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Signature on File

TO: Tom Lindner, Director
Physical Plant Operations

FROM: Robert J. Krickovich, Coordinator, LEA
Facilities and Construction Management, Environmental Division

SUBJECT: Indoor Air Quality (IAQ) Assessment
Print Shop - FISH 121 and Various Areas

On February 23, 2007 I conducted an assessment of FISH 121 and various areas at **Physical Plant Operations Print Shop**. 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: Jeffrey S. Moquin, Director, Risk Management
Mark Dorsett, Manager 1, Physical Plant Operations Division, Zone 1
Roy Norton, Manager Custodial/Grounds, Physical Plant Operations Division
Jerry Graziose, Director, Safety Department

RK/tc
Enc.

IAQ Assessment

Physical Plant Operations - Print Shop

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="Various"/>	<input type="text" value="69.8"/>	<input type="text" value="72 - 78"/>	<input type="text" value="45.2"/>	<input type="text" value="30% - 60%"/>	<input type="text" value="837"/>	<input type="text" value="Max 700 > Ambient"/>	<input type="text" value="6"/>
Noticeable Odor		<input type="text" value="No"/>	Visible water damage / staining?		Visible microbial growth?		Amount of material affected
Ceiling Type	<input type="text" value="2 x 2 Lay In"/>		<input type="text" value="Yes"/>	<input type="text" value="Yes"/>	<input type="text" value="1 ceiling tile - East end"/>		
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"/>
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="No"/>	<input type="text" value="Yes"/>	<input type="text" value="Yes"/>	<input type="text" value="Clean with Wexcide disinfectant"/>
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:

- **FISH 121A - Mechanical Room** - Chilled water pipe is leaking and slime is growing on the insulation. Filters, coils and pan are clean. Minor dust build up inside return.
- **FISH 121 and 121C** - Walls were dry at the time of the assessment. Visible growth on wall in FISH 121C where base was removed under window.
- **FISH 121** - Stained ceiling tile with visible microbial growth at the back of the room (East). May be caused by leaking chilled water line above ceiling.
- **FISH 121** - Temperature was low at the time of the assessment
- **FISH 121** - Dust and debris on HVAC return grill (wall mounted) and on ceiling at HVAC supply grills.
- **FISH 118B** - Complaint of room being too warm. Very little air flow out of supply grill.
- Exterior walls of building do not have stucco - only painted block walls. Roof flashing does not appear to extend down the wall far enough to prevent wind from blowing water into the building.

-Recommendations:

Site Based Maintenance:

- **FISH 121** - Clean HVAC return grill with Wexcide disinfectant solution and clean ceiling at HVAC supply grills as necessary.
- **FISH 121C** - Clean wall with Wexcide disinfectant solution to remove microbial growth and monitor for return of growth.
- 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:

- **FISH 121A** - Mechanical Room - Clean inside of return
- **FISH 121A** - Repair leaking chilled water lines in 121A and above ceiling in FISH 121 and remove and replace damaged insulation.
- **FISH 121** - Evaluate cause of stained ceiling tile and repair as appropriate and replace stained tile
- **FISH 121 and 118B** - Evaluate HVAC for proper operation (too warm and too cold) and repair as appropriate
- **Exterior** - Properly seal exterior walls to prevent water intrusion
- **Exterior** - Repair flashing to extend down the wall past the top of the block to prevent water intrusion