative Humidity	Range	CO2	Range	# Occupants
501	71.7	72 - 78	54.5	30% - 60%	980	Max 700 > Ambient	3
Noticeable Odor		Visible water damage / staining?		Visible microbial growth?		Amount of material affected	
No		Yes		No		1 ceiling tile	
Ceiling Type	2 x 4 Lay In		No		None		
Wall Type	Drywall		No		None		
Flooring	12 x 12 Vinyl		No		None		

	Clean	Minor Dust / Debris	Needs Cleaning	Corrective Action Required
Ceiling	No	Yes	Yes	Remove and replace ceiling tile
Walls	Yes	No	No	
Flooring	Yes	No	No	
HVAC Supply Grills	Yes	No	No	
HVAC Return Grills	Yes	No	No	
Ceiling at Supply Grills	Yes	No	No	
Surfaces in Room	Yes	No	No	

Observations

Findings:

- 1 stained ceiling tile over sink

Site Based Maintenance:

- Remove and replace stained ceiling tile. If stain returns, contact COMPASS to generate a work order to evaluate for cause.
- Continue to monitor this location for any signs of microbial growth as well as dust and debris accumulation and clean as appropriate

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Fish	Temperature	Range	Relative Humidity	Range	CO2	Range	# Occupants
502	69.8	72 - 78	59.4	30% - 60%	1096	Max 700 > Ambient	2
Noticeable Odor		Visible water damage / staining?		Visible microbial growth?		Amount of material affected	
No		No		No		None	
Ceiling Type	2 x 4 Lay In		No	No	None		
Wall Type	Drywall		No	No	None		
Flooring	12 x 12 Vinyl		No	No	None		

	Clean	Minor Dust / Debris	Needs Cleaning	Corrective Action Required
Ceiling	Yes	No	No	
Walls	Yes	No	No	
Flooring	Yes	No	No	
HVAC Supply Grills	Yes	No	No	
HVAC Return Grills	Yes	No	No	
Ceiling at Supply Grills	Yes	No	No	
Surfaces in Room	Yes	No	No	

Observations

Findings:

- Temperature was low at the time of the assessment

Site Based Maintenance:

- Continue to monitor this location for any signs of microbial growth as well as dust and debris accumulation and clean as appropriate

Physical Plant Operations:

- Evaluate HVAC system for proper operation and repair as appropriate to increase temperature

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Fish	Temperature	Range	Relative Humidity	Range	CO2	Range	# Occupants
503	73.2	72 - 78	60.8	30% - 60%	1246	Max 700 > Ambient	20
Noticeable Odor		Visible water damage / staining?		Visible microbial growth?		Amount of material affected	
Ceiling Type		No		No		None	
Wall Type		No		No		None	
Flooring		No		No		None	

	Clean	Minor Dust / Debris	Needs Cleaning	Corrective Action Required
Ceiling	Yes	No	No	
Walls	Yes	No	No	
Flooring	Yes	No	No	
HVAC Supply Grills	Yes	No	No	
HVAC Return Grills	Yes	No	No	
Ceiling at Supply Grills	Yes	No	No	
Surfaces in Room	Yes	No	No	

Observations

Findings:

- Humidity level was slightly elevated at the time of the assessment

Site Based Maintenance:

- Continue to monitor this location for any signs of microbial growth as well as dust and debris accumulation and clean as appropriate

Physical Plant Operations:

- Evaluate HVAC system for proper operation and repair as appropriate to lower humidity level

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Fish	Temperature	Range	Relative Humidity	Range	CO2	Range	# Occupants
504	73.4	72 - 78	51.2	30% - 60%	998	Max 700 > Ambient	20
Noticeable Odor		Visible water damage / staining?		Visible microbial growth?		Amount of material affected	
Ceiling Type		Yes		No		2 stained ceiling tiles	
Wall Type		No		No		None	
Flooring		No		No		None	

	Clean	Minor Dust / Debris	Needs Cleaning	Corrective Action Required
Ceiling	No	Yes	Yes	Remove and replace ceiling tiles
Walls	Yes	No	No	
Flooring	Yes	No	No	
HVAC Supply Grills	Yes	No	No	
HVAC Return Grills	Yes	No	No	
Ceiling at Supply Grills	Yes	No	No	
Surfaces in Room	Yes	No	No	

Observations

Findings:

- 2 stained ceiling tiles. HFSP advised that a J work order was generated to address.
- FISH 504A - visible microbial growth on HVAC supply grill

Site Based Maintenance:

- Follow up on J work order to evaluate stained ceiling tiles
- Wipe down HVAC supply grill in FISH 504A with Wexcide disinfectant solution
- Continue to monitor this location for any signs of microbial growth as well as dust and debris accumulation and clean as appropriate

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Indian Trace Elementary School

Time of Day 8:30 am

Outdoor Conditions Temperature 80.5 Relative Humidity 85.8 Ambient CO2 498

Fish	Temperature	Range	Relative Humidity	Range	CO2	Range	# Occupants
505	72.6	72 - 78	53.8	30% - 60%	1053	Max 700 > Ambient	19
Noticeable Odor		Visible water damage / staining?		Visible microbial growth?		Amount of material affected	
Ceiling Type		No		No		None	
Wall Type		No		No		None	
Flooring		No		No		None	

	Clean	Minor Dust / Debris	Needs Cleaning	Corrective Action Required
Ceiling	Yes	No	No	
Walls	Yes	No	No	
Flooring	Yes	No	No	
HVAC Supply Grills	Yes	No	No	
HVAC Return Grills	Yes	No	No	
Ceiling at Supply Grills	Yes	No	No	
Surfaces in Room	Yes	No	No	

Observations

Findings:
 - Occupant advised that it is colder in the morning and gets hotter in the afternoon. Desk is located adjacent to the windows with direct sun exposure.

Site Based Maintenance:
 - Consider changing location of desk to avoid direct sun exposure
 - Continue to monitor this location for any signs of microbial growth as well as dust and debris accumulation and clean as appropriate

IAQ Assessment

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Indian Trace Elementary School

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Fish	Temperature	Range	Relative Humidity	Range	CO2	Range	# Occupants
506	70.9	72 - 78	55.6	30% - 60%	1096	Max 700 > Ambient	22
Noticeable Odor		Visible water damage / staining?		Visible microbial growth?		Amount of material affected	
Ceiling Type		No		No		None	
Wall Type		No		No		None	
Flooring		No		No		None	

	Clean	Minor Dust / Debris	Needs Cleaning	Corrective Action Required
Ceiling	Yes	No	No	
Walls	Yes	No	No	
Flooring	Yes	No	No	
HVAC Supply Grills	Yes	No	No	
HVAC Return Grills	Yes	No	No	
Ceiling at Supply Grills	Yes	No	No	
Surfaces in Room	Yes	No	No	

Observations

Findings:

- Non-approved chemicals in room
- 3 potted plants

Site Based Maintenance:

- Remove non-approved chemicals from room. Chemicals not approved by SBBC can have a negative impact on indoor air quality.
- Remove potted plants from room. Soil is a source of microbial growth.
- Continue to monitor this location for any signs of microbial growth as well as dust and debris accumulation and clean as appropriate

IAQ Assessment

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Indian Trace Elementary School

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Outdoor Conditions Temperature 80.5 Relative Humidity 85.8 Ambient CO2 498

Fish	Temperature	Range	Relative Humidity	Range	CO2	Range	# Occupants
507	69.3	72 - 78	59.8	30% - 60%	907	Max 700 > Ambient	19
Noticeable Odor		Visible water damage / staining?		Visible microbial growth?		Amount of material affected	
No		No		No		None	
Ceiling Type	2 x 4 Lay In		No	No	None		
Wall Type	Drywall		No	No	None		
Flooring	12 x 12 Vinyl		No	No	None		

	Clean	Minor Dust / Debris	Needs Cleaning	Corrective Action Required
Ceiling	Yes	No	No	
Walls	Yes	No	No	
Flooring	Yes	No	No	
HVAC Supply Grills	No	Yes	Yes	Clean with Wexcide disinfectant
HVAC Return Grills	Yes	No	No	
Ceiling at Supply Grills	Yes	No	No	
Surfaces in Room	Yes	No	No	

Observations

Findings:

- Dust and debris on HVAC supply grills
- Temperature was low at the time of the assessment

Site Based Maintenance:

- Clean HVAC supply grills with Wexcide disinfectant solution
- Continue to monitor this location for any signs of microbial growth as well as dust and debris accumulation and clean as appropriate

Physical Plant Operations:

- Evaluate HVAC system for proper operation and repair as appropriate to increase temperature

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Fish	Temperature	Range	Relative Humidity	Range	CO2	Range	# Occupants
508	69.8	72 - 78	56.4	30% - 60%	909	Max 700 > Ambient	3
Noticeable Odor		Visible water damage / staining?		Visible microbial growth?		Amount of material affected	
Ceiling Type		No		No		None	
Wall Type		No		No		None	
Flooring		No		No		None	

	Clean	Minor Dust / Debris	Needs Cleaning	Corrective Action Required
Ceiling	Yes	No	No	
Walls	Yes	No	No	
Flooring	Yes	No	No	
HVAC Supply Grills	Yes	No	No	
HVAC Return Grills	Yes	No	No	
Ceiling at Supply Grills	Yes	No	No	
Surfaces in Room	Yes	No	No	

Observations

Findings:

- Non-approved chemicals in room
- 1 potted plant
- Temperature was low at the time of the assessment

Site Based Maintenance:

- Remove non-approved chemicals from room. Chemicals not approved by SBBC can have a negative impact on indoor air quality.
- Remove potted plant from room. Soil is a source of microbial growth.
- Continue to monitor this location for any signs of microbial growth as well as dust and debris accumulation and clean as appropriate

Physical Plant Operations:

- Evaluate HVAC system for proper operation and repair as appropriate to increase temperature

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Fish	Temperature	Range	Relative Humidity	Range	CO2	Range	# Occupants
509	73.7	72 - 78	51.5	30% - 60%	970	Max 700 > Ambient	4
Noticeable Odor		Visible water damage / staining?		Visible microbial growth?		Amount of material affected	
Ceiling Type		No		No		None	
Wall Type		No		No		None	
Flooring		No		No		None	

	Clean	Minor Dust / Debris	Needs Cleaning	Corrective Action Required
Ceiling	Yes	No	No	
Walls	Yes	No	No	
Flooring	Yes	No	No	
HVAC Supply Grills	Yes	No	No	
HVAC Return Grills	Yes	No	No	
Ceiling at Supply Grills	Yes	No	No	
Surfaces in Room	Yes	No	No	

Observations

Findings:

- No issues identified

Site Based Maintenance:

- Continue to monitor this location for any signs of microbial growth as well as dust and debris accumulation and clean as appropriate

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Fish	Temperature	Range	Relative Humidity	Range	CO2	Range	# Occupants
509B		72 - 78		30% - 60%		Max 700 > Ambient	
Noticeable Odor	No		Visible water damage / staining?	Visible microbial growth?	Amount of material affected		
Ceiling Type	2 x 4 Lay In		No	No	None		
Wall Type	Drywall		No	No	None		
Flooring	12 x 12 Vinyl		No	No	None		

	Clean	Minor Dust / Debris	Needs Cleaning	Corrective Action Required
Ceiling	Yes	No	No	
Walls	Yes	No	No	
Flooring	Yes	No	No	
HVAC Supply Grills	Yes	No	No	
HVAC Return Grills	Yes	No	No	
Ceiling at Supply Grills	Yes	No	No	
Surfaces in Room	Yes	No	No	

Observations

Findings: (restroom)

- Signs of pests identified

Site Based Maintenance:

- Contact COMPASS to generate a work order for pest control

- Continue to monitor this location for any signs of microbial growth as well as dust and debris accumulation and clean as appropriate

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510	69.4	72 - 78	64.6	30% - 60%	816	Max 700 > Ambient	3
Noticeable Odor		Visible water damage / staining?		Visible microbial growth?		Amount of material affected	
No		No		No		None	
Ceiling Type	2 x 4 Lay In		No	No	None		
Wall Type	Drywall		No	No	None		
Flooring	12 x 12 Vinyl		No	No	None		

	Clean	Minor Dust / Debris	Needs Cleaning	Corrective Action Required
Ceiling	Yes	No	No	
Walls	Yes	No	No	
Flooring	Yes	No	No	
HVAC Supply Grills	Yes	No	No	
HVAC Return Grills	Yes	No	No	
Ceiling at Supply Grills	Yes	No	No	
Surfaces in Room	Yes	No	No	

Observations

Findings:

- Non-approved chemicals in room
- 1 potted plant
- Temperature was low and humidity level was slightly elevated

Site Based Maintenance:

- Remove non-approved chemicals from room. Chemicals not approved by SBBC can have a negative impact on indoor air quality.
- Remove potted plant from room. Soil is a source of microbial growth.
- Continue to monitor this location for any signs of microbial growth as well as dust and debris accumulation and clean as appropriate

Physical Plant Operations:

- Evaluate HVAC system for proper operation and repair as appropriate to increase temperature and lower humidity level

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Fish	Temperature	Range	Relative Humidity	Range	CO2	Range	# Occupants
511	71.4	72 - 78	53.2	30% - 60%	1048	Max 700 > Ambient	21
Noticeable Odor		Visible water damage / staining?		Visible microbial growth?		Amount of material affected	
Ceiling Type		No		No		None	
Wall Type		No		No		None	
Flooring		No		No		None	

	Clean	Minor Dust / Debris	Needs Cleaning	Corrective Action Required
Ceiling	Yes	No	No	
Walls	Yes	No	No	
Flooring	Yes	No	No	
HVAC Supply Grills	Yes	No	No	
HVAC Return Grills	Yes	No	No	
Ceiling at Supply Grills	Yes	No	No	
Surfaces in Room	Yes	No	No	

Observations

Findings:

- No issues identified

Site Based Maintenance:

- Continue to monitor this location for any signs of microbial growth as well as dust and debris accumulation and clean as appropriate

IAQ Assessment

Location Number 3181
 Evaluation Requested October 6, 2009
 Evaluation Date October 13, 2009

Indian Trace Elementary School

Time of Day 8:30 am

Outdoor Conditions Temperature 80.5 Relative Humidity 85.8 Ambient CO2 498

Fish	Temperature	Range	Relative Humidity	Range	CO2	Range	# Occupants
512	71.7	72 - 78	54.7	30% - 60%	968	Max 700 > Ambient	
Noticeable Odor		Visible water damage / staining?		Visible microbial growth?		Amount of material affected	
No		No		No		None	
Ceiling Type	2 x 4 Lay In		No	No	None		
Wall Type	Drywall		No	No	None		
Flooring	12 x 12 Vinyl		No	No	None		

	Clean	Minor Dust / Debris	Needs Cleaning	Corrective Action Required
Ceiling	Yes	No	No	
Walls	Yes	No	No	
Flooring	Yes	No	No	
HVAC Supply Grills	Yes	No	No	
HVAC Return Grills	Yes	No	No	
Ceiling at Supply Grills	Yes	No	No	
Surfaces in Room	Yes	No	No	

Observations

Findings:
 - Non-approved chemicals in room

Site Based Maintenance:
 - Remove non-approved chemicals from room. Chemicals not approved by SBBC can have a negative impact on indoor air quality.
 - Continue to monitor this location for any signs of microbial growth as well as dust and debris accumulation and clean as appropriate

IAQ Assessment

Location Number 3181
 Evaluation Requested October 6, 2009
 Evaluation Date October 13, 2009

Indian Trace Elementary School

Time of Day 8:30 am

Outdoor Conditions Temperature 80.5 Relative Humidity 85.8 Ambient CO2 498

Fish	Temperature	Range	Relative Humidity	Range	CO2	Range	# Occupants
513	72.8	72 - 78	53.7	30% - 60%	1184	Max 700 > Ambient	18
Noticeable Odor		Visible water damage / staining?		Visible microbial growth?		Amount of material affected	
No		Yes		No		1 ceiling tile	
Ceiling Type	2 x 4 Lay In		Yes	No		1 ceiling tile	
Wall Type	Drywall		No	No		None	
Flooring	12 x 12 Vinyl		No	No		None	

	Clean	Minor Dust / Debris	Needs Cleaning	Corrective Action Required
Ceiling	No	Yes	Yes	Remove and replace ceiling tile
Walls	Yes	No	No	
Flooring	Yes	No	No	
HVAC Supply Grills	Yes	No	No	
HVAC Return Grills	Yes	No	No	
Ceiling at Supply Grills	Yes	No	No	
Surfaces in Room	Yes	No	No	

Observations

Findings:

- Non-approved chemicals in room
- 1 stained ceiling tile at drain pipe
- 1 potted plant

Site Based Maintenance:

- Remove non-approved chemicals from room. Chemicals not approved by SBBC can have a negative impact on indoor air quality.
- Remove and replace stained ceiling tile. If stain returns, contact COMPASS to generate a work order to evaluate for cause.
- Remove potted plant from room. Soil is a source of microbial growth.
- Continue to monitor this location for any signs of microbial growth as well as dust and debris accumulation and clean as appropriate