

## managing risk with responsibility

Aston A. Henry, Supervisor	Telephone:	754 321-1900
Risk Management Department	Fax:	754 321-1917

September 24, 2009 Signature on File

TO: Mr. John LaCasse, Principal

**Nova High School** 

FROM: Edward See, Project Manager

Risk Management Department

SUBJECT: Indoor Air Quality (IAQ) Assessment

FISH 617, Portable QP168 and QP359

On September 11, 2009 I conducted an assessment of FISH 617, Portable QP168 and QP359 at **Nova 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.

Please ensure that your Head Facilities Serviceperson receives a copy of this correspondence so that the recommendations requiring their attention can be addressed. In an attempt to separate IAQ issues from general maintenance items, the attached assessment may contain direction for site based staff to generate a work order through COMPASS. Within two weeks a representative from the Custodial/Grounds Department will conduct a follow-up visit to ensure that all issues have been appropriately addressed.

Should any questions arise, or if the current concerns continue after the attached recommendations have been addressed, please feel free to contact me at 754-321-1900.

cc: Dr. Joel Herbst, Area Superintendent

Steven Friedman, Area Director

Jeffrey S. Moquin, Executive Director, Support Operations

Aston Henry, Supervisor, Risk Management

Scott Gillen, Project Manager, Facilities and Construction Management

Diane Watts, Broward Teachers Union

Roy Jarrett, Federation of Public Employees

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

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

Robert Krickovich, Coordinator, LEA, Facilities and Construction Management

ES/tc Enc.

IAQ Assessment **Evaluation Requested** September 2, 2009 Nova High School **Evaluation Date** September 11, 2009 Time of Day 3:00 pm **Outdoor Conditions Temperature** 89.9 80.3 **Relative Humidity Ambient CO2** 374 Fish **Temperature** CO<sub>2</sub> Range **Relative Humidity** # Occupants Range Range 617 59.8 68.5 423 45 72 - 78 Max 700 > Ambient 30% - 60% Visible water Visible microbial Amount of **Noticeable Odor** No damage / staining? growth? material affected Drywall None **Ceiling Type** No No **Wall Type** None Drywall No No **Flooring** Carpet **Various** Yes No **Needs** Clean **Minor Dust Corrective Action Required** / Debris Cleaning Yes No No Ceiling Walls Yes No No **Flooring** No Yes Yes Clean and sanitize 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: Temperature was low and humidity level was elevated at the time of the assessment. Work order initiated by site to address -J390699 Water staining on carpet Recommendations: Site Based Maintenance: Clean and sanitize carpet · Continue to monitor this location for any signs of microbial growth as well as dust and debris accumulation and clean as appropriate

1281

**Location Number** 

1281 IAQ Assessment **Location Number Evaluation Requested** September 2, 2009 Nova High School **Evaluation Date** September 11, 2009 Time of Day 3:00 pm **Outdoor Conditions Temperature** 89.9 80.3 **Relative Humidity Ambient CO2** 374 Fish **Temperature** CO<sub>2</sub> Range **Relative Humidity** # Occupants Range Range QP168 78.8 54.3 4180 25 72 - 78 Max 700 > Ambient 30% - 60% Visible water Visible microbial Amount of **Noticeable Odor** No damage / staining? growth? material affected Wood None **Ceiling Type** No No **Wall Type** Drywall None No No **Flooring** 12 x 12 Vinyl No No None **Needs** Clean **Minor Dust Corrective Action Required** Cleaning / Debris Yes No No Ceiling Walls Yes No No Yes No No **Flooring** 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: Dust build up on A/C shaker unit Temperature was slightly elevated and was adjusted during the assessment CO2 level was elevated and fresh air was adjusted and air flow set to high Recommendations: Site Based Maintenance: Clean A/C shaker unit to remove dust Ensure that air conditioning settings remain within range - Continue to monitor this location for any signs of microbial growth as well as dust and debris accumulation and clean as appropriate

1281 IAQ Assessment **Location Number Evaluation Requested** September 2, 2009 Nova High School **Evaluation Date** September 11, 2009 Time of Day 3:00 pm **Outdoor Conditions Temperature** 89.9 80.3 **Relative Humidity Ambient CO2** 374 Fish **Temperature** CO<sub>2</sub> Range **Relative Humidity** # Occupants Range Range QP359 78.3 58.1 4279 72 - 78 Max 700 > Ambient 3 30% - 60% Visible water Visible microbial Amount of **Noticeable Odor** No damage / staining? growth? material affected Wood None **Ceiling Type** No No **Wall Type** Drywall None No No **Flooring** 12 x 12 Vinyl No No None **Needs** Clean **Minor Dust Corrective Action Required** Cleaning / Debris Yes No No Ceiling Walls Yes No No Yes No No **Flooring** 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: Temperature was slightly elevated and was adjusted during the assessment CO2 level was elevated and fresh air was adjusted and air flow set to high Recommendations: Site Based Maintenance: Ensure that air conditioning settings remain within range - Continue to monitor this location for any signs of microbial growth as well as dust and debris accumulation and clean as appropriate