

# RISK MANAGEMENT...

managing risk with responsibility

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September 19, 2008

**Signature on File**

TO: Ms. Sayra Hughes, Executive Director  
**Multicultural, ESOL and Program Services**

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

SUBJECT: Indoor Air Quality (IAQ) Assessment  
**Portable 170C, 382C and 1376C**

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

On August 14, 2008 Richard Rosa and I conducted an assessment of Portable 170C, 382C and 1376C at **Multicultural, ESOL and Program Services**. 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: Jeffrey S. Moquin, Director, Risk Management  
Israel Canales, Manager, Administrative Sites  
Israel Rodriguez-Soto, Project Manager, Facilities and Construction Management  
Mark Dorsett, Manager 1, Physical Plant Operations Division, Zone 1  
Roy Norton, Manager Custodial/Grounds, Physical Plant Operations Division

RK/tc  
Enc.

# IAQ Assessment

Multicultural and ESOL

Location Number

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="P-170C"/> | <input type="text" value="77.1"/>          | <input type="text" value="72 - 78"/> | <input type="text" value="55.4"/> | <input type="text" value="30% - 60%"/> | <input type="text" value="481"/>  | <input type="text" value="Max 700 &gt; Ambient"/> | <input type="text" value="2"/>    |
| 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="Homasote"/>      | <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" value="Yes"/> | <input type="text" value="No"/> | <input type="text" value="No"/> | <input type="text"/>       |
| 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:**  
 - Condensation in light fixtures lenses

**Recommendations:**

**Site Based Maintenance:**  
 - Clean interior of light fixture lenses  
 - Continue to monitor this location for any signs of microbial growth as well as dust and debris accumulation and clean as appropriate

# IAQ Assessment

Multicultural and ESOL

Location Number   
 Evaluation Requested   
 Evaluation Date

Time of Day

Outdoor Conditions      Temperature       Relative Humidity       Ambient CO2

|                                     |  |                                      |                                   |  |                                  |   |                                      |
|-------------------------------------|--|--------------------------------------|-----------------------------------|--|----------------------------------|---|--------------------------------------|
| Fish                                | Temperature                                | Range                                | Relative Humidity                 | Range                                  | CO2                              | Range   | # Occupants                          |
| <input type="text" value="P-382C"/> | <input type="text" value="72.7"/>          | <input type="text" value="72 - 78"/> | <input type="text" value="51.6"/> | <input type="text" value="30% - 60%"/> | <input type="text" value="537"/> | <input type="text" value="Max 700 &gt; Ambient"/> | <input type="text" value="5"/>       |
| Noticeable Odor                     | <input type="text" value="Yes"/>           |                                      | Visible water damage / staining?  |  | Visible microbial growth?        |   | Amount of material affected          |
| 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="Yes"/>  |  | <input type="text" value="No"/>  |   | <input type="text" value="Various"/> |
| 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="No"/>  | <input type="text" value="Yes"/> | <input type="text" value="Yes"/> | <input type="text" value="Repair/replace wall material"/> |
| 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" value="Yes"/> | <input type="text" value="No"/>  | <input type="text" value="No"/>  | <input type="text"/>                                      |
| 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="No"/>  | <input type="text" value="Yes"/> | <input type="text" value="Yes"/> | <input type="text" value="Clean as appropriate"/>         |

## Observations

### Findings:

- Musty odor upon entering room
- Tackboard walls were dry at the time of the assessment. Visible staining and dirt on all walls.
- Wall panel under West A/C unit has been repaired, however, the material needs to be replaced
- Dirt in light fixture in Southeast corner of the room
- Dust build up on window ledges and tops of book shelves
- Elevated moisture content in exterior wood siding around entire portable
- Advised that District Maintenance Capital Projects group has been working on repairing portables at this site

### Recommendations:

#### Site Based Maintenance:

- Clean debris from inside light fixtures
- Clean window ledges and tops of book shelves
- 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 and District Maintenance Capital Projects:

- Remove and replace wall panel under West A/C unit
- Evaluate exterior of portable for replacement of siding

# IAQ Assessment

Multicultural and ESOL

Location Number   
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Time of Day

Outdoor Conditions      Temperature       Relative Humidity       Ambient CO2

|                                      |   |                                      |                                   |  |                                  |   |                                |
|--------------------------------------|---|--------------------------------------|-----------------------------------|--|----------------------------------|---|--------------------------------|
| Fish                                 | Temperature                                       | Range                                | Relative Humidity                 | Range                                  | CO2                              | Range   | # Occupants                    |
| <input type="text" value="P-1376C"/> | <input type="text" value="76.8"/>                 | <input type="text" value="72 - 78"/> | <input type="text" value="55.5"/> | <input type="text" value="30% - 60%"/> | <input type="text" value="406"/> | <input type="text" value="Max 700 &gt; Ambient"/> | <input type="text" value="5"/> |
| 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="10 ceiling tiles"/>     |                                |
| Ceiling Type                         | <input type="text" value="2 x 4 Lay In"/>         |                                      | <input type="text" value="Yes"/>  | <input type="text" value="No"/>        |                                  | <input type="text" value="10 ceiling tiles"/>     |                                |
| Wall Type                            | <input type="text" value="Vinyl Coated 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 ceiling 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="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="Yes"/> | <input type="text" value="No"/>  | <input type="text" value="No"/>  | <input type="text"/>  |
| Surfaces in Room         | <input type="text" value="No"/>  | <input type="text" value="Yes"/> | <input type="text" value="Yes"/> | <input type="text" value="Clean as appropriate"/>             |

## Observations

**Findings:**

- 10 stained ceiling tiles
- Dust and debris on HVAC supply grills
- Dust build up on elevated surfaces throughout the portable. Cob webs over door.

**Recommendations:**

**Site Based Maintenance:**

- Remove and replace stained ceiling tiles. If stains return contact COMPASS to generate a work order to evaluate roof.
- Clean HVAC supply grills with Wexcide disinfectant solution
- Clean elevated surfaces throughout the portable and clean cob webs from over door
- Continue to monitor this location for any signs of microbial growth as well as dust and debris accumulation and clean as appropriate