

Jeffrey S. Moquin, Director
Risk Management Department

Telephone: 754-321-3200
Facsimile: 754-321-3290

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.

IAQ Assessment

Location Number 0371

Dillard High School

Evaluation Requested September 19, 2006

Time of Day 12:00 pm

Evaluation Date September 19, 2006

Outdoor Conditions Temperature 94.5 Relative Humidity 60.6 Ambient CO2 515

| | | | | | | | |
|--|--|---|--|---|--|--|--|
| Fish | Temperature | Range | Relative Humidity | Range | CO2 | Range | # Occupants |
| 227A | | 72 - 78 | | 30% - 60% | | Max 700 > Ambient | |
| Noticeable Odor | No | | Visible water damage / staining? | Visible microbial growth? | Amount of material affected | | |
| Ceiling Type | Drywall | | No | No | None | | |
| Wall Type | Ceramic Tile | | No | No | None | | |
| Flooring | Ceramic Tile | | 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 | | | | None |
| HVAC Return Grills | | | | None |
| Ceiling at Supply Grills | | | | N/A |
| Surfaces in Room | Yes | No | No | |

Observations

Findings:

- Restroom doors open to adjacent rooms so no environmental parameters were taken
- Exhaust fans only - no supply air - doors only undercut 1/4 inch
- Advised when doors are left closed microbial growth begins on drywall ceiling material. No visible microbial growth 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

Physical Plant Operations:

- Verify that exhaust fans are tied to the HVAC control circuit
- Evaluate air supply issue and consider making up a supply grill, etc.

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| | | | | | | | |
|--|--|---|--|---|--|--|--|
| Fish | Temperature | Range | Relative Humidity | Range | CO2 | Range | # Occupants |
| 227B | | 72 - 78 | | 30% - 60% | | Max 700 > Ambient | |
| Noticeable Odor | No | | Visible water damage / staining? | Visible microbial growth? | Amount of material affected | | |
| Ceiling Type | Drywall | | No | No | None | | |
| Wall Type | Ceramic Tile | | No | No | None | | |
| Flooring | Ceramic Tile | | 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 | | | | None |
| HVAC Return Grills | | | | None |
| Ceiling at Supply Grills | | | | N/A |
| Surfaces in Room | Yes | No | No | |

Observations

Findings:

- Restroom doors open to adjacent rooms so no environmental parameters were taken
- Exhaust fans only - no supply air - doors only undercut 1/4 inch
- Advised when doors are left closed microbial growth begins on drywall ceiling material. No visible microbial growth at the time of the assessment

Recommendations:

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Physical Plant Operations:

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| | | | | | | | |
|--|--|---|--|---|--|--|--|
| Fish | Temperature | Range | Relative Humidity | Range | CO2 | Range | # Occupants |
| 236A | | 72 - 78 | | 30% - 60% | | Max 700 > Ambient | |
| Noticeable Odor | No | | Visible water damage / staining? | Visible microbial growth? | Amount of material affected | | |
| Ceiling Type | Drywall | | No | No | None | | |
| Wall Type | Ceramic Tile | | No | No | None | | |
| Flooring | Ceramic Tile | | 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 | | | | None |
| HVAC Return Grills | | | | None |
| Ceiling at Supply Grills | | | | N/A |
| Surfaces in Room | Yes | No | No | |

Observations

Findings:

- Restroom doors open to adjacent rooms so no environmental parameters were taken
- Exhaust fans only - no supply air - doors only undercut 1/4 inch
- Advised when doors are left closed microbial growth begins on drywall ceiling material. No visible microbial growth 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

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- Verify that exhaust fans are tied to the HVAC control circuit
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| | | | | | | | |
|--|--|---|--|---|--|--|--|
| Fish | Temperature | Range | Relative Humidity | Range | CO2 | Range | # Occupants |
| 236B | | 72 - 78 | | 30% - 60% | | Max 700 > Ambient | |
| Noticeable Odor | No | | Visible water damage / staining? | Visible microbial growth? | Amount of material affected | | |
| Ceiling Type | Drywall | | No | No | None | | |
| Wall Type | Ceramic Tile | | No | No | None | | |
| Flooring | Ceramic Tile | | 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 | | | | None |
| HVAC Return Grills | | | | None |
| Ceiling at Supply Grills | | | | N/A |
| Surfaces in Room | Yes | No | No | |

Observations

Findings:

- Restroom doors open to adjacent rooms so no environmental parameters were taken
- Exhaust fans only - no supply air - doors only undercut 1/4 inch
- Advised when doors are left closed microbial growth begins on drywall ceiling material. No visible microbial growth 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

Physical Plant Operations:

- Verify that exhaust fans are tied to the HVAC control circuit
- Evaluate air supply issue and consider making up a supply grill, etc.

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| | | | | | | | |
|---|--|--|--|---|---|--|---|
| Fish | Temperature | Range | Relative Humidity | Range | CO2 | Range | # Occupants |
| 330 | 66.9 | 72 - 78 | 76.2 | 30% - 60% | 496 | Max 700 > Ambient | 2 |
| Noticeable Odor | | Visible water damage / staining? | | Visible microbial growth? | | Amount of material affected | |
| No | | Yes | | Yes | | Entire room | |
| Ceiling Type | | Wall Type | | Flooring | | | |
| Plaster | | Ceramic Tile | | Quarry Tile | | | |
| | | No | | No | | None | |
| | | No | | No | | None | |

| | Clean | Minor Dust / Debris | Needs Cleaning | Corrective Action Required |
|--------------------------|---|---|---|--|
| Ceiling | No | Yes | Yes | Clean and repaint as appropriate |
| Walls | Yes | No | No | |
| Flooring | Yes | No | No | |
| HVAC Supply Grills | No | Yes | Yes | Clean with Wexcide disinfectant |
| HVAC Return Grills | No | Yes | Yes | Clean with Wexcide disinfectant |
| Ceiling at Supply Grills | | | | N/A |
| Surfaces in Room | Yes | No | No | |

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

Physical Plant Operations:

- 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

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| | | | | | | | |
|-----------------|-------------|----------------------------------|-------------------|---------------------------|-----|-----------------------------|-------------|
| Fish | Temperature | Range | Relative Humidity | Range | CO2 | Range | # Occupants |
| 332 | 67.1 | 72 - 78 | 81.6 | 30% - 60% | 506 | Max 700 > Ambient | 2 |
| Noticeable Odor | | Visible water damage / staining? | | Visible microbial growth? | | Amount of material affected | |
| Ceiling Type | | Yes | | Yes | | Entire room | |
| Wall Type | | No | | No | | None | |
| Flooring | | No | | No | | None | |

| | Clean | Minor Dust / Debris | Needs Cleaning | Corrective Action Required |
|--------------------------|-------|---------------------|----------------|----------------------------------|
| Ceiling | No | Yes | Yes | Clean and repaint as appropriate |
| Walls | Yes | No | No | |
| Flooring | Yes | No | No | |
| HVAC Supply Grills | No | Yes | Yes | Clean with Wexcide disinfectant |
| HVAC Return Grills | No | Yes | Yes | Clean with Wexcide disinfectant |
| Ceiling at Supply Grills | | | | N/A |
| Surfaces in Room | Yes | No | No | |

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

Physical Plant Operations:

- 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

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|-----------------|-------------|----------------------------------|-------------------|---------------------------|-----|-----------------------------|-------------|
| Fish | Temperature | Range | Relative Humidity | Range | CO2 | Range | # Occupants |
| 540 | 76.3 | 72 - 78 | 54.4 | 30% - 60% | 743 | 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 | No | Yes | Yes | Clean with Wexcide disinfectant |
| HVAC Return Grills | No | Yes | Yes | Clean with Wexcide disinfectant |
| Ceiling at Supply Grills | No | Yes | Yes | Clean as appropriate |
| Surfaces in Room | No | Yes | Yes | Clean as appropriate |

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

Physical Plant Operations:

- 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

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| | | | | | | | |
|---|---|---|--|---|--|--|---|
| Fish | Temperature | Range | Relative Humidity | Range | CO2 | Range | # Occupants |
| 548 | 69.8 | 72 - 78 | 62.1 | 30% - 60% | 633 | 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 | No | Yes | Yes | Clean with Wexcide disinfectant |
| HVAC Return Grills | Yes | No | No | |
| Ceiling at Supply Grills | No | Yes | Yes | Clean as appropriate |
| Surfaces in Room | Yes | No | No | |

Observations

Findings:

- HFSP indicated that there was microbial growth on the wall near the door at the beginning of the school year and it was cleaned and has not returned.
- Wall material is clean and dry
- Dust and debris on HVAC supply grills and on ceiling at HVAC supply grills in FISH 548A
- Temperature was low and humidity level was elevated

Recommendations:

Site Based Maintenance:

- Clean HVAC supply grills with Wexcide disinfectant solution and clean surrounding ceiling as appropriate in FISH 548A
- 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 and repair HVAC to increase temperature and lower humidity

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| | | | | | | | |
|---|---|---|--|---|--|--|---|
| Fish | Temperature | Range | Relative Humidity | Range | CO2 | Range | # Occupants |
| 564 | 73.6 | 72 - 78 | 58.8 | 30% - 60% | 1086 | 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:
 - 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

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| | | | | | | | |
|-----------------|-------------|----------------------------------|-------------------|---------------------------|------|-----------------------------|-------------|
| Fish | Temperature | Range | Relative Humidity | Range | CO2 | Range | # Occupants |
| 570 | 75.3 | 72 - 78 | 60.7 | 30% - 60% | 1294 | Max 700 > Ambient | 23 |
| 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 | No | Yes | Yes | Clean with Wexcide disinfectant |
| HVAC Return Grills | No | Yes | Yes | Clean with Wexcide disinfectant |
| Ceiling at Supply Grills | Yes | No | No | |
| Surfaces in Room | Yes | No | No | |

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

Physical Plant Operations:

- 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

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| | | | | | | | |
|-----------------|-------------|----------------------------------|-------------------|---------------------------|-----|-----------------------------|-------------|
| Fish | Temperature | Range | Relative Humidity | Range | CO2 | Range | # Occupants |
| 573 | 74.9 | 72 - 78 | 51.4 | 30% - 60% | 837 | 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 | <input type="checkbox"/> Yes | <input type="checkbox"/> No | <input type="checkbox"/> No | |
| Walls | <input type="checkbox"/> Yes | <input type="checkbox"/> No | <input type="checkbox"/> No | |
| Flooring | <input type="checkbox"/> Yes | <input type="checkbox"/> No | <input type="checkbox"/> No | |
| HVAC Supply Grills | <input type="checkbox"/> No | <input type="checkbox"/> Yes | <input type="checkbox"/> Yes | Clean with Wexcide disinfectant |
| HVAC Return Grills | <input type="checkbox"/> No | <input type="checkbox"/> Yes | <input type="checkbox"/> Yes | Clean with Wexcide disinfectant |
| Ceiling at Supply Grills | <input type="checkbox"/> Yes | <input type="checkbox"/> No | <input type="checkbox"/> No | |
| Surfaces in Room | <input type="checkbox"/> Yes | <input type="checkbox"/> No | <input type="checkbox"/> No | |

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

Physical Plant Operations:

- 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

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| | | | | | | | |
|-----------------|-------------|----------------------------------|-------------------|---------------------------|-----|-----------------------------|-------------|
| Fish | Temperature | Range | Relative Humidity | Range | CO2 | Range | # Occupants |
| 633 | 74.6 | 72 - 78 | 55.7 | 30% - 60% | 788 | Max 700 > Ambient | 10 |
| 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 | <input type="checkbox"/> Yes | <input type="checkbox"/> No | <input type="checkbox"/> No | |
| Walls | <input type="checkbox"/> Yes | <input type="checkbox"/> No | <input type="checkbox"/> No | |
| Flooring | <input type="checkbox"/> Yes | <input type="checkbox"/> No | <input type="checkbox"/> No | |
| HVAC Supply Grills | <input type="checkbox"/> Yes | <input type="checkbox"/> No | <input type="checkbox"/> No | |
| HVAC Return Grills | <input type="checkbox"/> Yes | <input type="checkbox"/> No | <input type="checkbox"/> No | |
| Ceiling at Supply Grills | <input type="checkbox"/> Yes | <input type="checkbox"/> No | <input type="checkbox"/> No | |
| Surfaces in Room | <input type="checkbox"/> Yes | <input type="checkbox"/> No | <input type="checkbox"/> 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

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|-----------------|---------------|---------|----------------------------------|---------------------------|-----------------------------|-------------------|-------------|
| Fish | Temperature | Range | Relative Humidity | Range | CO2 | Range | # Occupants |
| 634 | 73.1 | 72 - 78 | 62.3 | 30% - 60% | 875 | Max 700 > Ambient | 22 |
| 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 | No | Yes | Yes | Clean with Wexcide disinfectant |
| HVAC Return Grills | No | Yes | Yes | Clean with Wexcide disinfectant |
| Ceiling at Supply Grills | Yes | No | No | |
| Surfaces in Room | Yes | No | No | |

Observations

Findings:

- Teacher advised that she had the door blocked open for about 45 minutes prior to the assessment because room is too cold.
- Dust and debris on HVAC supply and return grills
- Humidity level was slightly elevated

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
- 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

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| | | | | | | | |
|-----------------|-------------|----------------------------------|-------------------|---------------------------|-----|-----------------------------|-------------|
| Fish | Temperature | Range | Relative Humidity | Range | CO2 | Range | # Occupants |
| 642 | 73.9 | 72 - 78 | 55.6 | 30% - 60% | 673 | Max 700 > Ambient | 14 |
| Noticeable Odor | | Visible water damage / staining? | | Visible microbial growth? | | Amount of material affected | |
| Ceiling Type | | Visible water damage / staining? | | Visible microbial growth? | | Amount of material affected | |
| Wall Type | | Visible water damage / staining? | | Visible microbial growth? | | Amount of material affected | |
| Flooring | | Visible water damage / staining? | | Visible microbial growth? | | Amount of material affected | |

| | 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 | No | Yes | Yes | Clean with Wexcide disinfectant |
| Ceiling at Supply Grills | No | Yes | Yes | Clean as appropriate |
| 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

Location Number 0371

Dillard High School

Evaluation Requested September 19, 2006

Time of Day 12:00 pm

Evaluation Date September 19, 2006

Outdoor Conditions Temperature 94.5 Relative Humidity 60.6 Ambient CO2 515

| | | | | | | | |
|---|--|---|--|---|---|--|---|
| Fish | Temperature | Range | Relative Humidity | Range | CO2 | Range | # Occupants |
| 670 | 75.7 | 72 - 78 | 54.8 | 30% - 60% | 798 | 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 | No | Yes | Yes | Clean with Wexcide disinfectant |
| HVAC Return Grills | No | Yes | Yes | Clean with Wexcide disinfectant |
| Ceiling at Supply Grills | No | Yes | Yes | Clean as appropriate |
| Surfaces in Room | Yes | No | No | |

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

Physical Plant Operations:

- 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

IAQ Assessment

Location Number 0371

Dillard High School

Evaluation Requested September 19, 2006

Time of Day 12:00 pm

Evaluation Date September 19, 2006

Outdoor Conditions Temperature 94.5 Relative Humidity 60.6 Ambient CO2 515

| | | | | | | | |
|---|---|---|--|---|--|--|---|
| Fish | Temperature | Range | Relative Humidity | Range | CO2 | Range | # Occupants |
| 679 | 71.2 | 72 - 78 | 55.5 | 30% - 60% | 857 | 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 | No | Yes | Yes | Clean with Wexcide disinfectant |
| HVAC Return Grills | No | Yes | Yes | Clean with Wexcide disinfectant |
| Ceiling at Supply Grills | Yes | No | No | |
| 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