

managing risk with responsibility

754 321-1900

754 321-1917

Aston A. Henry, Supervisor	Telephone
Risk Management Department	Fax:

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)

Custodial Issues Addressed
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.

	Indian	Trace Elemer	ntary School		Evaluation	Requested	October	6, 2009
Time of Day	8:30 am				Eval	luation Date	October	13, 2009
Outdoor Cond	ditions Te	mperature	80.5	Relative Humidity	y 85.8	Ambie	nt CO2	498
Fish	Temperature	Danga P	Relative Humidity		CO2	Dan	# (Decumente
132	74.8	Range R	57.2	Range 30% - 60%	1358	Ran Max 700	ge # > Ambient	Occupants 19
Noticeable O	dor No		Visible water damage / staining	Visible micr g? growth		Amount of material affec		
Ceiling Type	2 x 4 La	y In	Yes	No		1 c	eiling tile	
Wall Type	Drywa	all	No	No			None	
Flooring	12 x 12 \	/inyl	No	No			None	
	Clean	Minor Du / Debris		ſ	Correctiv	e Action Re	quired	
Ceiling	No	Yes	Yes	I	Remove and	d replace ce	iling tile	
Walls	Yes	No	No					
Flooring	Yes	No	No					
HVAC Supply	y Grills Yes	No	No					
HVAC Return	Grills Yes	No	No					
Ceiling at Su Grills	pply Yes	No	No					
Surfaces in R	Room Yes	No	No					

3181

Location Number

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 As	sessment	Location Number	3181
	Indian Trace Eleme	entary 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 Ambie	nt CO2 498
Fish Temperat	ture Range	Relative Humidity	Range	CO2 Ran	ge # Occupants
206 74.7	7 72 - 78	65.4	30% - 60%	766 Max 700	> Ambient 2
Noticeable Odor	No	Visible water damage / staining	Visible micro growth?		
	x 4 Lay In	No	No		None
Wall Type	Drywall	No	No		None
Flooring 12	2 x 12 Vinyl	No	No		None
_	ean Minor D / Debri	is Cleaning		Corrective Action Re	equired
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 slig	ghtly elevated at the	e time of the asses	ssment		
Site Based Maintenand - Continue to monitor this appropriate		signs of microbial (growth as well as du	ust and debris accumula	ation and clean as
Physical Plant Operati - Evaluate HVAC systen		ion and repair as a	appropriate to lower	humidity level	

	Indian Trad	ce Elementary	School		Evaluati	on Requested	October 6, 2009
Time of Day 8:	30 am				E	valuation Date	October 13, 2009
Outdoor Conditions	Temp	erature 80	0.5 F	Relative Humidity	85.8	Ambier	nt CO2 498
Fish Tempe		- 78	•	Range 30% - 60%	CO2 738		> Ambient 2
Noticeable Odor	No		isible water age / staining?	Visible micro growth?		Amount of material affect	
Ceiling Type	2 x 4 Lay In		No	No			None
Wall Type	Drywall		Yes	No	[1 sq	uare foot
Flooring	12 x 12 Vinyl		No	No			None
	Clean I	Minor Dust / Debris	Needs Cleaning		Correc	ctive Action Re	quired
Ceiling	Yes	No	No				
Walls	No	Yes	Yes		Repa	air as appropri	ate
Flooring	Yes	No	No				
HVAC Supply Grills	Yes	No	No				
HVAC Return Grills	Yes	No	No				
Ceiling at Supply Grills	No	Yes	Yes		Clea	an as appropria	ite
Surfaces in Room	Yes	No	No				
bservations							
Findings: - HVAC supply vent b - Humidity level was r	_	_	•				
Site Based Maintena - Continue to monitor appropriate		for any signs o	of microbial gı	rowth as well as du	ust and d	lebris accumula	tion and clean as

- Evaluate current adjustable HVAC supply vent for replacement with a stationary vent that blows away from the wall

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

Physical Plant Operations:

- Repair and repaint wall as appropriate

IAQ Assessment

3181

	Indiar	n Trace Elemer	ntary School		Evaluati	ion Requested	October 6	6, 2009
Time of Day	8:30 am				E	Evaluation Date	October 1	3, 2009
Outdoor Condit	tions T	emperature	80.5	Relative Hum	enidity 85.8	Ambie	nt CO2	198
Fish T	emperature	Range R	elative Humidity	Range _	CO2	Ran	ge # O	ccupants
301	72.9	72 - 78	56.1	30% - 60%	654	Max 700	> Ambient	18
Noticeable Ode	or Yes		Visible water damage / staining		microbial wth?	Amount of material affect		
Ceiling Type	2 x 4 L	ay In	No	N	lo		None	
Wall Type	Dryv	vall	No	N	lo		None	
Flooring	12 x 12 Vin	yl/Carpet	No	N	lo		None	
	Clean	Minor Du			Correc	ctive Action Re	equired	
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 Supp Grills	ply Yes	No	No					
Surfaces in Ro	oom Yes	No	No					

3181

Location Number

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

		IAQ Ass	sessment	Location Number	3181
	Indian Trace Elemer	ntary 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 Ambie	nt CO2 498
Fish Tempe 407 7 Noticeable Odor Ceiling Type Wall Type	73.8 72 - 78 No	52.6 Visible water damage / staining	Range 30% - 60% Visible micro growth? No No	bial Amount o	> Ambient 38
Flooring	12 x 12 Vinyl	No	No		None
Ceiling	Clean Minor Du- / Debris	Cleaning		Corrective Action Re	equired
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			
Dbservations					
Site Based Maintenary - Remove non-approve quality.	ved chemicals from roc	om. Chemicals no	ot approved by SBI	BC can have a negative	

		IAQ Ass	sessment	Location Number	3181
	Indian Trace Eleme	entary 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 Ambie	nt CO2 498
Noticeable Odor Ceiling Type Wall Type Flooring Ceiling Walls Flooring HVAC Supply Grills HVAC Return Grills Ceiling at Supply Grills	14.7 72 - 78 No	Visible water damage / staining? No No No No No No No No No N	Range 30% - 60% Visible micro growth? No No No	bial Amount o	> Ambient 22 f eted None None None
Surfaces in Room	Yes No	No			
Findings: - No issues identified Site Based Maintena - Continue to monitor appropriate	ance:	signs of microbial g	rowth as well as du	ust and debris accumula	ation and clean as

		IAQ Assess	ment	Location Number	3181
	Indian Trace Elementary	/ School		Evaluation Requested	October 6, 2009
Time of Day 8:3	30 am			Evaluation Date	October 13, 2009
Outdoor Conditions	Temperature 8	0.5 Rela	tive Humidity	85.8 Ambie	nt CO2 498
Noticeable Odor Ceiling Type Wall Type Flooring Ceiling Walls Flooring HVAC Supply Grills HVAC Return Grills Ceiling at Supply Grills	No V dama 2 x 4 Lay In Drywall 12 x 12 Vinyl Clean Minor Dust / Debris No Yes No Yes No Yes No Yes No Yes No Yes No Yes No Yes No	isible water age / staining? Yes No Needs Cleaning Yes No No No No No No No No No N	- 60% Visible microl growth? No No	bial Amount of material affec	ted eiling tile None None quired
Surfaces in Room	Yes No	No			
oservations Findings:					
 1 stained ceiling tile Site Based Maintena Remove and replace 					

		IAQ Asse	essment	Location Number	3181
	Indian Trace Elementa	ary School		Evaluation Requested	October 6, 2009
Time of Day 8:3	30 am			Evaluation Date	October 13, 2009
Outdoor Conditions	Temperature	80.5 R	elative Humidity	85.8 Ambie	nt CO2 498
Noticeable Odor Ceiling Type Wall Type Flooring	9.8 72 - 78 No da 2 x 4 Lay In Drywall 12 x 12 Vinyl Clean Minor Dust / Debris Yes No Yes No Yes No Yes No	Visible water mage / staining? No No No	Range 0% - 60% Visible micro growth? No No		> Ambient 2 f cted None None None
Surfaces in Room	Yes No	No			
25					
Site Based Maintena - Continue to monitor appropriate Physical Plant Opera	this location for any sigr	ns of microbial gro			ation and clean as

	IAQ Assessment	Location Number 3181
Indian Trace Elen	mentary School	Evaluation Requested October 6, 2009
Time of Day 8:30 am		Evaluation Date October 13, 2009
Outdoor Conditions Temperature	e 80.5 Relative Humidity	y 85.8 Ambient CO2 498
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 No	Visible water Visible micr damage / staining? growth	7
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 / Deb	oris Cleaning	Corrective Action Required
Ceiling Yes No	No No	
Walls Yes No	No No	
Flooring Yes No	No	
HVAC Supply Grills Yes No	No	
HVAC Return Grills Yes No.	No No	
Ceiling at Supply Yes No	No No	
Surfaces in Room Yes No	No	
Dbservations		
Findings: - Humidity level was slightly elevated at the	he time of the assessment	
Site Based Maintenance: - Continue to monitor this location for any appropriate	signs of microbial growth as well as d	dust and debris accumulation and clean as
Physical Plant Operations: - Evaluate HVAC system for proper operations	ation and repair as appropriate to lowe	er humidity level

Indian Trace Elementary School Evaluation Requested October 6, 2009									
Time of Day 8:30 am Evaluation Date October 13, 2009									
Outdoor Condi	tions	Ter	mperature	80.5	Relative Hum	idity 85.8	3 Ambie	nt CO2	498
Fish 504 Noticeable Od Ceiling Type Wall Type Flooring	lor [30% - 60% Visible r gro	0	Amount of material affec	> Ambien f ted ed ceiling ti None	
Ceiling		No	Yes	· —	a 	Remove	and replace cei	ling tiles	
Walls		Yes	No	No					
Flooring		Yes	No	No					
HVAC Supply	Grills		No						
HVAC Return	Grills	Yes	No	No					
Ceiling at Sup Grills	ply	Yes	No	No					
Surfaces in Ro	oom	Yes	No	No					
bservations									
- FISH 504A - v Site Based Mai - Follow up on a - Wipe down H	visible i intena J work VAC si	microbial ance: order to e upply grill	growth on evaluate st in FISH 50	at a J work order of HVAC supply grill ained ceiling tiles 04A with Wexcide signs of microbia	disinfectant solu	ution	debris accumula	ition and cl	lean as

3181

		IAQ As	sessment	Location Number	3181
	Indian Trace Elem	entary School		Evaluation Requested	October 6, 2009
Time of Day 8	:30 am			Evaluation Date	October 13, 2009
Outdoor Conditions	S Temperature	80.5	Relative Humidity	85.8 Ambie	ent CO2 498
I — — —	Range 72.6 72 - 78 No 2 x 4 Lay In Drywall 12 x 12 Vinyl Clean Minor D / Debr Yes No	ris Cleaning No	Range 30% - 60% Visible micro growth? No No No	bbial Amount o	> Ambient 19 f cted None None None
Flooring	Yes No	No			
HVAC Supply Grills					
HVAC Return Grills	s Yes No	No			
Ceiling at Supply Grills	Yes No	No			
Surfaces in Room	Yes No	No			
Dbservations					
Findings: - Occupant advised twith direct sun exposes Site Based Mainten - Consider changing	sure. nance: location of desk to av	oid direct sun expo	osure	on. Desk is located adja	

	Indian Trace Ele	mentary School		Evaluation Requested	October 6, 2009
Time of Day	3:30 am			Evaluation Date [October 13, 2009
Outdoor Condition	s Temperatu	re 80.5	Relative Humidity	85.8 Ambier	nt CO2 498
	Poerature Range 70.9 72 - 78 No 2 x 4 Lay In Drywall	Relative Humidity 55.6 Visible water damage / staining No	30% - 60% Visible micro	bial Amount of material affect	> Ambient 22
Flooring	12 x 12 Vinyl	No	No		None
Ceiling	Clean Minor / De Yes N			Corrective Action Re	quired
Walls	Yes	o No			
Flooring	Yes	lo No			
HVAC Supply Grill	ls Yes N	lo No			
HVAC Return Grill	s Yes N	No No			
Ceiling at Supply Grills	Yes	No No			
Surfaces in Room	Yes	o No			
oservations					
Findings: - Non-approved che - 3 potted plants Site Based Maintel - Remove non-approquality Remove potted pla	nance: oved chemicals from ants from room. Soil	is a source of micro	bial growth.	C can have a negative is st and debris accumula	

3181

Indian Trace Elementary School Evaluation Requested October 6, 200	9					
Time of Day 8:30 am Evaluation Date October 13, 200)9					
Outdoor Conditions Temperature 80.5 Relative Humidity 85.8 Ambient CO2 498]					
Fish Temperature Range Relative Humidity Range CO2 Range # Occupal 507 69.3 72 - 78 59.8 30% - 60% 907 Max 700 > Ambient 19						
Noticeable Odor No Visible water Visible microbial Amount of						
damage / staining? growth? material affected Ceiling Type 2 x 4 Lay In No None	-,					
Wall Type Drywall No None	<u> </u>					
Flooring 12 x 12 Vinyl No No None	<u>-</u>					
Clean Minor Dust Needs Corrective Action Required / Debris Cleaning						
Ceiling Yes No No	$\Box \mid$					
Walls Yes No No	$\exists \mid$					
Flooring Yes No No	$\exists \mid$					
HVAC Supply Grills No Yes Clean with Wexcide disinfectant	$\exists \mid$					
HVAC Return Grills Yes No No	$\exists \mid$					
Ceiling at Supply Yes No No Grills						
Surfaces in Room Yes No No						
bservations						
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						

3181

	Indiar	Trace Elementa	ary School		Evaluatio	n Requested	Octo	ober 6, 2009
Time of Day	8:30 am				Ev	aluation Date	Octo	ber 13, 2009
Outdoor Condi	tions T	emperature	80.5	Relative Humidi	ty 85.8	Ambie	nt CO2	498
	Гетрегаture	Range Rel	ative Humidity	Range	CO2	Ran	ge	# Occupants
508	69.8	72 - 78	56.4	30% - 60%	909	Max 700	> Ambi	ent 3
Noticeable Od	or No	da	Visible water mage / staining	Visible mic growth		Amount of material affect		
Ceiling Type	2 x 4 La	ay In	No	No] [None	
Wall Type	Dryw	all	No	No] [None	
Flooring	12 x 12	Vinyl	No	No] [None	
	Clean	Minor Dust / Debris	Needs Cleaning		Correct	ive Action Re	equired	
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 Sup Grills	ply Yes	No	No					
Surfaces in Ro	oom Yes	No	No					
bservations								
Findings: - Non-approved - 1 potted plant - Temperature v		room time of the asse	essment					
Site Based Mai	intenance:							
Pomovo non o	approved abor	micals from room	Chamicala r	ot approved by SI	DDC oon ho	vo a pogativo	impost	on indoor oir

3181

Location Number

- 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

		IAQ Asse	ssment	Location Number	3181
	Indian Trace Eleme	entary School		Evaluation Requested	October 6, 2009
Time of Day 8:3	30 am			Evaluation Date	October 13, 2009
Outdoor Conditions	Temperature	80.5 Re	elative Humidity	85.8 Ambie	nt CO2 498
Noticeable Odor Ceiling Type Wall Type Flooring	No	Visible water damage / staining? No No No No No No No No No N	Range 0% - 60% Visible microl growth? No No No		> Ambient 4 feted None None None
Surfaces in Room bservations	Yes No	No .			
Findings: - No issues identified Site Based Maintena - Continue to monitor appropriate		signs of microbial gro	wth as well as du	st and debris accumula	ation and clean as

	Indian Trace Eleme	entary School		Evaluation Requested October 6, 2009
Time of Day 8:3	80 am			Evaluation Date October 13, 2009
Outdoor Conditions	Temperature	80.5	Relative Humidity	85.8 Ambient CO2 498
Fish Temper 509B Noticeable Odor Ceiling Type	72 - 78 [No 2 x 4 Lay In	Visible water damage / staining	30% - 60% Visible micro	Range # Occupants Max 700 > Ambient Sobial Amount of material affected None
Wall Type Flooring	Drywall 12 x 12 Vinyl	No No	No	None None
	Clean Minor Du	ust Needs	No	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		
bservations				
Findings: (restroom - Signs of pests identif				
Site Based Maintena - Contact COMPASS to Continue to monitor to appropriate	to generate a work o	•		ust and debris accumulation and clean as

3181

			IAQ As	sessment	Location	Number	3181
	Indian	Trace Elementa	ary School		Evaluation	Requested	October 6, 2009
Time of Day	8:30 am				Eva	luation Date	October 13, 2009
Outdoor Condi	tions Te	emperature	80.5	Relative Humidity	85.8	Ambie	nt CO2 498
Fish T 510	Femperature 69.4	Range Rel 72 - 78	lative Humidity 64.6	Range 30% - 60%	CO2 816	Ran Max 700	ge # Occupants > Ambient 3
Noticeable Od	or No	da	Visible water amage / staining	Visible micro growth?		Amount of material affec	
Ceiling Type	2 x 4 La	y In	No	No			None
Wall Type	Drywa	all	No	No			None
Flooring	12 x 12 \	√inyl	No	No			None
	Clean	Minor Dust / Debris	Needs Cleaning		Correcti	ve Action Re	quired
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 Sup Grills	ply Yes	No	No				
Surfaces in Ro	oom Yes	No	No				
bservations							
Findings: - Non-approved - 1 potted plant		oom					

- 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

			IAQ Ass	essment	Locatio	n Number	3181
	Indian Trace	Elementary S	chool		Evaluation	on Requested	October 6, 2009
Time of Day	8:30 am				E	valuation Date	October 13, 2009
Outdoor Condition	ns Tempera	ature 80.	5	Relative Humidi	85.8	Ambie	nt CO2 498
Fish Tem	perature Rang	je Relative	Humidity	Range	CO2	Rar	nge # Occupants
511	71.4 72 - 7	8 5	3.2	30% - 60%	1048	Max 700	> Ambient 21
Noticeable Odor	No		ble water e / staining?	Visible mid growth		Amount o material affect	
Ceiling Type	2 x 4 Lay In	[No	No] [None
Wall Type	Drywall		No	No] L		None
Flooring	12 x 12 Vinyl		No	No] [None
	/	nor Dust Debris	Needs Cleaning		Correc	tive Action Re	equired
Ceiling	Yes	No	No				
Walls	Yes	No	No				
Flooring	Yes	No	No				
HVAC Supply Gri	IIs Yes	No	No				
HVAC Return Gri	ls Yes	No	No				
Ceiling at Supply Grills	Yes	No	No				
Surfaces in Room	Yes	No	No				
L Observations							
Findings:							
- No issues identifie	∍d						
Site Based Mainter - Continue to moniter appropriate		r any signs of	microbial g	rowth as well as	dust and de	ebris accumula	ation and clean as

		IAQ Ass	sessment	Location Number	3181
	Indian Trace Elemer	ntary School		Evaluation Requested	October 6, 2009
Time of Day 8:3	0 am			Evaluation Date	October 13, 2009
Outdoor Conditions	Temperature	80.5	Relative Humidity	85.8 Ambie	nt CO2 498
Fish Temper		elative Humidity	Range	CO2 Rar	ige # Occupants
512 71	72 - 78		30% - 60%		> Ambient
Noticeable Odor	No	Visible water damage / staining	Visible micro ? growth?	bial Amount o material affect	
Ceiling Type	2 x 4 Lay In	No	No		None
Wall Type	Drywall	No	No		None
Flooring 1	12 x 12 Vinyl	No	No		None
	Clean Minor Du	Cleaning		Corrective Action Re	equired
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			
L Observations					
Findings:					
- Non-approved chemi	icals in room				
quality.	ed chemicals from roc			BC can have a negative	

Indian Trace Elementary School Evaluation Requested October 6, 2009							
Time of Day	3:30 am	 J	_		E	Evaluation Date	October 13, 2009
Outdoor Conditions	s Tem	nperature	80.5	Relative Humid	ity 85.8	B Ambier	nt CO2 498
		2 - 78 dar	53.7 Visible water mage / staining Yes	Range 30% - 60% Visible mid g? growt No		Amount of material affect	> Ambient 18
Flooring	12 x 12 Vir		No	No]		None
0.30	Clean	Minor Dust / Debris Yes	Needs Cleaning Yes			ctive Action Re	
Ceiling	No	Tes	res		кепіоче	and replace cei	ling tile
Walls	Yes	No	No				
Flooring	Yes	No	No				
HVAC Supply Grill	s Yes	No	No				
HVAC Return Grill	s Yes	No	No				
Ceiling at Supply Grills	Yes	No	No				
Surfaces in Room	Yes	No	No				
bservations							
quality.	e at drain pipenance: oved chemical ce stained c	pe cals from room eiling tile. If st	tain returns, co	ontact COMPASS		_	impact on indoor air o 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

IAQ Assessment

3181