

managing risk with responsibility

Jeffrey S. Moquin, Director Risk Management Department

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October 31, 2006 Signature on File

TO: Ms. Merceda Stanley, Principal

Dillard High School

FROM: Robert J. Krickovich, Coordinator, LEA

Facilities and Construction Management, Environmental Division

SUBJECT: Indoor Air Quality (IAQ) Assessment

FISH 227A, 227B, 236A, 236B, 330, 332, 540, 548, 564, 570, 573, 633, 634, 642, 670 and

679

On September 19, 2006 I conducted an assessment of FISH 227A, 227B, 236A, 236B, 330, 332, 540, 548, 564, 570, 573, 633, 634, 642, 670 and 679 at **Dillard High 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.

Should any questions arise, or if the current concerns continue after the attached recommendations have been addressed, please feel free to contact me at 754-321-1638.

cc: Dr. Verda Farrow, Area Superintendent

Michaelle Pope, Area Director

Michael Garretson, Deputy Superintendent, Facilities and Construction Management

Jeffrey S. Moquin, Director, Risk Management

David Herrmann, Project Manager, Facilities and Construction Management

Dane Ramson, Broward Teachers Union

Mark Dorsett, Manager 1, Physical Plant Operations Division, Zone 1

Roy Norton, Manager Custodial/Grounds, Physical Plant Operations Division

RK/tc Enc.

Time of Day	12:00 pm				Ev	valuation Date September 19, 2006
Outdoor Condi	tions Tem	perature 94	1.5 R	Relative Humidity	60.6	Ambient CO2 515
Fish	Temperature F	Range Relati	ve Humidity	Range	CO2	Range # Occupants
227A	7.	2 - 78	3	80% - 60%		Max 700 > Ambient
Noticeable Od	lor No		sible water ige / staining?	Visible microb growth?	oial	Amount of material affected
Ceiling Type	Drywall		No	No		None
Wall Type	Ceramic T	ile	No	No		None
Flooring	Ceramic Ti	е	No	No		None
	Clean	Minor Dust / Debris	Needs Cleaning		Correct	ive Action Required
Ceiling	Yes	No	No			
Walls	Yes	No	No			
Flooring	Yes	No	No			
HVAC Supply	Grills					None
HVAC Return	Grills					None
Ceiling at Sup Grills	ply					N/A
Surfaces in Ro	oom Yes	No	No			
bservations Findings:						
 Restroom door Exhaust fans of 	only - no supply a doors are left clo	ir - doors only ur	ndercut 1/4 inc			o visible microbial growth at the time
Recommendati	ions:					
Site Based Mai - Continue to mo appropriate		n for any signs o	f microbial gro	wth as well as dust	and deb	ris accumulation and clean as
	Operations: aust fans are tied apply issue and co			ill, etc.		
1						

Dillard High School

0371

September 19, 2006

Location Number
Evaluation Requested

Time of Day	12:00 pm				Eva	aluation Date Septemb	er 19, 2006
Outdoor Condi	tions Tem	perature 94	1.5	Relative Humidity	60.6	Ambient CO2	515
Fish	Temperature _F	Range Relati	ve Humidity	Range	CO2	Range #	Occupants
227B	7	2 - 78		30% - 60%		Max 700 > Ambien	t
Noticeable Od	lor No		sible water ige / staining	Visible microb ? growth?	oial A	affected	
Ceiling Type	Drywall		No	No		None	
Wall Type	Ceramic T	ile	No	No		None	
Flooring	Ceramic Til	e	No	No		None	
	Clean	Minor Dust / Debris	Needs Cleaning		Correctiv	ve Action Required	
Ceiling	Yes	No	No				
Walls	Yes	No	No				
Flooring	Yes	No	No				
HVAC Supply	Grills					None	
HVAC Return	Grills					None	
Ceiling at Sup Grills	ply					N/A	
Surfaces in Ro	oom Yes	No	No				
bservations							
- Exhaust fans o	only - no supply a doors are left clo	ir - doors only ur	ndercut 1/4 in			visible microbial growth	at the time
Recommendati	ions:						
Site Based Mai - Continue to mo appropriate		n for any signs o	f microbial gi	rowth as well as dust	and debri	s accumulation and clea	an as
	Operations: aust fans are tied upply issue and co			grill, etc.			
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Dillard High School

0371

September 19, 2006

Location Number
Evaluation Requested

Time of Day	12:00 pm				Eva	September 19, 2006
Outdoor Condi	itions Tem	perature 94	4.5	Relative Humidity	60.6	Ambient CO2 515
Fish	Temperature F	Range Relat	ive Humidity	Range	CO2	Range # Occupants
236A	7:	2 - 78		30% - 60%		Max 700 > Ambient
Noticeable Od	lor No		isible water age / staining	Visible microt growth?	oial A	mount of material affected
Ceiling Type	Drywall		No	No		None
Wall Type	Ceramic T	ile	No	No		None
Flooring	Ceramic Til	е	No	No		None
	Clean	Minor Dust / Debris	Needs Cleaning		Correctiv	ve Action Required
Ceiling	Yes	No	No			
Walls	Yes	No	No			
Flooring	Yes	No	No			
HVAC Supply	Grills					None
HVAC Return	Grills					None
Ceiling at Sup Grills	ply					N/A
Surfaces in Ro	oom Yes	No	No			
bservations Findings:						
 Restroom doo Exhaust fans d 	only - no supply a doors are left clo	ir - doors only u	ndercut 1/4 in			visible microbial growth at the time
Recommendati	ions:					
Site Based Mai - Continue to mo appropriate		n for any signs c	of microbial g	rowth as well as dust	and debri	s accumulation and clean as
	Operations: aust fans are tied upply issue and co			grill, etc.		

Dillard High School

0371

September 19, 2006

Location Number

Evaluation Requested

Time of Day	12:00 pm				Eva	luation Date Septem	ber 19, 200	6
Outdoor Condi	itions Tem	perature 94	1.5	Relative Humidity	60.6	Ambient CO2	515	
Fish	Temperature F	Range Relati	ive Humidity	Range	CO2	Range	# Occupan	its
236B	7	2 - 78		30% - 60%		Max 700 > Ambie	nt	
Noticeable Od	lor No		sible water age / staining	Visible microb ? growth?	oial A	mount of material affected		
Ceiling Type	Drywall		No	No		None]
Wall Type	Ceramic T	ile	No	No		None]
Flooring	Ceramic Ti	le	No	No		None		
	Clean	Minor Dust / Debris	Needs Cleaning		Correctiv	e Action Required		
Ceiling	Yes	No	No]
Walls	Yes	No	No]
Flooring	Yes	No	No					╛┃
HVAC Supply	Grills					None		╛┃
HVAC Return	Grills					None] │
Ceiling at Sup Grills	ply					N/A]
Surfaces in Ro	oom Yes	No	No]
bservations								_ _
- Exhaust fans o	only - no supply a doors are left clo	ir - doors only ur	ndercut 1/4 in			visible microbial grow	th at the tim	ne
Recommendat	ions:							
Site Based Mai - Continue to me appropriate		n for any signs o	f microbial gı	rowth as well as dust	and debris	s accumulation and cle	ean as	
	Operations: aust fans are tied upply issue and c			ırill, etc.				
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Dillard High School

0371

September 19, 2006

Location Number
Evaluation Requested

		Dillar	d High School		Evaluat	ion Requested	September	19, 2006
Time of Day	12:00 pm				i	Evaluation Date	September	19, 2006
Outdoor Cond	itions To	emperature	94.5	Relative Humid	ity 60.6	S Ambie	ent CO2	515
Fish	Temperature	Range	Relative Humidity	/ Range	CO2	Rar	nge # C	ccupants
330	66.9	72 - 78	76.2	30% - 60%	496	Max 700	> Ambient	2
Noticeable O	dor No		Visible water damage / staining	Visible mi g? growt		Amount of ma affected		
Ceiling Type	Plast	er	Yes	Yes		Er	tire room	
Wall Type	Ceramio	c Tile	No	No			None	
Flooring	Quarry	Tile	No	No			None	
	Clean	Minor D / Debr		3	Corre	ctive Action Re	equired	
Ceiling	No	Yes	Yes		Clean and	d repaint as ap	propriate	
Walls	Yes	No	No					
Flooring	Yes	No	No					
HVAC Supply	Grills No	Yes	Yes		Clean wit	h Wexcide dis	infectant	
HVAC Return	Grills No	Yes	Yes		Clean wit	h Wexcide dis	infectant	
Ceiling at Sup Grills	pply					N/A		
Surfaces in R	oom Yes	No	No					

0371

Location Number

Observations

Findings: Girls Locker Room

- Rust stains and peeling paint on ceilings of showers and visible microbial growth where paint is missing
- Minor microbial growth on other areas of ceiling throughout the locker room and was previously cleaned by staff
- HFSP stated that HVAC does not turn off and on with the other units on campus and has to be controlled manually
- Dust and debris on HVAC supply grills
- Heavy dust and debris on and inside HVAC return grills
- Temperature was low and humidity level was elevated

Recommendations:

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

- Verify that exhaust fans are tied to the HVAC control circuit
- Evaluate HVAC for proper operation and repair
- Evaluate and repair HVAC to increase temperature and lower humidity
- Evaluate cause of stains and peeling paint on ceiling and repair as appropriate. Paint entire ceiling
- Clean all surfaces thoroughly to remove microbial growth

			a	riigir Concor				•		,
Time of Day	12:00	om		<u></u> _			Evalua	ation Date	Septem	ber 19, 2006
Outdoor Condi	tions	Tempe	rature	94.5	Relative Hur	midity 6	60.6	Ambie	nt CO2	515
Fish ¹	Temperatu	ire Ran	nge l	Relative Humidit	y Range	CO	2	Ran	ige	# Occupants
332	67.1	72 -	78	81.6	30% - 60%	506	6	Max 700	> Ambier	nt 2
Noticeable Od	or Y	'es		Visible water damage / stainin		microbial owth?	Amo	ount of ma	terial	
Ceiling Type	F	Plaster		Yes		Yes		En	tire room	
Wall Type	Cer	amic Tile		No		No			None	
Flooring	Qu	arry Tile		No		No			None	
	Clea		linor Du / Debris			Co	orrective	Action Re	equired	
Ceiling	N	0	Yes	Yes		Clean	and repa	aint as ap	propriate	
Walls	Ye	es	No	No						
Flooring	Ye	es	No	No						
HVAC Supply	Grills N	0	Yes	Yes		Clean	with We	excide dis	infectant	
HVAC Return (Grills N	0	Yes	Yes		Clean	with We	xcide dis	infectant	
Ceiling at Supp Grills	ply							N/A		
Surfaces in Ro	oom Ye	es	No	No						

Dillard High School

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Evaluation Requested September 19, 2006

Location Number

Observations

Findings: Boys Locker Room

- Rust stains and peeling paint on ceilings of showers and visible microbial growth where paint is missing
- Minor microbial growth on other areas of ceiling throughout the locker room and was previously cleaned by staff
- HFSP stated that HVAC does not turn off and on with the other units on campus and has to be controlled manually
- Dust and debris on HVAC supply grills
- Heavy dust and debris on and inside HVAC return grills
- Temperature was low and humidity level was elevated

Recommendations:

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

- Verify that exhaust fans are tied to the HVAC control circuit
- Evaluate HVAC for proper operation and repair
- Evaluate and repair HVAC to increase temperature and lower humidity
- Evaluate cause of stains and peeling paint on ceiling and repair as appropriate. Paint entire ceiling
- Clean all surfaces thoroughly to remove microbial growth

Time of Day	12:00 pm				E	valuation Date Septemb	per 19, 2006
Outdoor Condi	tions Ter	mperature	94.5	Relative Humidity	60.6	Ambient CO2	515
Fish	Temperature	Range	Relative Humidity	Range	CO2	Range	# Occupants
540	76.3	72 - 78	54.4	30% - 60%	743	Max 700 > Ambier	nt 3
Noticeable Od	lor No]	Visible water damage / staining	Visible micro g? growth?		Amount of material affected	
Ceiling Type	2 x 4 Lay	/ In	No	No	[None	
Wall Type	Drywa	II	No	No	[None	
Flooring	12 x 12 V	inyl	No	No		None	
	Clean	Minor Du / Debris			Correc	tive Action Required	
Ceiling	Yes	No	No				
Walls	Yes	No	No				
Flooring	Yes	No	No				
HVAC Supply	Grills No	Yes	Yes	С	lean witl	h Wexcide disinfectant	
HVAC Return	Grills No	Yes	Yes	С	lean witl	h Wexcide disinfectant	
Ceiling at Sup Grills	ply No	Yes	Yes		Clea	n as appropriate	
Surfaces in Ro	oom No	Yes	Yes		Clea	an as appropriate	

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September 19, 2006

Location Number
Evaluation Requested

Observations

Findings:

- Occupant advised that the temperature is high in the morning from 7:00 8:00 a.m. and then cools down
- Advised that first and second floor rooms in buildings 5 and 6 -South side are too warm
- Dust and debris on HVAC supply and return grills and on ceiling at HVAC supply grills in FISH 548A
- Dust build up on environmental surfaces

Recommendations:

Site Based Maintenance:

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

- Evaluate HVAC system for proper operation
- Evaluate complaint that first and second floor rooms in buildings 5 and 6 South side are too warm and repair as appropriate to equalize temperature between building sections North and South

		Dillard H	igh School		Evalua	ation Requested	September	19, 2006
Time of Day	12:00 pm]				Evaluation Date	September	19, 2006
Outdoor Condition	ons Ter	nperature	94.5	Relative Hur	midity 60.	6 Ambie	ent CO2	515
Fish Te	mperature	Range Re	lative Humidity	Range	CO2	Ran	nge # C	Occupants
548		72 - 78	62.1	30% - 60%	633		> Ambient	2
Noticeable Odo	r No	da	Visible water mage / staining		e microbial owth?	Amount of ma	terial	
Ceiling Type	2 x 4 Lay		No	_	No		None	
Wall Type	Drywal	Ī	No		No		None	
Flooring	12 x 12 Vi	inyl	No		No		None	
	Clean	Minor Dust / Debris	Needs Cleaning		Corre	ective Action Re	equired	
Ceiling	Yes	No	No					
Walls	Yes	No	No					
Flooring	Yes	No	No					
HVAC Supply G	rills No	Yes	Yes		Clean w	ith Wexcide dis	infectant	
HVAC Return G	rills Yes	No	No					
Ceiling at Suppl Grills	y No	Yes	Yes		Cle	ean as appropri	ate	
Surfaces in Roo	m Yes	No	No					
bservations								
Findings: - HFSP indicated and has not return - Wall material is of Dust and debris - Temperature wa	ned. clean and dry on HVAC sup s low and hum	ply grills and o	n ceiling at HV/		_		year and it w	as cleaned
Recommendation	ns:							
Site Based Maint - Clean HVAC sup - Continue to mon appropriate	oply grills with							
Physical Plant O								
- Evaluate and rep	pair HVAC to in	ncrease tempe	erature and lowe	er humidity				

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Evaluation Requested September 19, 2006 Dillard High School **Evaluation Date** September 19, 2006 12:00 pm Time of Day **Outdoor Conditions Temperature** 94.5 60.6 **Relative Humidity Ambient CO2** 515 Temperature Fish CO₂ **Relative Humidity** Range Range Range # Occupants 73.6 58.8 1086 564 72 - 78 Max 700 > Ambient 3 30% - 60% Visible water Visible microbial **Amount of material Noticeable Odor** No damage / staining? growth? affected None **Ceiling Type** 2 x 4 Lay In No No **Wall Type** Drywall None No No **Flooring** 12 x 12 Vinyl None No No Clean **Minor Dust Needs Corrective Action Required** Cleaning / Debris Ceiling Yes No No Yes No No Walls **Flooring** Yes No No HVAC Supply Grills | Yes No No HVAC Return Grills | Yes No No **Ceiling at Supply** Yes No No **Grills Surfaces in Room** Yes No No **Observations** Findings: Occupant advised that the room is too cold after the room has been empty of students for an hour Recommendations: 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

IAQ Assessment

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			Dillar	d High Schoo	<u>l</u>		Evaluat	ion Requested	Septem	ber 19, 2006
Time of Day	12:	00 pm					ı	Evaluation Date	Septem	ber 19, 2006
Outdoor Cond	itions	Т	emperature	94.5	Relative	Humidity	60.6	Ambie	nt CO2	515
Fish	Tempe	rature	Range	Relative Hum	nidity Rang	je	CO2	Ran	ige	# Occupants
570	75	5.3	72 - 78	60.7	30% - 6	0%	1294	Max 700	> Ambie	nt 23
Noticeable O	dor	No		Visible wa damage / sta		isible micro growth?		Amount of ma affected	terial	
Ceiling Type		2 x 4 L	ay In	No		No			None	
Wall Type		Dryw	/all	No		No			None	
Flooring		12 x 12	Vinyl	No		No			None	
	(Clean	Minor D	, uot	eds ning		Corre	ctive Action Re	equired	
Ceiling		Yes	No	N	0					
Walls		Yes	No	N	0					
Flooring		Yes	No	N	0					
HVAC Supply	Grills	No	Yes	Ye	es	C	lean wit	h Wexcide dis	infectant	
HVAC Return	Grills	No	Yes	Ye	es	C	lean wit	h Wexcide dis	infectant	
Ceiling at Sup Grills	pply	Yes	No	N	0					
Surfaces in R	oom	Yes	No	_ N	0					

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Evaluation Requested September 19, 2006

Location Number

Observations

Findings:

- Occupant advised that the room is too warm
- Advised that first and second floor rooms in buildings 5 and 6 -South side are too warm
- Dust and debris on HVAC supply and return grills
- Heavy dust and debris on light fixtures near HVAC supply grills

Recommendations:

Site Based Maintenance:

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

- Evaluate HVAC system for proper operation
- Evaluate complaint that first and second floor rooms in buildings 5 and 6 South side are too warm and repair as appropriate to equalize temperature between building sections - North and South

		Dillard H	High School		Evaluati	on Requested	Septer	mber 19, 2006
Time of Day	12:00 pm]			E	Evaluation Date	Septer	mber 19, 2006
Outdoor Cond	litions Ter	mperature [94.5	Relative Humidity	60.6	Ambie	nt CO2	515
Fish	Temperature	Range R	elative Humidity	Range	CO2	Ran	ige	# Occupants
573	74.9	72 - 78	51.4	30% - 60%	837	Max 700	> Ambi	ent 3
Noticeable O	dor No] d	Visible water amage / staining	Visible micro g? growth?		Amount of mat affected	terial	
Ceiling Type	2 x 4 Lay	[,] In	No	No			None	
Wall Type	Drywa	I	No	No			None	
Flooring	12 x 12 V	inyl	No	No			None	
	Clean	Minor Dus / Debris	st Needs Cleaning	I	Correc	ctive Action Re	equired	
Ceiling	Yes	No	No					
Walls	Yes	No	No					
Flooring	Yes	No	No					
HVAC Supply	Grills No	Yes	Yes	С	lean wit	h Wexcide disi	infectan	t
HVAC Return	Grills No	Yes	Yes	С	lean wit	h Wexcide disi	infectan	t
Ceiling at Sup Grills	oply Yes	No	No					
Surfaces in R	oom Yes	No	No					

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Location Number

Observations

Findings:

- Occupant advised that the room is too warm
- Advised that first and second floor rooms in buildings 5 and 6 -South side are too warm
- Dust and debris on HVAC supply and return grills

Recommendations:

Site Based Maintenance:

- Clean HVAC supply and return 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

- Evaluate HVAC system for proper operation
- Evaluate complaint that first and second floor rooms in buildings 5 and 6 South side are too warm and repair as appropriate to equalize temperature between building sections North and South

Evaluation Requested September 19, 2006 Dillard High School **Evaluation Date** September 19, 2006 12:00 pm Time of Day **Outdoor Conditions Temperature** 94.5 60.6 **Relative Humidity Ambient CO2** 515 Temperature Fish CO₂ **Relative Humidity** Range Range Range # Occupants 633 74.6 55.7 788 72 - 78 Max 700 > Ambient 10 30% - 60% Visible water Visible microbial **Amount of material Noticeable Odor** No damage / staining? growth? affected None **Ceiling Type** 2 x 4 Lay In No No **Wall Type** Drywall None No No **Flooring** 12 x 12 Vinyl None No No Clean **Minor Dust Needs Corrective Action Required** Cleaning / Debris Yes Ceiling No No Yes No No Walls **Flooring** Yes No No HVAC Supply Grills | Yes No No HVAC Return Grills | Yes No No **Ceiling at Supply** Yes No No **Grills Surfaces in Room** Yes No No **Observations** Findings: No issues identified at the time of the assessment Recommendations: 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

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	Dillard Hig	h School	Ev	aluation Requested	September 19, 2006
Time of Day 12:00	pm			Evaluation Date	September 19, 2006
Outdoor Conditions	Temperature	94.5 Relati	ve Humidity	60.6 Ambier	nt CO2 515
Fish Temperat 634 73.1	72 - 78	62.3 30% -		75 Max 700	ge # Occupants > Ambient 22
Noticeable Odor	INO I	Visible water nage / staining?	Visible microbia growth?	l Amount of mate affected	erial
Ceiling Type 2	x 4 Lay In	No	No		None
Wall Type	Drywall	No	No	ľ	None
Flooring 12	x 12 Vinyl	No	No		None
Cle	ean Minor Dust / Debris	Needs Cleaning	C	orrective Action Rec	quired
Ceiling	/es No	No			
Walls	/es No	No			
Flooring	res No	No			
HVAC Supply Grills	No	Yes	Clea	n with Wexcide disir	nfectant
HVAC Return Grills	No	Yes	Clea	n with Wexcide disir	nfectant
Ceiling at Supply Grills	res No	No			
Surfaces in Room Y	/es No	No			
bservations					
Findings:	ha had the deer blocks	d anan far about 15 r	ninutae prier to t	ha aggaggmant hagg	una room is too sold
 Teacher advised that sh Dust and debris on HVA Humidity level was slight 	AC supply and return g		minutes prior to ti	ne assessment becau	ise room is too coid.
Recommendations:					
Site Based Maintenance	<u>e:</u>				
 Ensure that all exterior of the continue to monitor this appropriate 	d return grills with Wex	cide disinfectant solu		nd debris accumulatio	n and clean as
Physical Plant Operatio - Evaluate HVAC system					

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Evaluation Requested September 19, 2006 Dillard High School **Evaluation Date** September 19, 2006 12:00 pm Time of Day **Outdoor Conditions Temperature** 94.5 60.6 **Relative Humidity Ambient CO2** 515 Temperature Fish CO₂ **Relative Humidity** Range Range # Occupants Range 73.9 55.6 673 642 72 - 78 Max 700 > Ambient 14 30% - 60% Visible water Visible microbial Amount of material **Noticeable Odor** No damage / staining? growth? affected **Ceiling Type** 2 x 4 Lay In None No No **Wall Type** Drywall None No No **Flooring** 12 x 12 Vinyl None No No Clean **Minor Dust** Needs **Corrective Action Required** Cleaning / Debris Ceiling Yes No No Yes No Walls No **Flooring** Yes No No **HVAC Supply Grills** | **No** Clean with Wexcide disinfectant Yes Yes Yes **HVAC Return Grills** No Yes Clean with Wexcide disinfectant **Ceiling at Supply** No Yes Yes Clean as appropriate **Grills Surfaces in Room** Yes No No **Observations** Findings: Door to the room was blocked open. Teacher advised that one student is always cold. Dust and debris on HVAC supply and return grills and on ceiling at HVAC supply grills in FISH 548A Recommendations: Site Based Maintenance: Ensure that all exterior doors are kept closed at all times Clean HVAC supply and return grills with Wexcide disinfectant solution and clean ceiling around HVAC supply grills as appropriate 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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			1911 Contoon			-	
Time of Day	12:00 pm]			E	Evaluation Date	September 19, 2006
Outdoor Condit	ions Ten	nperature	94.5	Relative Hum	nidity 60.6	Ambie	ent CO2 515
Fish T	emperature	Range Re	lative Humidity	Range	CO2	Rar	nge # Occupant
670	75.7	72 - 78	54.8	30% - 60%	798	Max 700	> Ambient 2
Noticeable Ode	or No] da	Visible water amage / staining		microbial owth?	Amount of ma affected	terial
Ceiling Type	2 x 4 Lay	' In	No	1	No		None
Wall Type	Drywal	I	No	1	No		None
Flooring	12 x 12 Vi	nyl	No	1	No		None
	Clean	Minor Dust / Debris	t Needs Cleaning		Correc	ctive Action Re	equired
Ceiling	Yes	No	No				
Walls	Yes	No	No				
Flooring	Yes	No	No				
HVAC Supply (Grills No	Yes	Yes		Clean wit	h Wexcide dis	infectant
HVAC Return G	Grills No	Yes	Yes		Clean wit	h Wexcide dis	infectant
Ceiling at Supp Grills	oly No	Yes	Yes		Clea	an as appropri	ate
Surfaces in Ro	om Yes	No	No				

Dillard High School

0371

Evaluation Requested September 19, 2006

Location Number

Observations

Findings:

- Occupant advised that the room is too warm
- Advised that first and second floor rooms in buildings 5 and 6 -South side are too warm
- Dust and debris on HVAC supply and return grills and on ceiling at HVAC supply grills in FISH 548A

Recommendations:

Site Based Maintenance:

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

- Evaluate HVAC system for proper operation
- Evaluate complaint that first and second floor rooms in buildings 5 and 6 South side are too warm and repair as appropriate to equalize temperature between building sections North and South

Evaluation Requested September 19, 2006 Dillard High School **Evaluation Date** September 19, 2006 12:00 pm Time of Day **Outdoor Conditions Temperature** 94.5 60.6 **Relative Humidity Ambient CO2** 515 Temperature Fish CO₂ **Relative Humidity** Range Range Range # Occupants 679 71.2 55.5 857 72 - 78 Max 700 > Ambient 2 30% - 60% Visible water Visible microbial Amount of material **Noticeable Odor** No damage / staining? growth? affected None **Ceiling Type** 2 x 4 Lay In No No **Wall Type** Drywall None No No **Flooring** 12 x 12 Vinyl None No No Clean **Minor Dust Needs Corrective Action Required** Cleaning / Debris Ceiling Yes No No Yes No No Walls **Flooring** Yes No No **HVAC Supply Grills** | **No** Yes Clean with Wexcide disinfectant Yes Clean with Wexcide disinfectant **HVAC Return Grills** No Yes Yes **Ceiling at Supply** Yes No No **Grills Surfaces in Room** Yes No No **Observations** Findings: Dust and debris on HVAC supply and return grills Recommendations: Site Based Maintenance: Clean HVAC supply and return 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

IAQ Assessment

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