

# RISK MANAGEMENT...

managing risk with responsibility

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Risk Management Department

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September 10, 2007

**Signature on File**

TO: Ms. Betty Colyer,, Principal  
**Ramblewood Elementary School**

FROM: Robert Krickovich, Coordinator, LEA  
Facilities and Construction Management

SUBJECT: Indoor Air Quality (IAQ) Assessment  
**FISH 123, 127, 134, 137, 140, 213 and 215**

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

On August 8, 2007 I conducted an assessment of FISH 123, 127, 134, 137, 140, 213 and 215 at **Ramblewood 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. 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 754-321-1638.

cc: Dr. Joanne Harrison, Area Superintendent  
Jackie Haywood, Area Director  
Jeffrey S. Moquin, Director, Risk Management  
Philip Kaufold, Project Manager, Facilities and Construction Management  
Gary Itzkowitz, Broward Teachers Union  
Roy Jarrett, National Federation of Public and Private Employees  
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

Ramblewood Elementary School

Evaluation Requested

Time of Day

Evaluation Date

Outdoor Conditions      Temperature       Relative Humidity       Ambient CO2

|                                  |  |                                      |                                   |  |                                   |   |                                   |
|----------------------------------|--|--------------------------------------|-----------------------------------|--|-----------------------------------|---|-----------------------------------|
| Fish                             | Temperature                                | Range                                | Relative Humidity                 | Range                                  | CO2                               | Range   | # Occupants                       |
| <input type="text" value="123"/> | <input type="text" value="72.2"/>          | <input type="text" value="72 - 78"/> | <input type="text" value="55.5"/> | <input type="text" value="30% - 60%"/> | <input type="text" value="572"/>  | <input type="text" value="Max 700 &gt; Ambient"/> | <input type="text" value="1"/>    |
| Noticeable Odor                  |  | Visible water damage / staining?     |                                   | Visible microbial growth?              |                                   | Amount of material affected                       |                                   |
| <input type="text" value="No"/>  |  | <input type="text" value="No"/>      |                                   | <input type="text" value="No"/>        |                                   | <input type="text" value="None"/>                 |                                   |
| Ceiling Type                     | <input type="text" value="2 x 4 Lay In"/>  | <input type="text" value="No"/>      | <input type="text" value="No"/>   | <input type="text" value="No"/>        | <input type="text" value="None"/> | <input type="text" value="None"/>                 | <input type="text" value="None"/> |
| Wall Type                        | <input type="text" value="Tackboard"/>     | <input type="text" value="No"/>      | <input type="text" value="No"/>   | <input type="text" value="No"/>        | <input type="text" value="None"/> | <input type="text" value="None"/>                 | <input type="text" value="None"/> |
| Flooring                         | <input type="text" value="12 x 12 Vinyl"/> | <input type="text" value="No"/>      | <input type="text" value="No"/>   | <input type="text" value="No"/>        | <input type="text" value="None"/> | <input type="text" value="None"/>                 | <input type="text" value="None"/> |

|                          | Clean                            | Minor Dust / Debris              | Needs Cleaning                   | Corrective Action Required                              |
|--------------------------|----------------------------------|----------------------------------|----------------------------------|---|
| Ceiling                  | <input type="text" value="Yes"/> | <input type="text" value="No"/>  | <input type="text" value="No"/>  | <input type="text"/>                                    |
| Walls                    | <input type="text" value="Yes"/> | <input type="text" value="No"/>  | <input type="text" value="No"/>  | <input type="text"/>                                    |
| Flooring                 | <input type="text" value="Yes"/> | <input type="text" value="No"/>  | <input type="text" value="No"/>  | <input type="text"/>                                    |
| HVAC Supply Grills       | <input type="text" value="Yes"/> | <input type="text" value="No"/>  | <input type="text" value="No"/>  | <input type="text"/>                                    |
| HVAC Return Grills       | <input type="text"/>             | <input type="text"/>             | <input type="text"/>             | <input type="text" value="N/A through light fixtures"/> |
| Ceiling at Supply Grills | <input type="text" value="No"/>  | <input type="text" value="Yes"/> | <input type="text" value="Yes"/> | <input type="text" value="Clean as appropriate"/>       |
| Surfaces in Room         | <input type="text" value="Yes"/> | <input type="text" value="No"/>  | <input type="text" value="No"/>  | <input type="text"/>                                    |

**Observations**

**Findings:**

- Wall material was dry (8-10% WME)
- Environmental parameters were acceptable
- Dust build up on ceiling at HVAC supply grills

**-Recommendations:**

**Site Based Maintenance:**

- Clean ceiling at 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

# IAQ Assessment

Location Number

Ramblewood Elementary School

Evaluation Requested

Time of Day

Evaluation Date

Outdoor Conditions      Temperature       Relative Humidity       Ambient CO2

|                                  |  |                                      |                                   |  |                                  |   |                                |
|----------------------------------|--|--------------------------------------|-----------------------------------|--|----------------------------------|---|--------------------------------|
| Fish                             | Temperature                                | Range                                | Relative Humidity                 | Range                                  | CO2                              | Range   | # Occupants                    |
| <input type="text" value="127"/> | <input type="text" value="73.3"/>          | <input type="text" value="72 - 78"/> | <input type="text" value="50.4"/> | <input type="text" value="30% - 60%"/> | <input type="text" value="620"/> | <input type="text" value="Max 700 &gt; Ambient"/> | <input type="text" value="1"/> |
| Noticeable Odor                  |  | Visible water damage / staining?     |                                   | Visible microbial growth?              |                                  | Amount of material affected                       |                                |
| <input type="text" value="No"/>  |  | <input type="text" value="No"/>      |                                   | <input type="text" value="No"/>        |                                  | <input type="text" value="None"/>                 |                                |
| Ceiling Type                     | <input type="text" value="2 x 4 Lay In"/>  | <input type="text" value="No"/>      | <input type="text" value="No"/>   | <input type="text" value="None"/>      |                                  |   |                                |
| Wall Type                        | <input type="text" value="Tackboard"/>     | <input type="text" value="No"/>      | <input type="text" value="No"/>   | <input type="text" value="None"/>      |                                  |   |                                |
| Flooring                         | <input type="text" value="12 x 12 Vinyl"/> | <input type="text" value="No"/>      | <input type="text" value="No"/>   | <input type="text" value="None"/>      |                                  |   |                                |

|                          | Clean                            | Minor Dust / Debris             | Needs Cleaning                  | Corrective Action Required                              |
|--------------------------|----------------------------------|---------------------------------|---------------------------------|---|
| Ceiling                  | <input type="text" value="Yes"/> | <input type="text" value="No"/> | <input type="text" value="No"/> | <input type="text"/>                                    |
| Walls                    | <input type="text" value="Yes"/> | <input type="text" value="No"/> | <input type="text" value="No"/> | <input type="text"/>                                    |
| Flooring                 | <input type="text" value="Yes"/> | <input type="text" value="No"/> | <input type="text" value="No"/> | <input type="text"/>                                    |
| HVAC Supply Grills       | <input type="text" value="Yes"/> | <input type="text" value="No"/> | <input type="text" value="No"/> | <input type="text"/>                                    |
| HVAC Return Grills       | <input type="text"/>             | <input type="text"/>            | <input type="text"/>            | <input type="text" value="N/A through light fixtures"/> |
| Ceiling at Supply Grills | <input type="text" value="Yes"/> | <input type="text" value="No"/> | <input type="text" value="No"/> | <input type="text"/>                                    |
| Surfaces in Room         | <input type="text" value="Yes"/> | <input type="text" value="No"/> | <input type="text" value="No"/> | <input type="text"/>                                    |

**Observations**

**Findings:**  
 - Wall material was dry (8-10% WME)  
 - Environmental parameters were acceptable

**-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

Location Number

Ramblewood Elementary School

Evaluation Requested

Time of Day

Evaluation Date

Outdoor Conditions      Temperature       Relative Humidity       Ambient CO2

|                                  |  |                                      |                                   |  |                                  |   |                                |
|----------------------------------|--|--------------------------------------|-----------------------------------|--|----------------------------------|---|--------------------------------|
| Fish                             | Temperature                                | Range                                | Relative Humidity                 | Range                                  | CO2                              | Range   | # Occupants                    |
| <input type="text" value="134"/> | <input type="text" value="71.4"/>          | <input type="text" value="72 - 78"/> | <input type="text" value="63.1"/> | <input type="text" value="30% - 60%"/> | <input type="text" value="534"/> | <input type="text" value="Max 700 &gt; Ambient"/> | <input type="text" value="1"/> |
| Noticeable Odor                  |  | Visible water damage / staining?     |                                   | Visible microbial growth?              |                                  | Amount of material affected                       |                                |
| <input type="text" value="No"/>  |  | <input type="text" value="Yes"/>     |                                   | <input type="text" value="No"/>        |                                  | <input type="text" value="2 ceiling tiles"/>      |                                |
| Ceiling Type                     | <input type="text" value="2 x 2 Lay In"/>  | <input type="text" value="No"/>      |                                   | <input type="text" value="No"/>        |                                  | <input type="text" value="None"/>                 |                                |
| Wall Type                        | <input type="text" value="Drywall"/>       | <input type="text" value="No"/>      |                                   | <input type="text" value="No"/>        |                                  | <input type="text" value="None"/>                 |                                |
| Flooring                         | <input type="text" value="12 x 12 Vinyl"/> | <input type="text" value="No"/>      |                                   | <input type="text" value="No"/>        |                                  | <input type="text" value="None"/>                 |                                |

|                          | Clean                            | Minor Dust / Debris              | Needs Cleaning                   | Corrective Action Required                              |
|--------------------------|----------------------------------|----------------------------------|----------------------------------|---|
| Ceiling                  | <input type="text" value="No"/>  | <input type="text" value="Yes"/> | <input type="text" value="Yes"/> | <input type="text" value="Remove and replace tiles"/>   |
| Walls                    | <input type="text" value="Yes"/> | <input type="text" value="No"/>  | <input type="text" value="No"/>  | <input type="text"/>                                    |
| Flooring                 | <input type="text" value="Yes"/> | <input type="text" value="No"/>  | <input type="text" value="No"/>  | <input type="text"/>                                    |
| HVAC Supply Grills       | <input type="text" value="Yes"/> | <input type="text" value="No"/>  | <input type="text" value="No"/>  | <input type="text"/>                                    |
| HVAC Return Grills       | <input type="text"/>             | <input type="text"/>             | <input type="text"/>             | <input type="text" value="N/A through light fixtures"/> |
| Ceiling at Supply Grills | <input type="text" value="Yes"/> | <input type="text" value="No"/>  | <input type="text" value="No"/>  | <input type="text" value="Clean as appropriate"/>       |
| Surfaces in Room         | <input type="text" value="Yes"/> | <input type="text" value="No"/>  | <input type="text" value="No"/>  | <input type="text"/>                                    |

**Observations**

**Findings:**

- Wall material was dry (8-10% WME)
- Temperature was low and humidity level was slightly elevated
- Visible staining on ceiling tiles

**-Recommendations:**

**Site Based Maintenance:**

- Adjust the thermostat to increase the temperature. Continue to monitor condition and initiate a work order for Physical Plant Operations to evaluate the HVAC system if temperature and humidity does not improve.
- Remove and replace stained ceiling tiles. If stains return, contact Physical Plant Operations to initiate a work order to evaluate for cause of staining.
- 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

Ramblewood Elementary School

Evaluation Requested

Time of Day

Evaluation Date

Outdoor Conditions      Temperature       Relative Humidity       Ambient CO2

|                                  |  |                                      |                                 |  |                                   |   |                                |
|----------------------------------|--|--------------------------------------|---------------------------------|--|-----------------------------------|---|--------------------------------|
| Fish                             | Temperature                                | Range                                | Relative Humidity               | Range                                  | CO2                               | Range   | # Occupants                    |
| <input type="text" value="137"/> | <input type="text" value="72"/>            | <input type="text" value="72 - 78"/> | <input type="text" value="59"/> | <input type="text" value="30% - 60%"/> | <input type="text" value="510"/>  | <input type="text" value="Max 700 &gt; Ambient"/> | <input type="text" value="1"/> |
| Noticeable Odor                  |  | Visible water damage / staining?     |                                 | Visible microbial growth?              |                                   | Amount of material affected                       |                                |
| <input type="text" value="No"/>  |  | <input type="text" value="No"/>      |                                 | <input type="text" value="No"/>        |                                   | <input type="text" value="None"/>                 |                                |
| Ceiling Type                     | <input type="text" value="2 x 4 Lay In"/>  |                                      | <input type="text" value="No"/> | <input type="text" value="No"/>        | <input type="text" value="None"/> |   |                                |
| Wall Type                        | <input type="text" value="Tackboard"/>     |                                      | <input type="text" value="No"/> | <input type="text" value="No"/>        | <input type="text" value="None"/> |   |                                |
| Flooring                         | <input type="text" value="12 x 12 Vinyl"/> |                                      | <input type="text" value="No"/> | <input type="text" value="No"/>        | <input type="text" value="None"/> |   |                                |

|                          | Clean                            | Minor Dust / Debris             | Needs Cleaning                  | Corrective Action Required                              |
|--------------------------|----------------------------------|---------------------------------|---------------------------------|---|
| Ceiling                  | <input type="text" value="Yes"/> | <input type="text" value="No"/> | <input type="text" value="No"/> | <input type="text"/>                                    |
| Walls                    | <input type="text" value="Yes"/> | <input type="text" value="No"/> | <input type="text" value="No"/> | <input type="text"/>                                    |
| Flooring                 | <input type="text" value="Yes"/> | <input type="text" value="No"/> | <input type="text" value="No"/> | <input type="text"/>                                    |
| HVAC Supply Grills       | <input type="text" value="Yes"/> | <input type="text" value="No"/> | <input type="text" value="No"/> | <input type="text"/>                                    |
| HVAC Return Grills       | <input type="text"/>             | <input type="text"/>            | <input type="text"/>            | <input type="text" value="N/A through light fixtures"/> |
| Ceiling at Supply Grills | <input type="text" value="Yes"/> | <input type="text" value="No"/> | <input type="text" value="No"/> | <input type="text"/>                                    |
| Surfaces in Room         | <input type="text" value="Yes"/> | <input type="text" value="No"/> | <input type="text" value="No"/> | <input type="text"/>                                    |

**Observations**

**Findings:**  
 - Wall material was dry (8-10% WME)  
 - Environmental parameters were acceptable

**-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

Location Number

Ramblewood Elementary School

Evaluation Requested

Time of Day

Evaluation Date

Outdoor Conditions      Temperature       Relative Humidity       Ambient CO2

|                                  |  |                                      |                                   |  |                                   |   |                                |
|----------------------------------|--|--------------------------------------|-----------------------------------|--|-----------------------------------|---|--------------------------------|
| Fish                             | Temperature                                | Range                                | Relative Humidity                 | Range                                  | CO2                               | Range   | # Occupants                    |
| <input type="text" value="140"/> | <input type="text" value="71.7"/>          | <input type="text" value="72 - 78"/> | <input type="text" value="60.7"/> | <input type="text" value="30% - 60%"/> | <input type="text" value="508"/>  | <input type="text" value="Max 700 &gt; Ambient"/> | <input type="text" value="6"/> |
| Noticeable Odor                  |  | Visible water damage / staining?     |                                   | Visible microbial growth?              |                                   | Amount of material affected                       |                                |
| <input type="text" value="No"/>  |  | <input type="text" value="No"/>      |                                   | <input type="text" value="No"/>        |                                   | <input type="text" value="None"/>                 |                                |
| Ceiling Type                     | <input type="text" value="2 x 4 Lay In"/>  |                                      | <input type="text" value="No"/>   | <input type="text" value="No"/>        | <input type="text" value="None"/> |   |                                |
| Wall Type                        | <input type="text" value="Tackboard"/>     |                                      | <input type="text" value="No"/>   | <input type="text" value="No"/>        | <input type="text" value="None"/> |   |                                |
| Flooring                         | <input type="text" value="12 x 12 Vinyl"/> |                                      | <input type="text" value="No"/>   | <input type="text" value="No"/>        | <input type="text" value="None"/> |   |                                |

|                          | Clean                            | Minor Dust / Debris             | Needs Cleaning                  | Corrective Action Required                              |
|--------------------------|----------------------------------|---------------------------------|---------------------------------|---|
| Ceiling                  | <input type="text" value="Yes"/> | <input type="text" value="No"/> | <input type="text" value="No"/> | <input type="text"/>                                    |
| Walls                    | <input type="text" value="Yes"/> | <input type="text" value="No"/> | <input type="text" value="No"/> | <input type="text"/>                                    |
| Flooring                 | <input type="text" value="Yes"/> | <input type="text" value="No"/> | <input type="text" value="No"/> | <input type="text"/>                                    |
| HVAC Supply Grills       | <input type="text" value="Yes"/> | <input type="text" value="No"/> | <input type="text" value="No"/> | <input type="text"/>                                    |
| HVAC Return Grills       | <input type="text"/>             | <input type="text"/>            | <input type="text"/>            | <input type="text" value="N/A through light fixtures"/> |
| Ceiling at Supply Grills | <input type="text" value="Yes"/> | <input type="text" value="No"/> | <input type="text" value="No"/> | <input type="text"/>                                    |
| Surfaces in Room         | <input type="text" value="Yes"/> | <input type="text" value="No"/> | <input type="text" value="No"/> | <input type="text"/>                                    |

**Observations**

**Findings:**

- Wall material was dry (8-10% WME)
- Temperature was low and humidity level was slightly elevated

**-Recommendations:**

**Site Based Maintenance:**

- Adjust the thermostat to increase the temperature. Continue to monitor condition and initiate a work order for Physical Plant Operations to evaluate the HVAC system if temperature and humidity does not improve.
- 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 2721

Ramblewood Elementary School

Evaluation Requested

Time of Day 10:00 am

Evaluation Date August 8, 2007

Outdoor Conditions      Temperature 85.7      Relative Humidity 69.3      Ambient CO2 484

|   |  |   |  |   |   |  |   |
|---|--|---|--|---|---|--|---|
| Fish  | Temperature  | Range   | Relative Humidity  | Range   | CO2   | Range  | # Occupants   |
| <span style="border: 1px solid black; padding: 2px;">213</span>           | <span style="border: 1px solid black; padding: 2px;">68</span> | <span style="border: 1px solid black; padding: 2px;">72 - 78</span> | <span style="border: 1px solid black; padding: 2px;">62.6</span> | <span style="border: 1px solid black; padding: 2px;">30% - 60%</span> | <span style="border: 1px solid black; padding: 2px;">500</span> | <span style="border: 1px solid black; padding: 2px;">Max 700 &gt; Ambient</span> | <span style="border: 1px solid black; padding: 2px;">1</span> |
| Noticeable Odor   |  | Visible water damage / staining?                                    |  | Visible microbial growth?   |   | Amount of material affected  |   |
| Ceiling Type  |  | Wall Type   |  | Flooring  |   |  |   |
| <span style="border: 1px solid black; padding: 2px;">No</span>            |  | <span style="border: 1px solid black; padding: 2px;">No</span>      |  | <span style="border: 1px solid black; padding: 2px;">No</span>        |   | <span style="border: 1px solid black; padding: 2px;">None</span>                 |   |
| <span style="border: 1px solid black; padding: 2px;">2 x 2 Lay In</span>  |  | <span style="border: 1px solid black; padding: 2px;">Yes</span>     |  | <span style="border: 1px solid black; padding: 2px;">No</span>        |   | <span style="border: 1px solid black; padding: 2px;">2 square feet</span>        |   |
| <span style="border: 1px solid black; padding: 2px;">Drywall</span>       |  | <span style="border: 1px solid black; padding: 2px;">No</span>      |  | <span style="border: 1px solid black; padding: 2px;">No</span>        |   | <span style="border: 1px solid black; padding: 2px;">None</span>                 |   |
| <span style="border: 1px solid black; padding: 2px;">12 x 12 Vinyl</span> |  |   |  |   |   |  |   |

|                          | Clean   | Minor Dust / Debris  | Needs Cleaning   | Corrective Action Required |
|--------------------------|---|--|--|----------------------------|
| Ceiling                  | <span style="border: 1px solid black; padding: 2px;">Yes</span> | <span style="border: 1px solid black; padding: 2px;">No</span> | <span style="border: 1px solid black; padding: 2px;">No</span> |                            |
| Walls                    | <span style="border: 1px solid black; padding: 2px;">Yes</span> | <span style="border: 1px solid black; padding: 2px;">No</span> | <span style="border: 1px solid black; padding: 2px;">No</span> |                            |
| Flooring                 | <span style="border: 1px solid black; padding: 2px;">Yes</span> | <span style="border: 1px solid black; padding: 2px;">No</span> | <span style="border: 1px solid black; padding: 2px;">No</span> |                            |
| HVAC Supply Grills       | <span style="border: 1px solid black; padding: 2px;">Yes</span> | <span style="border: 1px solid black; padding: 2px;">No</span> | <span style="border: 1px solid black; padding: 2px;">No</span> |                            |
| HVAC Return Grills       | <span style="border: 1px solid black; padding: 2px;">Yes</span> | <span style="border: 1px solid black; padding: 2px;">No</span> | <span style="border: 1px solid black; padding: 2px;">No</span> |                            |
| Ceiling at Supply Grills | <span style="border: 1px solid black; padding: 2px;">Yes</span> | <span style="border: 1px solid black; padding: 2px;">No</span> | <span style="border: 1px solid black; padding: 2px;">No</span> |                            |
| Surfaces in Room         | <span style="border: 1px solid black; padding: 2px;">Yes</span> | <span style="border: 1px solid black; padding: 2px;">No</span> | <span style="border: 1px solid black; padding: 2px;">No</span> |                            |

**Observations**

**Findings:**

- Wall material was dry (12-14% WME)
- Temperature was low and humidity level was slightly elevated
- Drywall is water damaged at emergency exit door

**-Recommendations:**

**Site Based Maintenance:**

- Adjust the thermostat to increase the temperature. Continue to monitor condition and initiate a work order for Physical Plant Operations to evaluate the HVAC system if temperature and humidity does not improve.
- Initiate a work order through Physical Plant Operations to repair building as necessary
- 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:**

- Repair water damaged drywall at emergency exit door. May need to install a door sweep to keep water out of the room. Dirt and grass on floor appears to have been blown in under the door.

# IAQ Assessment

Location Number

Ramblewood Elementary School

Evaluation Requested

Time of Day

Evaluation Date

Outdoor Conditions      Temperature       Relative Humidity       Ambient CO2

|                                  |  |                                      |                                   |  |                                   |   |                                |
|----------------------------------|--|--------------------------------------|-----------------------------------|--|-----------------------------------|---|--------------------------------|
| Fish                             | Temperature                                | Range                                | Relative Humidity                 | Range                                  | CO2                               | Range   | # Occupants                    |
| <input type="text" value="215"/> | <input type="text" value="68.9"/>          | <input type="text" value="72 - 78"/> | <input type="text" value="67.6"/> | <input type="text" value="30% - 60%"/> | <input type="text" value="484"/>  | <input type="text" value="Max 700 &gt; Ambient"/> | <input type="text" value="1"/> |
| Noticeable Odor                  |  | Visible water damage / staining?     |                                   | Visible microbial growth?              |                                   | Amount of material affected                       |                                |
| <input type="text" value="No"/>  |  | <input type="text" value="No"/>      |                                   | <input type="text" value="No"/>        |                                   | <input type="text" value="None"/>                 |                                |
| Ceiling Type                     | <input type="text" value="2 x 2 Lay In"/>  |                                      | <input type="text" value="No"/>   | <input type="text" value="No"/>        | <input type="text" value="None"/> |   |                                |
| Wall Type                        | <input type="text" value="Drywall"/>       |                                      | <input type="text" value="No"/>   | <input type="text" value="No"/>        | <input type="text" value="None"/> |   |                                |
| Flooring                         | <input type="text" value="12 x 12 Vinyl"/> |                                      | <input type="text" value="No"/>   | <input type="text" value="No"/>        | <input type="text" value="None"/> |   |                                |

|                          | Clean                            | Minor Dust / Debris              | Needs Cleaning                   | Corrective Action Required                                   |
|--------------------------|----------------------------------|----------------------------------|----------------------------------|--|
| Ceiling                  | <input type="text" value="Yes"/> | <input type="text" value="No"/>  | <input type="text" value="No"/>  | <input type="text"/>   |
| Walls                    | <input type="text" value="Yes"/> | <input type="text" value="No"/>  | <input type="text" value="No"/>  | <input type="text"/>   |
| Flooring                 | <input type="text" value="Yes"/> | <input type="text" value="No"/>  | <input type="text" value="No"/>  | <input type="text"/>   |
| HVAC Supply Grills       | <input type="text" value="No"/>  | <input type="text" value="Yes"/> | <input type="text" value="Yes"/> | <input type="text" value="Clean with Wexcide disinfectant"/> |
| HVAC Return Grills       | <input type="text" value="Yes"/> | <input type="text" value="No"/>  | <input type="text" value="No"/>  | <input type="text"/>   |
| Ceiling at Supply Grills | <input type="text" value="No"/>  | <input type="text" value="Yes"/> | <input type="text" value="Yes"/> | <input type="text" value="Clean as appropriate"/>            |
| Surfaces in Room         | <input type="text" value="Yes"/> | <input type="text" value="No"/>  | <input type="text" value="No"/>  | <input type="text"/>   |

## Observations

**Findings:**

- Wall material was dry (12-14% WME)
- Temperature was low and humidity level was slightly elevated
- Visible stain on tackable surface over bookcase. Appears to be an old stain from a spill on top of the bookcase.
- Dust and debris on HVAC supply grills and on ceiling at supply grills

**-Recommendations:**

**Site Based Maintenance:**

- Adjust the thermostat to increase the temperature. Continue to monitor condition and initiate a work order for Physical Plant Operations to evaluate the HVAC system if temperature and humidity does not improve.
- Clean HVAC supply grills with Wexcide disinfectant solution and clean ceiling at supply grills
- Continue to monitor this location for any signs of microbial growth as well as dust and debris accumulation and clean as appropriate