

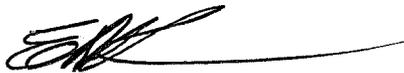


UNITED STATES DISTRICT COURT
MIDDLE DISTRICT OF FLORIDA

MEMORANDUM

DATE: August 3, 2001

TO: All Agencies and Individuals Occupying U.S. Courthouse Buildings in Ft. Myers, Tampa, Orlando, Ocala, and Jacksonville, Florida (the Middle District of Florida).

FROM: Elizabeth A. Kovachevich, Chief Judge, USDC, MD/FL 

SUBJECT: REPORT ON HEALTH AND BUILDING EVALUATIONS

This is a general announcement regarding a project commissioned by the Administrative Office of the United States Courts.

As a result of very serious health and building-related issues confronted throughout the federal buildings occupied by the United States District Court in the Middle District of Florida, the Administrative Office of the U.S. Courts retained Vitetta, Inc., to engage experts to evaluate all of the federal courthouse facilities within the Middle District of Florida. Dr. Joseph Q. Jarvis, M.D., M.S.P.H., was subsequently retained as one of the experts to study these issues. Initially, Dr. Jarvis appeared in the Middle District of Florida to perform preliminary evaluations of complaints in the Fort Myers, Tampa, Orlando, and Jacksonville Divisions. Dr. Jarvis followed up these preliminary evaluations by making a presentation at the Middle District of Florida's "Town Hall Meeting" that was held in Tampa on December 18, 2000. Thereafter, in March and April, 2001, Dr. Jarvis returned to the Middle District of Florida to conduct an epidemiological study and survey of all of the persons employed in the federal courthouse facilities within the Middle District of Florida.

In addition to Dr. Jarvis' epidemiological survey, AET Environmental, Inc., was retained to perform various environmental tests within the federal courthouse facilities in the Middle District of Florida, to determine the presence of possibly hazardous mold, mildew, and other substances toxic to persons working within those buildings.

The report generated in response to Dr. Jarvis' epidemiological study and surveys, and AET Environmental, Inc.'s testing, is now complete and available in each of the Clerk's offices within the Middle District of Florida.

Dr. Jarvis will return to the Middle District of Florida to conduct a Second "Town Hall Meeting" to explain and discuss the findings included in the report that is now available. Dr. Jarvis will be at the following locations to present his report on the dates listed below:

Monday, September 10, 2001	Sam M. Gibbons U.S. Courthouse, Tampa, Florida
Tuesday, September 11, 2001	Fort Myers U.S. Courthouse, Fort Myers, Florida
Wednesday, September 12, 2001	Golden-Collum Memorial Federal Building and U.S. Courthouse, Ocala, Florida
Thursday, September 13, 2001	George C. Young U.S. Courthouse, Orlando, Florida
Friday, September 14, 2001	Jacksonville U.S. Courthouse, Jacksonville, Florida

In each of the divisions, Dr. Jarvis will give the same presentation. This practice will allow the individuals viewing the presentation within each separate location to hear information relating to each of the other facilities; this is important for those individuals who may have transferred from one division to another division, or who may have spent time in several divisions. In addition to making the presentations in each division, Dr. Jarvis will allow ample time after each presentation for questions and answers. The exact time and location for each presentation will need to be coordinated, and will be announced in the near future.

The Administrative Office of the U. S. Courts has expended substantial sums to engage persons of high repute in connection with this project. The objective has been to obtain the best and most reliable information to present to persons who are currently working, or have previously worked, in the Middle District of Florida's federal courthouse facilities, so that those persons may make informed decisions concerning their health.

I encourage all individuals that have occupied, in some form or another, one of our federal courthouse facilities within the Middle District of Florida, to obtain a copy of the report discussed above, and to attend one of the second "Town Hall Meetings."

Of course, as the Court receives new information on this subject, that information will be expeditiously passed on to you.

With my very best personal regards to all of you.

TASK ORDER 01-VT-004
ENVIRONMENTAL ASSESSMENT FOLLOW-UP
MIDDLE DISTRICT OF FLORIDA



PREPARED FOR:

ADMINISTRATIVE OFFICE OF THE UNITED STATES COURTS
WASHINGTON, DC

PREPARED BY:

VITETTA
4747 SOUTH BROAD STREET
PHILADELPHIA, PA 19112

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**TASK ORDER 01-VT-004
ENVIRONMENTAL ASSESSMENT FOLLOW-UP
MIDDLE DISTRICT OF FLORIDA**

CONTENTS

Introduction

Section 1 HEALTH AND DISCOMFORT COMPLAINTS IN SIX FEDERAL
COURTHOUSES IN FLORIDA

Section2 BIOLOGICAL STUDY

TASK ORDER 01-VT-004
ENVIRONMENTAL ASSESSMENT FOLLOW-UP
MIDDLE DISTRICT OF FLORIDA

INTRODUCTION

The objective of this effort is as described in Task Order 01-VT-004, a follow-up to Task Order 01-VT-002, executed as part of VITETTA's contract USCA 82004 with the Administrative Office of the United States Courts. The specific Task Descriptions are as follows:

The recommendations of the report from 01-VT-002 recommended more intense sampling and investigation protocol to determine if hazardous conditions exist within the buildings.

Task 5A required:

Conduct fungal and bacterial air sampling to assess the conditions noted in the previous study at the locations in the subject courthouses. In Tampa, this should be done throughout the building.

Moisture sampling for moisture in and behind the walls to assess the possibility of contamination behind the walls in Jacksonville, Orlando and Tampa.

Take swab, tape and vacuum samples on a random basis throughout the ventilation system in the Tampa courthouse.

Conduct random vacuum, tape and swab samples from books, papers and files to be moved from the old building to the new one in Ft. Myers and Tampa.

Conduct random vacuum, tape and swab samples from books, papers and files to be moved from the old building to the new one in Jacksonville.

Assess Orlando for asbestos containing materials.

The recommendations from the report from 01-VT-002 also recommended determination of possible links, if any, between the contamination in the buildings, and the discomfort expressed by the employees of the courts in the buildings.

Task 5B required:

Conduct an epidemiologic study in the affected buildings. Use a Federal Courthouse in Florida (Tallahassee) known to be free of problems as a comparison building.

MIDDLE DISTRICT OF FLORIDA; BACKGROUND

Prior to 1964, there was no U.S. District Court for the Middle District of Florida. There were only U.S. District courts for the Northern and Southern Districts of Florida. Subsequent to the JFK assassination in 1963, President Lyndon Johnson recognized a huge increase in activity in the middle portion of Florida, due in part to the activity in and around the Kennedy Space Center. The Middle District of Florida was formed in 1964. Many of the courthouses within the Middle District were formerly part of the Northern and Southern Districts.

The Northern District of Florida was created in 1821 and the Southern District in 1828. Prior to 1845, Florida was not recognized as a State. While it was the Florida Territory, Florida was divided by a line running from east to west across the peninsula. The Southern District of Florida contained everything below the line drawn from what is now Port Charlotte. The Northern District contained everything north of that same line. These Districts were "officially" established by Congress in 1847.

Middle District of Florida Courthouse Information

Fort Myers Courthouses

The old Fort Myers Federal Building and Courthouse, also known as the George W. Whitehurst Federal Building, and, the Old Post Office building, is located at 2305 First Street, Ft. Myers, Florida. The courthouse is bounded on the north by Bay Street, on the east by Lee Street, on the south by First Street, and on the west by Jackson Street. Nathaniel Gaillard Walker is the architect of this building, which was constructed in 1933. The old Fort Myers Federal Building and Courthouse is on the National Register of Historic Buildings.

Currently, the old Fort Myers Federal Building and Courthouse is owned by the City of Ft. Myers. On March 6, 2000, the City Council, for the City of Ft. Myers, approved the purchase of the old Fort Myers Federal Building and Courthouse from General Services Administration.

From the information made available, after contacting General Services Administration, the Administrative Office of the United States Courts, and the United States District Court, for the Middle District of Florida, many federal agencies occupied the old Fort Myers Federal Building and Courthouse. The agencies that occupied the old Fort Myers Federal Building and Courthouse may include, but are not limited to: the United States District Court for the Middle District of Florida, Congressman Mack; Congressman Goss; the United States Marshal's Service; the United States Geological Survey; the United States Attorney's Office; the Federal Bureau of Investigation; Wage and Hour; National Oceanic; the United States Federal Public Defender's Office; the United States Pretrial Services; the United States Probation Office; the United States Bankruptcy Court; the United States Postal Service; various agency-hired contract employees (Court Security Officers, Maintenance Contractors, Cleaning Contractors); and General Services Administration. The first permanent Clerk's Office position, for the Middle District of Florida, in the old Fort Myers Federal Building and Courthouse was established in May of 1988. Prior to 1988, the old Fort Myers Federal Building and Courthouse was part of the United States District Court for the Southern District of Florida. In 1988, by Congressional legislation, the Fort Myers division was transferred to the United States District Court for the Middle District of Florida.

The new Fort Myers Courthouse is located at 2110 First Street, in Fort Myers, Florida. Spillas, Candela & Partners are the architects for the new Fort Myers Courthouse. Construction is reported to have been completed in 1996. The United States District Court for the Middle District of Florida moved into the new Fort Myers Courthouse, from the old Fort Myers Federal Building and Courthouse, in March of 1998. The United States Attorney's Office moved into the new Fort Myers Courthouse in February of 1998. The new Fort Myers Courthouse is currently occupied by the following federal agencies, which include, but are not limited to: the United States District Court for the Middle District of Florida; the United States Attorney's Office; the United States Probation Office; the United States Marshal's Service; United States Pretrial Services; and various agency-hired contract employees (Court Security Officers, Maintenance Contractors, Cleaning Contractors).

Tampa Courthouses

The old Tampa Federal Courthouse, also known as the Classic Courthouse, is located at 611 North Florida Avenue, Tampa, Florida. The original building was built in the years 1902 through 1905. As originally built, the Classic Courthouse was in the shape of a "U". In 1931, however, an addition was constructed on the east side of the Classic Courthouse, enclosing the east side of the Classic Courthouse. The architect of the Classic Courthouse is James Knox Taylor. The Classic Courthouse is on the National Register of Historic Buildings.

From the information made available, after contacting General Services Administration, the Administrative Office of the United States Courts, and the United States District Court, for the Middle District of Florida, many federal agencies occupied the Classic Courthouse. The agencies

may include, but are not limited to: the United States District Court for the Middle District of Florida; the United States Marshal's Service, the United States Tax Court; various agency-hired contract employees (Court Security Officers, Maintenance Contractors, Cleaning Contractors); and General Services Administration.

The new Tampa Federal Courthouse, also known as the Sam M. Gibbons Federal Courthouse, is located at 801 North Florida Avenue, Tampa, Florida. Hellmuth, Obata & Kassabaum, with Howard & Associates, are the architects for the Sam M. Gibbons Federal Courthouse. Construction of the Sam M. Gibbons Federal Courthouse was completed in 1998. In March of 1998, the United States Bankruptcy Court moved into the Sam M. Gibbons Federal Courthouse. In October of 1998, the United States District Court, for the Middle District of Florida, moved into the Sam M. Gibbons Federal Courthouse. Currently, the Sam M. Gibbons Federal Courthouse is occupied by the following federal agencies, which include, but are not limited to: United States Senator Bill Nelson; United States Court of Appeal, for the Eleventh Circuit; United States District Court, for the Middle District of Florida; United States Bankruptcy Court; United States Marshal's Service; and various agency-hired contract employees (Court Security Officers, Maintenance Contractors, Cleaning Contractors).

Orlando Courthouse

The Orlando Federal Courthouse, also known as the George C. Young U.S. Courthouse, is located at 80 North Hughey Avenue, Orlando, Florida. Construction of the George C. Young U.S. Courthouse was completed in 1975. The architect of the George C. Young U.S. Courthouse could not be identified based on the information reviewed.

The George C. Young U.S. Courthouse has been, and currently is, occupied by several federal agencies. The agencies who are occupying, or who have occupied, the George C. Young U.S. Courthouse may include, but are not limited to: the United States District Court, for the Middle District of Florida; the United States Marshal's Service; the United States Probation Office; the Federal Public Defender's Office; the United States Attorney's Office; the Social Security Administration; General Services Administration; and various agency-hired contract employees (Court Security Officers, Maintenance Contractors, Cleaning Contractors).

Jacksonville Courthouse

The Jacksonville U.S. Courthouse is located at 311 West Monroe Street, Jacksonville, Florida, and was constructed in 1932 through 1933. Marsh and Saxelbye is the listed architect of the Jacksonville U.S. Courthouse. While the Jacksonville U.S. Courthouse is not currently on the National Register of Historic Buildings, there is some suggestion that it could be.

The Jacksonville U.S. Courthouse has been, and currently is, occupied by several federal agencies, which may include, but are not limited to: the United States Court of Appeals, for the Eleventh Circuit; the United States District Court, for the Middle District of Florida; the United States Bankruptcy Court; the United States Attorney's Office; the United States Pretrial Services; the United States Probation Office; the United States Border Patrol; the United States Marshal's Service; the United States Postal Service; the United States Trustee; the United States Department of Labor; the United States Tax Court; General Services Administration; and various agency-hired contract employees (Court Security Officers, Maintenance Contractors, Cleaning Contractors).

Ocala Courthouse

The Ocala Courthouse, also known as the Golden-Collum Memorial Federal Building and U.S. Courthouse, is located at 207 NW Second Street, Ocala, Florida. No information was received, or found, regarding the date of construction completion, or the architect of this federal building.

The Golden-Collum Memorial Federal Building and U.S. Courthouse has been, and currently is, occupied by several federal agencies. The agencies who are occupying, or who have occupied, the Golden-Collum Memorial Federal Building and U.S. Courthouse may include, but are not limited to: the United States District Court, for the Middle District of Florida; the United States Social Security Administration; the United States Marshal's Service; the United States Probation Office; General Services Administration; the Internal Revenue Service; the Federal Bureau of Investigation; and various agency-hired contract employees (Court Security Officers; Maintenance Contractors; Cleaning Contractors).

Entire Middle District

In addition to the many federal agencies that are currently occupying, and that have occupied, the federal Courthouses within the Middle District of Florida, there are numerous other individuals that are required to be within the federal Courthouses in the Middle District of Florida, such as: jurors; defendants; witnesses; attorneys; and others.

NO

**HEALTH AND DISCOMFORT COMPLAINTS
IN SIX FEDERAL COURTHOUSES
IN FLORIDA**

JULY 25, 2001

PREPARED BY JOSEPH Q. JARVIS MD MSPH

INTRODUCTION

In a letter to Judge Elizabeth Kovachevich, dated October 24, 2000, Mr. Thomas H. Walker, P.E., Assistant Regional Administrator of the Public Buildings Service in the US General Services Administration, indicated that he had access to "environmental and air quality related records" concerning the Tampa Classic Courthouse dating back to 1992. A report prepared for the US Public Health Service, Division of Federal Occupational Health, dated June 28, 2000, by HLM Consultants of Auburn, Georgia, contains an Appendix A listing written records concerning the Tampa Classic Courthouse, with the first record dated 1989 (a scope of work for repair of damage from a leaking coffee machine). Apparently many complaints had been registered about the indoor air quality in the Tampa Classic Courthouse over at least a decade. Verbal statements made by building occupants to Joseph Q. Jarvis MD MSPH, the author of this report, indicate that other buildings housing federal courts in the Middle District of Florida have also been the subjects of indoor air complaints over many years. No attempt is made herewith to comprehensively review the history of indoor air problems of any of the buildings in the Middle District of Florida. However, these complaints presumably led to Task Order 01-VT-002, issued in December 2000 by the Administrative Office of the United States Courts (AOUSC), which required that a team of consultants conduct brief investigations into indoor air quality complaints at four courthouses in the Middle District of Florida (Tampa, Ft. Myers, Orlando, and Jacksonville). The team consisted of an architect, an engineer, an industrial hygienist, and a physician. The report of their findings indicated the presence of four common deficiencies: 1) outdoor ventilation air flows and room air changes were inadequate; 2) building interior pressure is not adequate to prevent the infiltration of moisture-laden air into the building; 3) outdoor ventilation air is not dehumidified enough to prevent microbial growth; and 4) ventilation air intakes are in close proximity to contaminate sources (i.e. vehicle exhaust). In addition, there was evidence of mold reservoirs in each of the buildings. In the case of the Orlando and Jacksonville buildings, the potential bioaerosol problems stem from the age and deterioration of the structures themselves. The current Ft. Myers and Tampa buildings are substantially newer, but have inherited books, papers, files, and furnishings from the two older buildings they replaced. Both of the obsolete courthouses (the Tampa Classic Courthouse and its equivalent in Ft. Myers) were significantly mold contaminated, so much so that the General Services Administration has determined the Tampa Classic Courthouse to be hazardous and unoccupiable. According to the industrial hygienist on the AOUSC team, from AET Environmental, the old courthouse in Ft. Myers should be likewise designated unfit for occupancy. In addition to the mold antigen burdens brought into the new Ft. Myers and Tampa courthouses, the Tampa building has had at least two major flooding events, and both buildings have been subject to poor air handling practices that allow for unacceptably high humidity levels. Interviews with building occupants by the physician on the indoor air quality team documented discomfort in all four courthouses and plausible concerns about building related allergic disease among occupants of the Tampa, Ft. Myers, and Jacksonville buildings. The team issued a report with a number of recommendations for further investigation. The AOUSC accepted the team recommendations and has since implemented a further study of indoor air quality and its effect on the health of occupants of US court buildings in the Middle District of Florida (Task Order 01-VT-004), including the four buildings already mentioned plus the court building in Ocala. AET Environmental, Inc. performed the microbiological sampling required

by this task order (see synopsis below). This report concerns the epidemiological study of health and discomfort complaints among occupants of the federal court buildings in the Middle District of Florida.

SYNOPSIS OF MICROBIOLOGICAL SAMPLING

AET Environmental Inc. conducted microbiological sampling in the five courthouses (Ft. Myers, Tampa, Orlando, Ocala, and Jacksonville) of the Middle District of Florida during the first several months of 2001. The studies included sampling for endotoxin in air and dust, viable fungi in air and dust, temperature, humidity, and moisture in walls. In general AET found water flooding, releases, incursions and damage in all five buildings. They also report "some form of microbiological concern in all five buildings." Only one of the buildings operates climate control systems on a 24 hour a day, seven day each week basis. A brief review of the findings in each building follows:

Tampa

Endotoxin in air: 66% of interior samples exceed outdoor air, 10% exceed 1 EU/M3
Endotoxin in dust: not elevated except in a construction zone
Fungal colonies in dust: medium growth in air ducts and on walls
Fungal air samples: Most indoor samples had lower counts than outdoors and were dominated by Cladosporium, a typical outdoor fungus.
Temperature: ranged from 71 to 76 degrees F
Humidity: ranged from 59% to 65%
Moisture detection: none recorded
Comment: Mold was observed behind walls beneath windows. Diesel fume enters fresh air system on a daily basis.

Orlando

Endotoxin in air: 27% of samples above outside control and all above 1 EU/M3
Endotoxin in dust: 31% elevated above commonly established limit.
Fungal colonies in dust: total counts generally in the heavy contamination range
Fungal air samples: generally counts inside lower than outside with no unusual species
Temperature: ranged from 72 to 82 degrees F
Humidity: ranged from 65%-74%
Moisture detection: none recorded
Comment: Water leaking from roof and plumbing was noted. Building is not on 24/7 AC. Mold visible on carpet, around windows, and behind vinyl wallpaper. Fresh air intakes are below grade. Black dust is probably of combustion engine origin.

Jacksonville

Endotoxin in Air: 67% of samples above outdoors reference, 50% above 1 EU/m3.
Endotoxin in Dust: 42% of samples above a commonly accepted standard. 3 samples particularly elevated (500,000 EU/g to 2 million EU/g)
Fungal colonies in dust: Many specimens over 1 million CFU/gr dust due to leaking condensation pans.
Fungal air samples: at least two samples document mold reservoirs in the rooms where sampling performed, with Penicillium and Aspergillus species dominant.
Temperature: ranged from 72-80 degrees F
Humidity: ranged from 70%-85%
Moisture detection: none recorded
Comment: Visible mold can be seen throughout the building. Building is not on 24/7 AC.

Ft. Myers

Endotoxin in Air: all samples below outside control

Endotoxin in Dust: all samples below commonly accepted standard

Fungal colonies in dust: furniture in the building has mold counts ranging from 40,000 CFU/g to 300,000 CFU/g.

Fungal air samples: not different substantially from expected based upon outdoor samples

Temperature: ranged from 70-76 degrees F

Humidity: ranged from 55%-62%

Moisture detection: not mentioned

Comment: Building is not on 24/7 AC. Building is stuffy.

Ocala

Endotoxin in air: samples generally below outside control

Endotoxin in dust: not mentioned

Fungal colonies in dust: most samples moderate to low

Fungal air samples: most samples low compared to outdoor air

Temperature: ranged from 70-80 degrees F

Humidity: ranged from 60%-85%

METHODS OF THE EPIDEMIOLOGICAL STUDY

This is a cross-sectional study conducted in February and March 2001 to examine symptoms and self-reported disease prevalence among 1,031 occupants of the five federal court buildings in the Middle District of Florida (Tampa, Ft. Myers, Orlando, Ocala, and Jacksonville) and 129 occupants of a comparison building, the federal courthouse in Tallahassee, which was not known to have indoor air complaints. The Tallahassee building has HVAC operation specifications that prevent excursions of humidity above 65% or of temperature above 82 degrees F at any time. Visual inspection of the Tallahassee building by an AOUSC contracted architect confirmed that no indoor air problems were known to exist. This study examines exposure variables and risk factors for illness among the occupants of each individual building and is therefore a comparison between each building in the Middle District of Florida and the building in Tallahassee.

The study instrument consists of a standardized respiratory symptom questionnaire (American Thoracic Society) supplemented with questions regarding other symptoms, discomfort complaints, previous physician diagnoses, medications, sick leave, physician consultation, job characteristics, job satisfaction, and work station factors including lighting, equipment, and proximity to visible water damage or mold growth. Occupants completed individual questionnaires in groups of 30 to 50 with the assistance, when necessary, of a physician or nurse who also checked for completeness of the responses. The questionnaire was designed to answer these questions:

- 1) Did the occupants of the various courthouses in the Middle District of Florida experience more discomfort complaints, symptoms, and illnesses than occupants of the federal courthouse in Tallahassee?
- 2) Could any differences between building occupant populations in rates of reported discomfort complaints, symptoms, and illnesses be explained by differences in gender, race, ethnicity, age, education, smoking, job-satisfaction parameters, work tasks, personal risk factors, or environmental exposure variables?
- 3) If any court buildings in the Middle District of Florida have increased rates of discomfort complaints, symptoms, or illnesses, are there environmental exposure factors associated with those adverse effects?

For data analysis, a symptom or discomfort complaint was classified as present when it was reported to occur at least one or more days per week during the last four weeks (before

completing the questionnaire) while working in the building. The questionnaire responses were analyzed using Epi Info 2000, a database and statistics program from the Centers for Disease Control and Prevention, Atlanta, Georgia. A probability of 0.05 or less was considered significant.

A case of sick building syndrome was defined as a person reporting a symptom in at least three of the following five symptom categories—nasal, throat, eyes, neuropsychological, and headache—at least 1-3 days per week while working in the building during the previous four weeks. The nasal symptom category included stuffy nose, runny nose, and sinus congestion. The throat symptom category included sore throat, dry throat, and hoarseness. The eye symptom category included dry eyes, itching eyes, red eyes, tired or strained eyes, and tearing eyes. The neuropsychological category included mental fatigue or fuzziness, dizziness or lightheadedness, and difficulty remembering things or concentrating.

A case of respiratory illness was defined as a person reporting at least three of four chest symptoms (cough, mucus production, wheezing, and shortness of breath). The symptom questions of interest were: "Do you usually have a cough?"; "Do you usually bring up phlegm (mucus) from your chest?"; "Have you ever had an attack of wheezing that made you feel short of breath?"; and "Are you troubled by shortness of breath when hurrying on the level or walking up a slight hill?". Controls for respiratory illness reported no chest symptoms.

RESULTS

Ninety-eight percent (81/83) of the Fort Myers building occupants, 85% of Ocala building occupants (94/110), 95% of Orlando building occupants (299/314), 93% of Tampa building occupants (280/302), 95% of Jacksonville building occupants (210/222), and 98% of Tallahassee building occupants (127/129) responded to the questionnaire.¹ Only the occupant population in Ocala among all of the building populations in the Middle District of Florida differed statistically in personal characteristics from the occupant population in Tallahassee (See Table 1). Each group of building occupants in the Middle District of Florida, when compared with the group of building occupants in the Tallahassee Federal Courthouse, had similar personal characteristics, such as age, gender, race, education, smoking status, job category, and contact lens use. Modest differences between building populations did occur, but 95% confidence intervals for each observation overlapped, meaning that no statistically significant differences were observed, except for the finding that the average age of the Ocala population is higher than that of the comparison population in Tallahassee. Personal responsibilities outside of the normal working day were also similar when comparing each building population within the Florida Middle District with the Tallahassee building population. The proportion of each population reporting major responsibility for childcare duties, major responsibility for housekeeping duties, major responsibility for care of an elderly or disabled person on a regular basis, or a regular commitment of five hours or more per week, paid or unpaid, outside the courthouse job was statistically similar.

¹ For purposes of this report, the fifteen persons working exclusively in the 'Classic' Courthouse in Tampa will not be included in the Tampa building analysis. Thus, the response rate for the Tampa building (the Sam Gibbons Building) is 265/287 or 92%.

**TABLE 1
CHARACTERISTICS OF BUILDING OCCUPANTS**

	Ft. Myers N=81	Ocala N=94	Orlando N=299	Tampa N=265	Jacksonville N=210	Tallahassee N=127
Gender (%Female)	51%	52%	63%	64%	58%	51%
Mean Age	45	50*	45	43	45	43
Race (%White)	85%	70%	67%	83%	82%	80%
Education (%w/college degree or higher)	57%	57%	63%	48%	52%	53%
Job Category (%Professional)	40%	43%	41%	33%	41%	45%
Smoking Status (% Never Smoked)	54%	55%	65%	62%	66%	63%
% Job Satisfaction	99%	96%	95%	95%	96%	93%
% Childcare Responsibility	29%	24%	35%	32%	29%	29%
%Housekeeping Responsibility	57%	68%	70%	73%	65%	58%
%Elder/Disabled Care	7%	12%	9%	10%	6%	9%
%Regular Duty >=5 Hours/Week	26%	43%	28%	30%	28%	35%
%Contact Lens Use	22%	21%	28%	30%	26%	22%

All percentages are rounded to the nearest whole number. *Statistically significant difference from the comparison population in Tallahassee.

The demands of work reported by the various building populations were also similar (see Table 2). The proportion of each building population reporting that they 'Fairly Often' or 'Very Often' faced conflict problems at work was generally low, and none of the groups of occupants of Middle District of Florida buildings differed statistically from the Tallahassee building occupant group. All building groups commonly reported the need to work very fast and very hard, with little time to get things done while having a great deal to be done. Seventy-six percent of the Orlando building occupant group reported that "often there is a great deal to be done" at their work, which was a statistically significantly higher proportion than reported the same from the Tallahassee building group (62%). Similar proportions of all groups reported being clear on job responsibilities, being able to predict what was expected on the job, having work objectives well defined, and being clear about what others expect on the job, with no statistically significant differences between the Tallahassee building group and all Middle District of Florida building groups.

**TABLE 2
CHARACTERISTICS OF JOB DEMANDS**

	FORT MYERS N=81	OCALA N=94	ORLANDO N=299	TAMPA N=265	JACKSONVILLE N=210	TALLAHASSEE N=127
CONFLICT	4%	21%	13%	7%	13%	16%
FAST WORK	49%	46%	61%	50%	49%	46%
HARD WORK	60%	53%	68%	59%	61%	56%
LITTLE TIME	46%	47%	52%	36%	46%	38%
MUCH TO BE DONE	68%	69%	76%*	67%	66%	62%
CLEAR ON JOB	90%	86%	91%	88%	90%	84%
WORK PREDICTABLE	80%	85%	86%	87%	85%	85%
OBJECTIVES DEFINED	83%	81%	84%	82%	86%	83%
EXPECTATIONS CLEAR	88%	87%	89%	85%	89%	85%

*Statistically significant difference from the comparison building population (Tallahassee). In this table, all percentages have been rounded to the nearest whole number.

The characteristics of the workstation environment of the survey respondents were generally similar when comparing each Middle District building with the Tallahassee building, with the exception of the Ocala Building (see Table 3). Very few occupants of any building reported new carpeting, paint, furniture, partitions, or wall coverings within 15 feet of their workstation area during the three months previous to completing the questionnaire. Most respondents reported comfortable chairs and desks at their workstations, though occupants of the Ocala and Tampa buildings were more likely than Tallahassee building occupants to report an uncomfortable desk. One-third to two-thirds of all building occupants have workstations located in an open area (i.e., not a private office). Two-thirds or more of the respondents from each building reported having one or more windows in their personal workspace, except for the Ocala and Orlando buildings, where occupants reported windows at a rate statistically lower than the occupants of the Tallahassee building. Lighting was just right for a majority of the respondents from each building, with the exception of the Ocala building, where the majority find the building either too dim or too bright. Most building occupants only rarely or occasionally experience glare in the work environment. Nearly half of the respondents from the Ocala and Orlando buildings have a photocopy machine located within 15 feet of their workstation, which is a statistically higher proportion than in Tallahassee (26%).

**TABLE 3
CHARACTERISTICS OF WORKSTATION ENVIRONMENT**

	Fort Myers N=81	Ocala N=94	Orlando N=299	Tampa N=265	Jacksonville N=210	Tallahassee N=127
Open Room	41%	67%	57%	52%	36%	46%
Window	67%	40%*	55%*	71%	77%	77%
Lighting	69%	44%*	61%	62%	64%	75%
Glare	39%	41%	35%	41%	28%	32%

Chair	82%	75%	68%	70%	75%	78%
Desk	80%	64%*	70%	63%*	69%	83%
Close Photocopy	38%	49%*	46%*	36%	40%	26%
New Carpet	0%	10%	14%	2%	2%	9%
New Paint	3%	8%	18%	4%	9%	10%
New Furniture	22%	8%	22%	11%	16%	12%
New Partitions	0%	4%	9%	2%	2%	5%
New Wall Covering	0%	6%	10%	2%	2%	5%

*Statistically significant difference from the comparison building population (Tallahassee). Percentages in this table have been rounded to the nearest whole number.

Characteristics of job activities are quite similar across all building populations (see Table 4). Very few persons use film developers, microfilm copiers, or blue line printers in any of the buildings. Carbonless copy paper and chemicals, such as cleansers, glue, correction fluid, or other strong smelling substances are used by a minority of respondents (approximately one in five), with no statistically significant differences between any Middle District building and the Tallahassee population. Use of copiers, printers, and fax machines is ubiquitous, with Orlando building occupants the heaviest users. Tallahassee building occupants do average fewer hours of computer use per day than do persons occupying buildings in the Middle District of Florida.

**TABLE 4
CHARACTERISTICS OF JOB ACTIVITIES**

	Ft. Myers N=81	Ocala N=94	Orlando N=299	Tampa N=265	Jacksonville N=210	Tallahassee N=127
Ave. Hours Computer	5.1*	5.2*	5.7*	5.3*	4.9*	4.3
Copier Use	84%	74%	87%*	75%	77%	69%
Printer Use	76%	58%	80%*	75%	79%	66%
Fax Use	62%	54%	54%	35%*	39%*	58%
Carbonless Copy Use	22%	14%	24%	12%	12%	15%
Chemicals Use	18%	27%	25%	21%	26%	17%
Blue Line Printer	0%	0%	1%	1%	3%	2%
Microfilm Copier	0%	0%	1%	.8%	2%	2%
Use Film Developer	0%	0%	.7%	.8%	1%	2%

*Statistically significant difference from comparison building population (Tallahassee). Percentages in this table have been rounded to the nearest whole number unless their value is less than 1%.

In contrast to the personal characteristics of the building populations, and the characteristics of their job demands, workstations, and job activities, the rates of self-reported discomfort in buildings are vastly different between the comparison building and the five buildings in the Middle District of Florida (see Table 5). The Tallahassee building meets the expectations of the American Society of Heating, Refrigerating, and Air Conditioning Engineers (ASHRAE), which asserts that 80% of building occupants can and should be made comfortable by proper building design and maintenance. In no category of indoor comfort were there more than one in five occupants of the Tallahassee building discomfited. In stark contrast, all five of the Middle District of Florida buildings were uncomfortable in some way to at least 40% of occupants. The Fort Myers building is stuffy, hot, and cold. The Tampa building is reported to be breezy, cold, and smelly. The Orlando and Jacksonville buildings have temperature control problems, odors, stuffiness, and humidity. The Ocala building is the most uncomfortable Middle District building, with excess complaints in nine of ten categories, leaving out only humidity from the list of problems.

**TABLE 5
SELF REPORTED DISCOMFORT IN BUILDINGS**

	Ft. Myers N=81	Ocala N=94	Orlando N=299	Tampa N=265	Jacksonville N=210	Tallahassee N=127
Excess air movement	6%	25%*	17%	18%*	13%	6%
Stuffiness	41%*	43%*	36%*	27%	32%*	16%
Hot	40%*	43%*	29%	27%	32%*	19%
Cold	44%*	46%*	45%*	48%*	33%*	17%
Humid	19%	13%	16%*	15%	17%*	6%
Dry	10%	23%*	17%	15%	21%*	7%
Noisy	0%	29%	25%	15%	23%	14%
Moldy Odors	7%	20%*	19%*	15%*	24%*	4%
Chemical Odors	4%	19%*	13%	17%*	13%	4%
Other Odors	8%	27%*	18%*	16%	22%*	5%

*Statistically significant difference from comparison building (Tallahassee). The percentages in this table have been rounded to the nearest whole number.

Three questions were included in the survey instrument to evaluate whether mold and water damage was apparent to the building occupants: 1) Has there ever been water damage to walls, ceiling tiles or carpeting visible from your workstation? 2) Has there ever been visible mold growth on the walls or carpet within 15 feet of your workstation? 3) During the past three months, have the following changes taken place within 15 feet of your current workstation: Water Damage? Answers to these questions were markedly different in the Tallahassee building, when compared to responses from occupants of the Middle District of Florida buildings (see Table 6). Recent water damage was remarkably more common in the Ocala, Orlando, and Jacksonville buildings than in Tallahassee. All five Middle District building occupant groups reported seeing any evidence of water damage, recent or not, at a higher rate than did the respondents in Tallahassee, with Ocala, Orlando, and Jacksonville respondents reporting water damage at a rate approximately ten times higher than the comparison population. No one in Tallahassee reported seeing any mold growth in the building, while 24%-44% of the occupants of Middle District buildings reported mold growth within 15 feet of their workstations.

**TABLE 6
VISIBLE BUILDING WATER AND MOLD DAMAGE**

	Fort Myers N=81	Ocala N=94	Orlando N=299	Tampa N=265	Jacksonville N=210	Tallahassee N=127
Recent Water Damage	0%	28%*	19%*	6%	27%*	2%
Any Water Damage	18%	56%*	54%*	38%*	71%*	6%
Visible Mold Growth	24%*	25%*	33%*	30%*	44%*	0%

*Statistically significant difference from comparison building (Tallahassee). The percentages in this table are rounded to the nearest whole number.

Water damage and mold growth in office buildings have been associated with respiratory health problems among occupants. Table 7 contains data about the rates of usual cough and mucus production, wheezing with shortness of breath, and trouble with shortness of breath when hurrying on the level or walking up a slight hill. Table 8 contains data about the frequency of reporting respiratory symptoms during the last four weeks while working in the respondent's building. Table 9 contains data about the rates of use of various kinds of medications. Table 10 provides information about illness behaviors, including a history of having a chest illness requiring bed rest and or remaining at home or away from work during the past three years, days of sick leave during the past 12 months, days of sick leave attributable to illness related to work environment, and physician evaluation due to symptoms caused or worsened by the work environment. Respiratory symptoms, medication use, and illness behaviors are generally more common among persons working in the Middle District of Florida buildings than in the Tallahassee building. In addition to the data shown in Table 7, the Tampa and Fort Myers populations are generally most likely to experience cough and mucus production as much as 4-6 times a day, 4 or more days out of the week, and have had two or more episodes of wheezing attacks causing shortness of breath (data not shown).

**TABLE 7
USUAL RESPIRATORY SYMPTOMS**

	Ft. Myers	Ocala	Orlando	Tampa	Jacksonville	Tallahassee
Cough	20%	19%	19%	22%	23%	12%
Mucus	25%	16%	20%	24%*	19%	9%
Wheeze	20%	19%	20%	18%	20%	12%
Dyspnea	35%*	24%	27%	30%*	29%*	15%

*Statistically significant difference from comparison building (Tallahassee). The percentages have been rounded to the nearest whole number. Dyspnea=short of breath.

**TABLE 8
RESPIRATORY SYMPTOMS IN PAST 4 WEEKS**

	FT. MYERS N=81	OCALA N=94	ORLANDO N=299	TAMPA N=265	JACKSONVILLE N=210	TALLAHASSEE N=127
WHEEZE	6%	9%	7%	9%	7%	3%
CHEST TIGHT	7%	8%	10%	9%	7%	5%
SHORT OF BREATH	12%	8%	8%	9%	6%	2%
COUGH	30%*	19%	22%*	25%*	22%	9%
PHLEGM	24%*	15%	19%*	26%*	15%	8%

*Statistically significant difference from the comparison building (Tallahassee). Percentages have been rounded to the nearest whole number.

**TABLE 9
MEDICATION USE**

	Ft.Myers	Ocala	Orlando	Tampa	Jacksonville	Tallahassee
Nasal Medication	40%	45%	49%	52%	48%	44%
Inhaled Medication	11%	10%	10%	9%	11%	2%
Other Asthma Medication	4%	4%	4%	5%	4%	2%
Steroid Medication	8%	7%	11%	9%	6%	3%

Percentages in this table have been rounded to the nearest whole number.

**TABLE 10
ILLNESS BEHAVIOR**

	Ft.Myers	Ocala	Orlando	Tampa	Jacksonville	Tallahassee
Chest Illness at Home	39%	26%	36%*	40%*	38%*	22%
Physician Consult	34%*	18%*	35%*	32%*	31%*	4%
Average Days/Sick Leave- Total	5	6	6	6	6	5
Average Days/Sick Leave- Work	1	5	3	3	2	.3

*Statistically significant difference from the comparison population (Tallahassee). Percentages in this table have been rounded to the nearest whole number.

Occupants of problem buildings whether the buildings have mold and water damage or not, often report a constellation of symptoms (eye, nose, throat irritation with headache and difficulty concentrating or remembering things) that have been commonly called 'sick building syndrome'. Table 11 contains data about rates of symptoms related to 'sick building syndrome' in the five Middle District of Florida buildings and the Tallahassee comparison building. The Ocala population reports the highest percentage of eyestrain and glare, and the lowest proportion with adequate lighting and windows in their workplace. Contact lens use is the highest in Tampa, which population also reports the highest proportion of dry and red eyes.

TABLE 11
RATES OF SICK BUILDING SYNDROME SYMPTOMS

	Ft. Myers N=81	Ocala N=94	Orlando N=299	Tampa N=265	Jacksonville N=210	Tallahassee N=127
Dry Eye	27%	22%	31%*	32%*	22%	15%
Red Eye	20%	16%	22%	26%	14%	14%
Itchy Eye	28%	27%	33%*	32%*	21%	15%
Tears/Eye	20%	14%	19%	19%	12%	9%
Eye Strain	40%	44%*	43%*	40%*	38%*	21%
Headache	33%	25%	31%*	37%*	32%*	16%
Memory Difficulty	20%*	6%	13%	22%*	11%	6%
Mental Fuzziness	21%*	14%	16%*	19%*	13%	5%
Dizziness	13%	2%	9%	13%*	5%	2%
Hoarse	9%	9%	9%	10%	6%	5%
Sore Throat	9%	8%	11%	12%	7%	4%
Dry Throat	17%	16%	23%*	22%*	13%	8%
Stuffy Nose	31%*	21%	32%*	31%*	26%	13%
Runny Nose	22%*	19%	23%*	27%*	19%*	6%
Sinus Congestion	31%	22%	31%*	35%*	27%	14%

*Statistically significant difference from the comparison building (Tallahassee). Percentages in this table are rounded to the nearest whole number.

Table 12 contains data concerning the rates of other symptoms that are not commonly associated with indoor air problems. Rates of reported skin symptoms are statistically elevated among Tampa building occupants, when compared to persons working in Tallahassee. The rates of pain or stiffness in the back, shoulders, or neck (Neck Pain) among occupants of all buildings in the Middle District of Florida are higher than would be expected based upon the Tallahassee population. However, average daily hours of computer use are higher in the Middle District buildings than in Tallahassee, as is desk and chair related discomfort. In general, the symptoms not usually associated with indoor air problems are not reported at higher rates in the Middle District of Florida than in the building in Tallahassee.

TABLE 12
SYMPTOMS NOT USUALLY ASSOCIATED WITH INDOOR AIR PROBLEMS

	Ft. Myers N=81	Ocala N=94	Orlando N=299	Tampa N=265	Jacksonville N=210	Tallahassee N=127
Dry Skin	17%	19%	28%	35%*	27%	17%
Skin Itch	17%	9%	19%	29%*	15%	9%
Rash	9%	2%	5%	9%	4%	2%
Fatigue	32%	26%	30%*	42%*	26%	16%
Fever	6%	1%	3%	4%	.5%	.8%
Chills	10%	4%	8%	7%	4%	3%
Depression	13%	6%	12%	15%	7%	9%
Tension	16%	15%	19%	20%	19%	10%
Muscle Ache	14%	17%	13%	19%*	13%	6%
Neck Pain	35%*	35%*	36%*	37%*	30%	17%
Hand Pain	19%*	11%	8%	14%	10%	5%
Nausea	5%	5%	2%	3%	1%	2%
Diarrhea	6%	6%	3%	4%	2%	2%
Frequent Urination	13%	10%	16%*	14%	12%	6%

*Statistically significant difference from comparison building population (Tallahassee). Percentages in this table are rounded to the nearest whole number.

Estimates of rates of symptom improvement away from work are uncertain (i.e., have wide 95% confidence intervals) and are therefore not displayed here. Some of the sick building syndrome related symptoms (eye symptoms, headache, and central nervous system symptoms) tend to improve away from work more often for Middle District building occupants than for persons occupying the Tallahassee building. No other trends are detectable.

The lifetime cumulative incidence of childhood asthma is similar among all six building populations (range 5%-8%, Tallahassee=7%). However, the cumulative incidence of adult onset asthma is lowest in Tallahassee (3%) with rates in Middle District building populations as follows: Jacksonville=4%, Ocala=6%, Ft. Myers=7%, Orlando=8%, Tampa=9%, and current occupants of the Classic Tampa Courthouse=13%(2/15). The diagnosis with the highest cumulative incidence in all six building populations is sinus trouble (range 36%-43%, Tallahassee=38%). However, 10 of 15 current Classic Courthouse occupants report ever having sinus trouble. The cumulative incidence of bronchitis is lowest in Tallahassee (17%) with rates in the Middle District populations as follows: Ocala=22%, Ft. Myers=27%, Orlando=32%, Jacksonville=32%, and Tampa=32%. No other diagnoses demonstrate a predilection for the populations occupying the buildings in the Middle District of Florida.

Rates of reporting no symptoms related to sick building syndrome are listed by building in Table 13, along with rates of building occupants meeting the case definition for sick building syndrome. Also included in Table 13 are the rates of reporting at least one symptom in each of four symptom categories (nose, throat, eye, and neuropsychological) that along with headache constitute the case definition for sick building syndrome. Among Middle District courthouses, Ocala's occupant population has the highest rate of reporting no sick building syndrome symptoms and is the only building with no statistically significant differences with the Tallahassee population for each of the four symptom categories. None-the-less, the Ocala occupant population joins the other Middle District building populations in reporting a statistically significant higher rate of sick building

syndrome than the population in the Tallahassee building (relative risks for sick building syndrome are 3-5 fold higher in the Middle District than in Tallahassee).

TABLE 13
RATES OF SICK BUILDING SYNDROME, SYMPTOM CATEGORIES, AND NO REPORTED SYMPTOMS RELATED TO SICK BUILDING SYNDROME

	FtMyers n=81	Ocala n=94	Orlando n=299	Tampa n=265	Jacksonville n=210	Tallahassee n=127
No SBS symptoms	31%	44%	31%	30%	39%	57%
Nose	39%*	31%	41%*	41%*	35%*	16%
Throat	22%	20%	26%*	25%*	15%	9%
Eye	56%*	47%	56%*	52%*	44%	31%
Neuro-psychological	26%*	16%	22%*	29%*	17%	7%
Sick Building Syndrome	28%*	25%*	35%*	36%*	23%*	7%

Percentages listed in the table are rounded to the nearest whole number. *Statistically significant difference from the Tallahassee building population. No statistics were calculated for the row labeled "No SBS symptoms".

Table 14 contains rates of no reported usual respiratory symptoms (cough, mucus, wheeze, and shortness of breath) and the rate of respiratory illness by building occupant group. The Ocala group had the highest rate of no reported usual respiratory symptoms among the Middle District of Florida building occupant groups. Each occupant group within the Middle District had a statistically higher rate of respiratory illness than did the occupant group in Tallahassee. Rates of respiratory illness were three times higher in the Middle District than would be expected based upon the rate in Tallahassee.

TABLE 14
RATES OF NO REPORTED USUAL RESPIRATORY SYMPTOMS AND RESPIRATORY ILLNESS

	FtMyers n=81	Ocala n=94	Orlando n=299	Tampa n=265	Jacksonville n=210	Tallahassee n=127
No usual respiratory symptoms	46%	60%	53%	48%	48%	68%
Respiratory illness	27%*	24%*	23%*	24%*	26%*	8%

Percentages in this table have been rounded to the nearest whole number. *Statistically significant difference from the rate in Tallahassee. No statistics have been calculated for the row designated "No usual respiratory symptoms".

A nested case-control study design was used to explore whether cases of respiratory illness were statistically associated with the following exposure factors: 1) average daily computer use greater than 3 hours; 2) ever smoking (i.e. reporting current or former tobacco use); 3) ever having water damage to walls, ceiling tiles or carpeting visible from the workstation; 4) water damage within 15 feet of the workstation during the past three months; 5) ever having visible mold growth on walls or carpet within 15 feet of the workstation; 6) too little air movement; 7) temperature too hot; 8) temperature too cold; 9) moldy odors; and 10) ever working in the Classic Courthouse in Tampa.

Odds ratios for all ten exposure factors in all five buildings were generally greater than one. The odds ratios reaching statistical significance are as follows: 1) Ft. Myers—average computer hours greater than 3, OR=4.8 (1.2-19); temperature too hot, OR=3.4 (1.1-10); temperature too cold, OR=3.4 (1.1-10); 2) Ocala—visible mold growth, OR=9 (2.1-37); 3) Orlando—ever smoking, OR=1.8 (1.0-3); visible mold growth, OR=2.3 (1.0-15); too little air movement, OR=3.4 (1.8-6); temperature too hot, OR=3 (1.6-5.7); temperature too cold, OR=2 (1.0-3.7); 4) Tampa—ever having water damage, OR=3 (1.4-6.6); temperature too cold, OR=2.1 (1.1-4); moldy odors, OR=4.8 (2.0-11); ever working in the Classic Courthouse OR=1.8 (.98-3.3); and 5) Jacksonville—average computer hours greater than 3, OR=2.8 (1.2-6.3); water damage during past three months, OR=3.9 (1.8-8.5); visible mold growth, OR=2.7 (1.2-6.1); too little air movement, OR=2 (1.0-4.2); moldy odors, OR=7.9 (3.2-19.7); ever working in the Classic Courthouse, OR=3 (1.0-8). Of interest is the observation that three persons with a history of ever working in the Classic Courthouse, who currently work in the Tallahassee Courthouse, met the case definition for Respiratory Illness. No one in the Tallahassee Courthouse reporting no usual respiratory symptoms ever worked in the Classic Courthouse in Tampa.

Table 15 contains data extending the nested case-control study to associations between meeting the case definition for respiratory illness and the following four illness behaviors: 1) experiencing a chest illness during the past 3 years requiring being off work, indoors at home, or in bed; 2) seeing a doctor for any symptoms which may have been caused or worsened by the work environment since working in the current building; 3) using a bronchodilator inhaler or pills during the last month; and 4) taking more than 2 sick days during the last 12 months for conditions caused or worsened by the work environment. Odds ratios are listed in Table 15 arranged by building for each of the five Middle District courthouses.

TABLE 15
ODDS RATIOS FOR RESPIRATORY ILLNESS AND SELECTED ILLNESS BEHAVIORS

	Ft. Myers Cases=22 Controls=37	Ocala Cases=23 Controls=56	Orlando Cases=69 Controls=158	Tampa Cases=64 Controls=127	Jacksonville Cases=55 Controls=101
Chest Illness	8*	9*	4*	5*	6*
Physician Consult	3*	13*	6*	6*	7*
Use of Inhaler	12*	5	13*	44*	30*
Sick Leave due to Work	2	16*	8*	5*	10*

*Statistically significant at $p=.05$. Odds ratios have been rounded to the nearest whole number.

Among Tallahassee building occupants meeting the case definition for respiratory illness, only the category for experiencing a chest illness during the past three years requiring being off work, indoors at home, or in bed, was statistically significantly increased [OR=11 (2.5-50)]. Only one in ten cases of respiratory illness in Tallahassee reported using inhaled medication or taking more than 2 days of sick leave due to work related factors.

COMMENT

All five of the building populations in the Middle District of Florida, when compared individually, are remarkably similar in personal, job demands, workstation environment, and job activity characteristics to the comparison population in Tallahassee, with the exception of the age and workstation characteristics of the Ocala group, which are more commonly older and have

uncomfortable furniture, poor lighting, fewer windows, and closer proximity to photocopy machines. Thus, except in Ocala, any differences in rates of discomfort or symptoms between a group of building occupants in the Middle District of Florida and the group occupying the Tallahassee building would not likely be due to dissimilarities of a personal, workstation, or job related nature. The Tallahassee building does not have excursions of relative humidity above 65% at any time. The five Middle District buildings have remarkably more mold and water damage than does the Tallahassee building, according to the self reported perceptions of the building occupants. Environmental data confirms the self-reported perceptions of the building occupants, except in Ocala, where the only measured parameter outside of expected indoor values was the ambient humidity, which ranged as high as 85%. And the five Middle District buildings are clearly uncomfortable for their occupants, in contrast to the building in Tallahassee. Based upon both the environmental data and the questionnaire survey, the Ocala building is the most uncomfortable building, while the Jacksonville building is the most water and mold damaged structure, though the old Fort Myers and Tampa courthouses would probably have been more mold and water damaged during the last years of occupancy therein.

Both usual and recent respiratory symptom rates are elevated in all five Middle District building groups over the rate observed in the Tallahassee group. Use of inhaled medication, other asthma medications, and steroid medications is elevated 2-5 times in the Middle District populations over that reported by Tallahassee personnel, though not reaching statistical significance. Rates of physician consultation for work related symptoms, sick leave use for work related problems, and chest illness in the past three years requiring sick leave or bed rest are also elevated in the Middle District populations over the rates reported by the Tallahassee group. Average number of total sick leave days is the same for the Tallahassee and the Middle District populations.

Sick building syndrome symptoms, examined individually, appear to be occurring more commonly among occupants of the Ft. Myers, Orlando, and Tampa buildings. The rates for sick building syndrome symptoms are lower in Ocala and Jacksonville. All of the Middle District of Florida buildings except Ocala have rates of nose and sinus symptoms that may reflect allergic rhinitis occurring secondary to indoor mold exposure. Skin problems (dry skin and itching skin, but not rash) may be occurring more often in the Tampa building than expected, though little data is available in the medical literature to explain how indoor exposures (other than to fiber glass) might lead to dermatological problems. The presence of an elevated rate of reported fatigue among Orlando, Tampa, and possibly Ft. Myers personnel may reflect the impact of building related allergic conditions on these populations.

The observation that rates of reported fever, chills, depression, tension, diarrhea, nausea, and frequent urination among Middle District occupant populations are generally not statistically elevated above the rate found in the Tallahassee group is reassuring, since it makes unlikely the possibility that Middle District personnel are simply anxious and concerned about the reports of building related problems at their workplaces and are therefore willing to report any symptom on the questionnaire. Rather, it is apparent that the survey instruments were in the main carefully and thoughtfully filled out and that the rates reported here are a true reflection of the health experience of these different groups of people.

BUILDING SPECIFIC CONCLUSIONS AND RECOMMENDATIONS

Fort Myers

The old Ft. Myers courthouse has a history of water damage and mold proliferation. Nearly one-fourth of the occupants of the new Ft. Myers building report seeing mold near their workstations. However, indoor environmental evaluation of the new Ft. Myers building by AET Environmental has not confirmed the presence of proliferating mold reservoirs in the new building. Unusual counts of fungal colonies were documented on the furniture in the new building, however. The personal, job demand, workstation environment, and job activities characteristics of the Ft. Myers

group are in every aspect similar to those of the comparison group in Tallahassee. The Ft. Myers building occupants report that the building is uncomfortable because of too little air movement and temperature control problems both hot and cold. These reports are supported by the AOUSC team findings that the air handling systems were improperly designed and are operated only during usual business hours (at least at the time of the initial survey and building evaluation.). Ft. Myers building occupants report problems with respiratory and nasal symptoms at a higher rate than would be expected. They consult physicians because of work related health problems seven times more often than expected. They report a diagnosis of adult onset asthma twice as often as do occupants of the Tallahassee building. Ft. Myers building occupants meet the case definition for sick building syndrome at a rate four times higher and the case definition for respiratory illness three times more often than the comparison population in Tallahassee. Persons within the new Ft. Myers building meeting the case definition for respiratory illness are five times more likely than those without respiratory symptoms to report more hours per day of computer use than the average. They are also three times more likely than those without respiratory symptoms to report discomfort due to temperature problems (i.e. too hot or too cold). Rates of chest illness during the past three years, inhaler use, and physician consultation are also significantly higher among persons in the Ft. Myers building meeting the respiratory illness case definition than for those in the same building without reported respiratory symptoms.

Based upon these findings, the following **conclusions** can be stated:

- 1) Mold proliferation problems in the old Ft. Myers courthouse probably led to unusual mold exposure, mold sensitivity, and allergic nose and chest disease among federal court employees in Ft. Myers.
- 2) Transfer of furniture, papers, books, files, and other courthouse furnishings from the old to the new Ft. Myers courthouses probably resulted in some quantities of unusual mold spores contaminating the new courthouse in Ft. Myers.
- 3) Persons with acquired sensitivity and allergic disease arising from exposure in the old Ft. Myers courthouse may continue to experience nasal or respiratory symptoms in the new courthouse due to mold contamination.
- 4) The air handling systems in the new Ft. Myers courthouse are improperly designed and operated.

Based upon these conclusions, the following **recommendations** can be stated:

- 1) Medical records for persons in the Ft. Myers federal courthouse with a history of nose or respiratory problems should be collected and reviewed in order to document the clinical nature of the health problems encountered by these people.
- 2) Remediation of the new Ft. Myers federal courthouse will be required to remove the antigen burden that was probably transferred from the old to the new courthouse at the time of the opening of the new courthouse. The remediation project should be under the direction of an expert in mycology and industrial hygiene who has experience with antigen burden removal remediation projects.
- 3) The air handling systems for the new Ft. Myers courthouse should be re-designed and then operated continuously, preventing excursions of humidity above 65% and uncomfortable temperatures.
- 4) Industrial hygiene experts should be engaged to definitively rule-out mold proliferation in the new Ft. Myers courthouse.

Ocala

Fewer than 90% of the Ocala building occupants actually responded to the questionnaire. Rates of symptoms and discomfort reported by this group are therefore probably higher than is actually experienced, perhaps by as much as 10%. The people who did respond to the questionnaire in Ocala are on average 7 years older than those in Tallahassee, a factor that also leads to higher reported symptom rates. Windowless rooms, lighting problems, uncomfortable desks, and

workstations close to copy machines also contribute to increased discomfort and symptom reports in Ocala. Ocala occupants report that the federal courthouse in their city is the noisiest, stuffiest, hottest, and most odor filled building in the Middle District of Florida. The building is also too breezy and cold. Humidity readings by AET Environmental were high in the building, as were temperatures. Half of the building occupants in Ocala reported seeing some water damage in the building and one-fourth reported mold near their workstations. AET Environmental did not document mold proliferation, however. Ocala questionnaire respondents did not report respiratory symptoms or chest illness at a statistically significantly higher rate. They did report the need for physician consultation four times more commonly than did the Tallahassee comparison group, but at approximately half the rate of the other occupant groups in the Middle District of Florida. The only individual symptom associated with sick building syndrome that was elevated among Ocala occupants was eyestrain. The cumulative incidence of bronchitis reported in Ocala was similar to the rate reported in the comparison population. Sick building syndrome and respiratory illness rates in Ocala were both three times greater than expected, but the rates of reporting no sick building syndrome or respiratory symptoms were highest among all Middle District Buildings in Ocala, and approached those reported in Tallahassee. The only exposure variable significantly associated with persons meeting the case definition for respiratory illness in Ocala was seeing visible mold growth near the workstation, which must be discounted due to lack of supporting environmental data. Persons meeting the case definition for respiratory disease among Ocala building occupants do not have a statistically significant increase in use of inhaled medications.

Given these findings, the following **conclusions** can be stated:

- 1) There is no evidence that persons in the Ocala building have experienced unusual mold exposure.
- 2) The Ocala building is significantly less comfortable than it should be, based upon ASHRAE standards and comparison with the Tallahassee building.
- 3) Persons who feel unwell in the Ocala building are more likely experiencing sick building syndrome than allergic disease or any other building related illness.

Given these conclusions, the following **recommendations** can be stated:

- 1) Medical records from Ocala occupants experiencing respiratory problems should be collected and reviewed, in order to determine the nature of the clinical problems encountered by the Ocala building occupants.
- 2) An industrial hygienist and an HVAC engineer should more thoroughly evaluate the Ocala building, looking for environmental problems leading to the occurrence of discomfort conditions and sick building syndrome.
- 3) Based upon the findings elicited under recommendation 2, remediation of the Ocala building should be carried out.

Orlando

Water leakage, high humidity, inadequate HVAC design and operation, visible mold, and hot temperatures characterize the findings of the environmental study of the Orlando federal courthouse. Building dust harvested for mold culture revealed fungal contamination, though not clearly a mold proliferation problem. The occupants of the Orlando courthouse as a group are similar to the occupant group in Tallahassee, including personal, job demand, workstation environment, and job activity characteristics, with some exceptions. The people working in Orlando tend to report more often having a great deal to be done at work, no windows in the work area, a copier close to their workstation, and needing to use a copy or fax machine, than those who work in the Tallahassee building. The Orlando courthouse is reported by its occupants to be significantly more stuffy, cold, humid, and moldy smelling than the Tallahassee courthouse by its occupants. The Orlando courthouse is probably also too hot and generally smelly (i.e. body odor, tobacco smoke) than is comfortable. More than half of the Orlando building occupants report

water damage and one-third report the presence of mold near their workstations. Orlando building occupants do not report usual respiratory symptoms at a statistically higher rate than do Tallahassee building occupants, but they do report cough and sputum production at work during the past four weeks more often than expected. A history of chest illness requiring rest away from work is more common among Orlando building occupants, as is consultation with a physician due to work related factors, than would be expected. Symptoms related to sick building syndrome are generally reported more often by Orlando building occupants than would be expected, in all five categories. Orlando building occupants also reported fatigue more often than expected. However, the symptom of frequent urination, clearly not a building related problem, was also statistically significantly more often reported by Orlando building occupants, suggesting that some problems may be overstated by the epidemiological data. An alternative explanation for the higher reported rate of frequent urination at work is that a significant fraction of the occupants of the Orlando courthouse have jobs requiring them to stay at their work stations for the entire day, except for limited periods of time for designated breaks. The rate of sick building syndrome was elevated five fold and the rate of respiratory illness was elevated three fold in the Orlando occupant group over that found in the Tallahassee group. Exposure factors related to meeting the case definition for respiratory illness in the Orlando building were generally weak associations and were for ever smoking, visible mold growth near the work station, temperature too hot or cold, and stuffiness. Cases of respiratory illness in the Orlando building were more likely to seek physician consultation, report a chest illness during the past three years, use inhalers, or sick leave, than were persons with no respiratory symptoms.

Based upon these findings, the following **conclusions** can be stated:

- 1) Several environmental conditions that are unacceptable exist in the Orlando federal courthouse, including water damage, humidity, odors, and possibly mold proliferation.
- 2) Some of the people occupying the Orlando courthouse have job requirements substantially different from those experienced by employees of the federal courts, such as those employed by the Social Security Administration. The group of people with different job requirements may report symptoms on a questionnaire differently, perhaps because of the unusual job characteristics they experience, such as always having more work to accomplish than is possible (leading perhaps to finding themselves less able to schedule rest breaks as often as would be desirable). These differences may account for some of the increased symptom rates reported by the Orlando building occupant group.
- 3) Sick building syndrome does occur more often than expected in the Orlando building occupant group.
- 4) Respiratory illness is also reported more often than expected, but may be due to factors not related to the building, such as cigarette smoking. The association with cigarette smoking is supported by the finding that cough and sputum production are the only respiratory symptoms reported at a statistically higher rate in the Orlando occupant group. It is not clear that building related allergic respiratory disease has occurred in the Orlando federal courthouse.

Based upon these conclusions, the following **recommendations** can be stated:

- 1) HVAC redesign and operating protocol changes are necessary for the comfort of the occupants of the Orlando federal courthouse. Features requiring expert attention include the location of the air intakes, continuous operation, the cleanliness of the ductwork and air handler interiors, humidity control, water leakage or condensation, and temperature control.
- 2) The AOUSC or other responsible federal agency should engage the services of an expert in mycology and industrial hygiene with experience in evaluation of water damaged buildings and the development of protocols for remediation of water damage and mold contamination. This expert should be asked to render a definitive opinion concerning the presence of proliferating mold reservoirs in the Orlando federal courthouse and develop protocols for the remediation of existing mold damage and contamination in the building.

- 3) A building envelope expert should be engaged to discover and propose remedies for the roof leakage evidently occurring in the building. A plumbing expert may also be required to investigate plumbing sources for the water leakage. The courts must assure that water incursion into the building is completely stopped.
- 4) Medical records from persons with respiratory disease should be collected and reviewed. This review will make possible a definitive finding concerning whether building related illnesses such as allergic chest disease have occurred in the Orlando federal courthouse. Orlando building occupants reporting respiratory disease but having no adequate medical records for review should be referred to a pulmonary medicine specialist with experience in the diagnosis of building related allergic chest disease for definitive clinical study.

Tampa

The General Services Administration has declared the Classic Courthouse in Tampa, which was still occupied at the time of the epidemiological survey, unfit for occupancy. It is a water damaged and moldy building. Ten of its 15 occupants in February 2001 have reported nose and sinus disease. One person who worked in the Classic Courthouse until December 2000 is known to have received a diagnosis of probable building related asthma subsequently. Many of the occupants of the Sam Gibbons Federal Courthouse (the new Tampa courthouse) worked in the Classic Courthouse before moving to their present quarters, bringing with them the furnishings, furniture, papers, books, and files that are necessary to federal court work. Thus, it is likely that residual mold contamination, originating in the Classic Courthouse, survives on surfaces in the new Tampa courthouse. In addition, the new Tampa courthouse has a history of water leakage and flooding. AET Environmental has reported finding mold in wall cavities under windows in the new Tampa courthouse, and dust cultures have revealed moderate fungal growth from sampling of the air handling system and the interior wall surfaces in the building. There are also indoor air problems caused by the discharge of diesel exhaust near the air intakes for the new Tampa courthouse. Tampa building occupants, who are in all respects similar to Tallahassee building occupants, report with statistically greater frequency that their building has had water damage and visible mold growth. Half of the new Tampa courthouse occupants report that their building is cold. Also reported at a statistically higher rate in the new Tampa building are too much air movement, moldy odors, and chemical odors. The building is probably also too stuffy and hot for some occupants. Tampa building occupants report mucus production, shortness of breath, and cough at higher rates than expected. They are nearly twice as likely to have remained at home or away from work with a chest illness during the past three years than occupants of the Tallahassee building, and they more commonly consult a physician about illness related to factors at work. Tampa building occupants also report all categories of symptoms related to sick building syndrome at a higher rate than expected, particularly symptoms related to nasal problems. Unlike any other building, occupants of the new Tampa courthouse report statistically elevated rates of dry skin and itching skin (though not unusual rates of rash). The rate of reported adult onset asthma is three times higher in Tampa than Tallahassee, and the rate of reported cumulative incidence of bronchitis in Tampa is nearly twice that of Tallahassee. Sick building syndrome occurs five fold more often in Tampa, and respiratory illness three fold more often, than in Tallahassee. By case control study, environmental factors associated with respiratory illness in the new Tampa courthouse are ever having water damage near the workstation, moldy odors, every working in the Classic Courthouse, and temperature too cold. These factors suggest a relationship between mold exposures and meeting the respiratory case definition in the new Tampa courthouse occupant group. Cases of respiratory illness in the Tampa courthouse are 44 times more likely to use inhaled medication than persons in the same building not reporting any respiratory symptom.

Based upon these findings, the following **conclusions** can be stated:

- 1) Moldy building related respiratory disease (nose, sinus, and asthma) has probably occurred among the people who currently occupy the new Tampa courthouse. Some (perhaps all) of this disease originated in the Classic Courthouse, where conditions were

clearly unacceptable due to water and mold damage, among other problems. However, mold reservoirs beyond the residual spores moved into the building with the furniture and files from the Classic Courthouse may exist in the Sam Gibbons building due to flooding problems and perhaps window leakage. Persons with allergic respiratory disease originating in either building will continue to have problems as long as fungal spores remain in the building from either water damaged source.

- 2) Sick building syndrome is occurring in the Sam Gibbons building, as well, probably caused by both exposure to mold and diesel exhaust.
- 3) Air handling system problems have been documented in the new Tampa courthouse, including poor temperature control, inadequate operating procedures, poor design (placement of air intakes), and perhaps dusty interior ductwork.

Based upon these conclusions, the following **recommendations** can be stated:

- 1) Medical records from persons in the new Tampa courthouse with respiratory problems should be collected and reviewed. Persons with these symptoms but without previous clinical workup for these problems should be referred to a pulmonary medicine specialist with expertise and experience in the diagnosis of building related allergic respiratory disease. Medical record review will make possible a confirmation of the presence of building related allergic disease in this population.
- 2) The services of an expert in mycology and industrial hygiene with experience in characterizing fungal burdens in buildings and remediation of buildings for antigen burden removal should be engaged. This expert should provide a definitive assessment of the fungal problems in the Sam Gibbons courthouse, and specify the methods for cleaning the building and its contents.
- 3) If actively proliferating mold reservoirs are confirmed in the Sam Gibbons courthouse, the courts should consider temporarily removing all persons with a history of possible building related allergic chest disease from the building.
- 4) Medical surveillance of the entire building population will be required during the timeframe necessary for complete remediation.
- 5) HVAC design and operation should be altered to prevent intake of diesel exhaust, prevent temperature discomfort, and provide sufficient quantities of outdoor air. Constant operation of the HVAC system is required.

Jacksonville

The Jacksonville federal courthouse is the oldest of the currently occupied buildings in the Middle District of Florida and is the most obviously water damaged and moldy structure. Environmental data presented by AET Environmental confirm that the building is hot, humid, and contains actively proliferating mold reservoirs that are degrading the air in parts of the building. The air handling system is not continuously operated, and mold is visible throughout the building. Mold contamination is likely on all furniture, paper products, books, and files in the building. The new Jacksonville federal courthouse, under construction across the street, will itself be contaminated if these furnishings are moved into the building without proper cleaning. Jacksonville courthouse occupants, as a group, share remarkable similarities of personal, job demand, workstation environment, and job activity characteristics with the comparison group in Tallahassee. The Jacksonville building, however, is perceived significantly more often to be stuffy, hot, cold, humid, dry, and smelly (including moldy smelling) than the building in Tallahassee. And the Jacksonville building is reported by its occupants to be the most water and mold damaged structure in the Middle District of Florida, an observation confirmed by the available environmental data. Jacksonville building occupants more commonly report usually suffering shortness of breath, and they more often stay away from work with a chest illness, and seek physician care for problems related to work. Jacksonville building occupants have a three-fold increase in sick building syndrome and respiratory illness over the occupants of the Tallahassee building. By case control study design, environmental factors associated with being a case of respiratory illness in

Jacksonville are greater than average hourly use of computer each day, water damage in the work area in the past three months, visible mold growth in the work area, too little air movement, moldy odors, and ever working in the Tampa Classic Courthouse. Persons meeting the case definition for respiratory illness in the Jacksonville building are 30 times more likely than persons not reporting respiratory symptoms to use inhaled medication and 10 time more likely to report sick leave use due to work related problems.

Due to these findings, the following conclusions can be stated:

- 1) Unusual mold exposure is occurring among persons employed in the Jacksonville federal courthouse.
- 2) Building related allergic respiratory disease is probably occurring among occupants of the Jacksonville federal courthouse.
- 3) The new Jacksonville federal courthouse will be contaminated by mold if the furnishings, files, books, and other items currently in the old Jacksonville courthouse are move to the new building without mold antigen burden cleaning.
- 4) Air handling system design and operation are inadequate in the old Jacksonville courthouse.

Based upon these conclusions, the following recommendations can be stated:

- 1) Medical records from persons in the Jacksonville courthouse should be collected and reviewed. The review will assist in the confirmation of the finding of excess cases of allergic respiratory disease in this population.
- 2) The AOUSC should engage the services of an expert in mycology and industrial hygiene with experience in devising protocols for antigen burden removal and identifying and remediating mold reservoirs in buildings. The expert should be engaged to plan for the cleaning or replacement of furnishings before the courts move into the new federal courthouse in Jacksonville. In addition, control of the interior environment of the old courthouse must be established during the interim before the move occurs.
- 3) The courts should consider moving all persons with possible building related allergic chest disease out of the old Jacksonville courthouse during the interim before the move to the new building occurs.
- 4) The expert in mycology and industrial hygiene recommended in item #2 should also be engaged to visually inspect the new Jacksonville courthouse, currently under construction, in order to document that all necessary precautions are being taken to prevent proliferation of mold on building materials during the construction process.
- 5) An HVAC expert should be engaged to make recommendations concerning the proper function of the air handling system in the current Jacksonville courthouse, including provision of adequate outdoor air, 24 hour operation, and building pressurization to prevent infiltration of moisture.

NO

NO

NO

TABLE OF CONTENTS

INTRODUCTION

EXECUTIVE SUMMARY

METHODOLOGY

RESULTS AND RECOMMENDATIONS

INTRODUCTION

AET Environmental, Inc. (AET) was retained by Vitetta Group to conduct a microbiological assessment at the following five (5) United States Courthouses within the Middle District of Florida.

**Samuel M. Gibbons Federal Courthouse
Tampa, Florida**

**George C. Young United States Courthouse and Federal Building
Orlando, Florida**

**United States Courthouse
Jacksonville, Florida**

**United States Courthouse and Federal Building
Fort Myers, Florida**

**Golden-Collum Memorial Federal Building & United States Courthouse
Ocala, Florida**

This is an expanded study performed as a follow-up to the initial discovery visit to each location conducted in December of 2000. Data from the discovery visits will be referred to in this report since it is valid and complimentary to this ongoing study.

This study was prefaced by concerns that occupants might experience stressors caused by microbiological amplification. Microbial sampling was completed for endotoxins in air, endotoxins in dust, viable fungi in air and fungi in dust. Readings for temperature and relative humidity were also collected because of their impact on microbial growth.

Other environmental stressors and the human health effects of this microbiological assessment will be addressed in the medical profile section of this report.

Please observe that no follow up evaluations of the classic Courthouse in Tampa and the former Courthouse in Ft. Myers have been done under this task order. It is our understanding that the General Services Administration (GSA) has conducted a study on the classic Courthouse in Tampa and has found that significant contamination does exist in the building. It is our opinion and observation that significant contamination also exists in the former Courthouse in Ft. Myers.

EXECUTIVE SUMMARY

Generally, we have found that there has been water flooding, releases, incursions and water damage in all buildings within the District. Some problems are recent. In general, the five (5) Courthouses in the Middle District of Florida can be considered to be located in a sub-tropical climate zone. Ft. Myers is bordering on a tropical climate zone. The opportunity for microbiological contamination is more pronounced in sub-tropical and tropical climates. This fact in its self requires a more vigorous attention to the possibilities of microbiological contamination both in existing buildings and in new construction.

Some form of microbiological concern has been found in all five (5) Courthouses in the District. Our findings range from a very scattered, isolated and manageable problem in some buildings to the possibility of a consistent and extensive microbiological contamination in at least one (1) building. We have found that these issues have been ongoing. The most important guard against microbiological infestations and the most important remedial action to any microbiological contamination is to seal the building envelope from water entry and to keep building systems in a state of repair that will greatly limit the possibility of water release from those systems.

AET feels strongly that these principles must be applied to new construction **now** so that these same problems can be avoided in the future. This applies to the design phase as well as the construction phase. We are not aware of a particular effort to address these issues in either the design phase or construction phase in the Middle District of Florida or throughout the Federal Court System.

We have found that on-site operations and maintenance personnel are not properly trained in the hazards of microbial contamination, ways to prevent infestation, or in some cases, they are not aware that there is a potential hazard at all. Building management and maintenance is fast becoming synonymous with environmental management and maintenance. This requires personnel who cannot only recognize a physical problem with building systems or components, but who can anticipate how that problem may impact on the health and safety of all occupants and visitors to the facility. Training is essential to understand the risks of microbiological contamination predominantly from an occupant health and safety standpoint, but also in view of risk management.

Another general observation was that there was a furniture traffic at/among the buildings in the Middle District of Florida and even from outside the District. Furniture, imported from another Courthouse, was placed into service and never cleaned. We strongly suggest that a program be developed where some type of control or monitoring effort with a cleaning protocol be developed to protect against the introduction of a potential contamination from another courthouse.

We observed that housekeeping practices and effectiveness varied from building to building. Again, the need for training and awareness for workers responsible for daily housekeeping in the building is apparent. A simple everyday task of vacuum cleaning with a commercial bag type vacuum cleaner can take viable spores in a contaminated area and spread them airborne throughout the area and possibly into the duct system. On the other hand, lack of effective cleaning can lead to amplification of existing mold or fungi infestations. Some areas were observed which apparently are not cleaned at all. These are not mechanical areas but areas used by the Courts.

Only one (1) of the five (5) Courthouses in the District operates the climate control system on a 24 hour a day, seven (7) day a week (24/7) basis. AET cannot emphasize enough the importance of this factor in the control of microbiological amplification in buildings in a semi-tropical or tropical climate. In discussions with on-site building personnel, we have been told that the cost of the 24/7 delivery of temperature and humidity control is prohibited. In actuality, the cost of remedial action to microbiological infestations, employee health and safety, risk management and design and installation of new building components and accessories far outweighs the cost of a percentage increase in cost to run the system on a 24/7 basis.

It was our observation that papers and files from old Courthouses were contaminated with obvious molds. It is our opinion that none essential files and papers be disposed of after a specific length of time. Essential files that can be copied should be copied under controlled conditions. An environmental contractor should do this professionally since exposures can be realized during the process. In the case of court documents where the originals that are contaminated must be retained, a professional document conservator should be retained to professionally decontaminate the papers or files and to recommend adequate storage safeguards.

It is understood that all findings and recommendations are based on conditions that existed at the time of inspection. The degree of suitable air quality is dependent on varying factors including temperatures, humidity, outside air quality, mechanical conditions of equipment, air heating and cooling, maintenance procedures, etc. It is understood that changes in these factors can be present a very different scenario.

METHODOLOGY

A. Endotoxins in Air

Airborne endotoxin sampling is accomplished by drawing a known quantity of air through a 3-piece, 37mm closed-faced cassette with a 0.45 μm pore-size filter. Air volume was maintained at 4 liters for a known period of time to obtain the minimum of 240L required for analysis. The sample is labeled and a chain of custody (COC) is generated. The sample is then sent to P&K Microbiology Services, Inc. (P&K) located at 7 Allison Drive, Cherry Hill, New Jersey 08003, to be analyzed using the Kinetic Chromogenic Method. A blank is sent with sample for quality assurance. Results were recorded in endotoxin unit per cubic meter of air (EU/m^3).

B. Endotoxins in Dust

Using clean masking tape a 4 in^2 is marked. A 37mm, 3-piece filter is connected to high volume pump. The top cover of the cassette is removed; the opening is placed within the marked area. The area is then vacuumed with the open-faced cassette horizontally, vertically, and diagonally. Vacuuming is conducted for at least five (5) minutes or longer so that a sufficient amount of dust is obtained for analysis, preferably 0.1g or more. Samples are labeled, blanks are added and a chain of custody is completed prior to shipping to the laboratory for analysis. P&K analyzes the samples using the Kinetic Chromogenic Method. Results were recorded in endotoxin unit per gram (EU/g).

C. Fungal Swab/Vacuum Sample

Two (2) sample methods were utilized to obtain surface fungal quantities.

Fungal vacuum sampling follows the same protocol as the endotoxin in dust method. However, a fungal analysis does not use the Kinetic Chromogenic Method and results are given in colony forming units per gram of dust (CFU/g).

Fungal swab samples were collected by utilizing a Culturette Swab Kit supplied by P&K Microbiology Services, Inc.

The Culturette Swab Kit is a sterile, disposable culture collection and transport system. It contains one (1) rayon-tipped swab and one (1) ampule of 0.5 ml modified Stuart's transport media. The wax paper packaging is opened. The swab is removed by holding the plastic covering. The tip of the swab is then wiped across a pre-measured surface. The swab is then returned to the culturette and closed tightly. The ampule is then broken to activate the media for transport. The sample is labeled, chain-of-custody generated and sent to P&K for analysis. Results are recorded in colony forming units per square inch (CFU/in^2).

D. Fungal Air Sampling

An Anderson N6 single stage impactor was utilized as a viable particle sampler for airborne fungi in the following manner.

1. The sampler was disinfected with 70% rubbing alcohol. It was allowed to dry before loading the agar collection plate.
2. A nutrient media in a agar collection plate is loaded into the sampler. The media used was 2% malt extract agar (MEA) and was supplied by P&K.
3. A known quantity of air is drawn over the media for one (1) to eight (8) minutes.
4. The agar plate is removed and covered. It is then labeled and sealed with 3/4" masking tape.
5. The agar plates are placed in paper bags. The chain-of-custody sheet is completed and is sent along with the media to P&K for culture and subsequent analysis.

Results are reported in Colony Forming Units per cubic meter of air (CFU/m³).

E. Temperature and Humidity Testing

Temperature and Humidity readings were taken in the area under assessment utilizing a thermohydrometer to assess comfort conditions. Temperature and Humidity readings were also taken on the exterior of the building for comparative study.

F. Moisture Detection

Moisture detection was accomplished by utilizing a Tramex Moisture Encounter Non-destructive Moisture Detector. The detector was calibrated to account for substrate material and placed flush against the test surface. The results were interpreted in accordance with the manufacturers product specifications.

G. Ambient Asbestos Air Sampling

A high flow pump is used to pull a known quantity of air over a Transmission Electron Microscopy (TEM) cassette for a documented period of time. The pump is calibrated before and after sampling with a rotometer. The cassette is left open-faced during sampling. The sample is labeled and a chain of custody (COC) is generated. One (1) field blank and one (1) closed blank is sent with the samples to International Asbestos Testing Laboratories (I.A.T.L.) located at 16000 Horizon Way, Unit 100, Mount Laurel, New Jersey, 08054 for analysis. Results are recorded in fibers of asbestos per cubic centimeter of air (0.01 f/cc).

H. Observation

Inspect and survey the site for evidence of sources of indoor air quality contamination (i.e.: exposed chemicals, mold accumulations, etc.) and evaluate general housekeeping and maintenance practices.

RESULTS AND RECOMMENDATIONS

Samuel M. Gibbons Federal Courthouse Tampa, Florida

Endotoxin in Air

Endotoxin is produced by Gram-negative bacteria during growth, division, death or lyses. Therefore, where there are gram-negative bacteria, there is endotoxin. Gram-negative bacteria is commonly found in water and water damaged materials. Airborne endotoxin sampling gives us a snapshot in time as to the levels of endotoxins during the time period of the sampling cycle.

It is our experience that it is unusual that airborne endotoxin levels exceed 1 endotoxin unit per cubic meter of air (EU/m³) unless there is a related problem leading to the amplification of gram-negative bacteria. Currently, this is a guide and has not been correlated with any IAQ symptom or illness.

An exterior sample was taken at the site with a result of 0.17 EU/m³. About 24% of the samples on the interior of the building were below the exterior sample. About 66% of the samples were above the exterior sample. About 10% of the samples were above 1 EU/m³. The highest sample recorded was 2.90 EU/m³ in the southwest corner of the library. The mechanical room, which houses AHU 16-A, had a reading of 1.90 EU/m³. This mechanical room had various leaks in the equipment and had substantial standing water on the floor. Another sample reached a level of 1.70 EU/m³ which was in the dock area.

Endotoxin in Dust

Endotoxin in dust samples are taken to determine endotoxin levels in surface particulate. Endotoxin in dust gives us a look at the potential of endotoxin entering the air as a result of vacuuming with standard equipment or through common activities such as air movement caused by people movement or other changes in air movement.

It is difficult to fully evaluate the relationship between environmental dust which contains endotoxin and the potential for release into airborne endotoxin, however it is generally believed that endotoxin levels in dust in the range of 50,000 EU/gram of dust and 75,000 EU/g of dust are background levels for buildings in a semi-tropical climate. Based on that level, 91% of the samples were below the 75,000 EU/g level. The only sample to rise above that level was in the new Clerk of the Courts office on the 16th floor which was still under construction at the time of sampling. In this area, there is documented water incursion through the windows prior to construction. Since the area was under construction, it is difficult to evaluate if the increased levels were from building related problems or a result of construction activity.

Fungal Swab/Vacuum Samples

Acceptable levels of fungal matter in dust have not been established. However, the University of Minnesota, Department of Environmental Safety and Health suggests the following in interpreting data from duct insulation:

Colony forming units/gram of dust	
Less than 10,000	low
10,000 to 100,000	medium
100,000 to 1,000,000	medium to heavy
>1,000,000	heavy

We consider these numbers as a general rule of thumb. However, it is our opinion that these guidelines may not be relative to all buildings in all parts of the country. It is also our opinion that not only should the total fungal level be considered when interpreting data but also the levels of identified mycotoxin procedures (e.i.: sp: *Aspergillus*, sp: *Alternaria*, sp: *Penicillium*).

A predominance of the fungal wipe and vacuum samples were taken from the ventilation systems within the building. The air handling systems that carry air to the workspace were generally dusty. Sampling in air supplies to the work areas or occupied spaces were in the 60,000 colony forming units per inch squared (CFU/in²) to over 300,000 CFU/in². A combined predominance of sp: *Auerobasidium* and sp: *Acremonium* in all samples are concern. Both are known allergens. With the combination of species observed in the samples in the ductwork, and total populations, it would be our recommendation that all duct systems in the United States Courthouse in Tampa be cleaned under an environmental protocol.

Another concern observed in the ambient growth of 36,400 CFU/in² on a wall above a doorway in the 17th floor Judge's office and chambers and of 69,700 CFU in² from a horizontal pipe off of AHU 16-A on the 16th floor. Ambient levels of dust with microbial activity tend to support the theory that the ductwork is contaminated to the extent that duct cleaning under environmental protocol is warranted.

Fungal Air Samples

Again there are no "official standards or guidelines" for fungal bioaerosols. It has been our experience that 200 ± 50 CFU/m³ of fungal bioaerosol is acceptable provided no opportunistic fungi are identified. The same range is also proposed and used by the U.S. Public Health Service, Federal Employee Occupation Service Region III. A similar range proposed by Canada suggested that microbial concentrations of 50 CFU/m³ (single species), 150 CFU/m³ (mixture), or 500 CFU/m³ (common fungi such as *Cladosporium*) are acceptable. There are other numbers called background numbers or guidelines used by such organizations as ACGIH & OSHA and by private consultants. But the numbers are mostly arbitrary. As you are aware, some people are more sensitive than others, and allergenicity of each fungi could also be very different.

Justification for the proposed range:

1. Normal human respiration rate is 6 L/min. Individuals are expected to inhale at

least 1.0 CFU/min if the concentrations of airborne culturable microbial particles are within the 0.10-0.25 CFU/L. The ACGIH's standard of 1,000 CFU/m³ (or 1 CFU/L) means that individuals may inhale 6 CFU/min of culturable microbial particles (fungi and bacteria). There are additional airborne microbial particles either non-viable or non-culturable.

2. In our experience, it is very infrequent to have airborne microbial concentrations over 0.25 CFU/L in an office environment. More than 85% of air samples examined in office buildings were within or below the recommended range.
3. Because there are other indoor pollutants that may affect human response and may react synergistically with microbiological particles, we feel that a lower acceptable range is a cautious approach.
4. Most airborne microbial particles are either from localized sources (such as crowded places, heavy human activity, HVAC systems, etc.) or from outdoor air. These concentrations can be reduced by (1) proper hygiene maintenance program, (2) reduced human density in the office, and (3) proper maintenance of the air handling units, such as upgrading the filter efficiency to 50% or higher. The 0.10-0.25 CFU/L range is easily achievable.

Exterior air sampling ranged from a low of 36 CFU/m³ to a high of 6214 CFU/m³ over the course of the sampling. Air sample results in the building were considered low. However, *sp*: *Aspergillus* was detected inside the building in heavier concentrations and more species than the exterior samples. *Aspergillus* is generally associated with water damage, however the interior levels are considered inconclusive.

Air samples that may be considered elevated were dominated by *Cladosporium* which is a common fungal tenant in air. Our recommendation is to increase filter efficiency after duct cleaning has been accomplished.

Temperature and Humidity

Temperature and humidity readings were taken throughout the testing process. Exterior temperatures ranged from 82 degrees F to 87 degrees F throughout the process. Exterior humidity ranged from 85% to 100% RH during the process.

Interior temperatures throughout the building on a consistent basis ranged from 71 degrees F to 76 degrees F. Relative humidity in the building ranged from 59% RH to 65% RH during our visit. The predominant or norm RH was in the 62% range. It would be a goal to attain a consistent 50% RH in the building to help avoid microbial problems. It is difficult to attain 50% RH indoors in this climate zone, but not impossible.

Moisture Detection

The moisture detection was used to test 178 test points throughout the building. Since the detector is sensitive to metal, test points with the possibility of metal behind the walls were ignored.

No positive identifications for moisture behind the walls were recorded. This in no way prohibits the assumption that there may be moisture or fungal amplification behind walls. It is our opinion that there is no obvious moisture behind walls in specific test points. Please note that water and molds have been observed behind walls near window bottoms. Since the window bottoms have metal bottom plates, testing under windows could not be accomplished with this instrument.

We do recommend that a boroscope be utilized to investigate exterior wall vacancies to determine if molds exist in specific areas. This requires a destruction intrusion into the wall on a limited basis.

Observations

It is our observation that the Federal Courthouse in Tampa, Florida can improve indoor air quality for the occupants of the building.

It is our understanding that molds have been observed in the wall channels during construction on the 16th Floor (new District Clerks Office). We understand that testing was done by the GSA, however, we have requested results but have not received a response. It would be our recommendation to request results from the GSA as to levels of mold detected and speciation of same.

It is our understanding that there have been other window problems in the building as it relates to water entering the building. Any information documenting such incursions would be helpful in completing an analysis of the building.

A release of diesel fume from the federal building was observed entering the fresh air intakes of the building. This was probably a test of the emergency backup system. Several occupants of the 2nd floor Clerk's office had to leave the building. Such testing should be done at night or vented to the roof of the building. This is also the side of the building where the buses idle just below the fresh air intakes.

It is our opinion that quantities of diesel fume are entering the fresh air system of the building on a daily basis. Higher efficiency filters or pre-filters should be utilized in the building to restrict gases and particulates entering the fresh air system.

Recommendations

- A. It is our recommendation the professional environmental duct cleaning be completed throughout the air delivery system of the building. This requires environmental specifications for cleaning and post testing of the work.
- B. It is recommended that a boroscope be used to observe conditions inside the walls in specific areas.
- C. We recommend that training in the hazards of microbiological contamination, the control of water incursions into the building and their environmental effects on the building and health effects of microbial disease, be mandatory for all maintenance and operations personnel assigned to the site.
- D. We recommend awareness training for housekeeping employees and a standardized method of cleaning areas in an environmentally prudent system.
- E. We promote the appointment of an Indoor Air Quality Manager who can log complaints, document events and monitor the response of the building managers. This IAQ Manager should be trained as the maintenance and operations staff so they have a full comprehension of the problem and remedies. An official chronology of events and complaints is essential documentation to the identification and abatement of indoor air quality problems. The manager should be a building occupant and accept this duty as an extra responsibility and not a full time position. Our experience has found that employees in the community residence of the building are the most effective in logging activity.
- F. Increase efficiency of filters in the ventilation system. This may require specialized filters to trap gases commonly found in diesel fume.
- G. Adjust the system to achieve and maintain a 50% Relative Humidity in the building.
- H. Maintain a consistent 24/7 operation of the ventilation and air conditioning system. The IAQ Manager should have access to logs of operation of the system.

**George C. Young US Courthouse and Federal Building
Orlando, Florida**

Endotoxin in Air

Two (2) exterior samples were taken for endotoxin outside the Orlando Federal Courthouse. Both samples were consistent with one recording 0.89 EU/m³ and the other registering 0.91 EU/m³. Samples were taken on different days.

Samples registering lower than the outside control samples were 73% of the samples. 27% of the samples were above the outside control and above the 1 EU/m³ guideline.

Two (2) samples that were above or equal to the 1 EU/m³ were observed on the 3rd Floor. The other sample was at the entrance to the building that could account for higher readings.

The facts that two (2) of the readings on the 3rd floor were 1 EU/m³ or greater does not, in our opinion, constitute a reason for concern at this time. The medical evaluation should advise as to whether further investigation is warranted.

Endotoxin in Dust

Using the 75,000 EU/g threshold, 31% of the samples were above the commonly found limit. 69% of the samples were below the value. Some were significantly below the value. The elevated samples were in the 120,000 to 160,000 EU/g level. The interesting fact is that both samples were taken on the 3rd floor. One (1) other sample registered 1,700,000 EU/g of dust. That is significant and warrants microbiological remedial action.

The 1,700,000 EU/g sample was collected from the 6th Floor Judge's Chambers on the Southeast side. Obvious and continuous water seepage from the roof or building system was observed with buckets collecting the drip. Again, the only remedial activity prior to sealing the building envelope against water intrusions is evacuation from areas of concern. It is our opinion that that office space should be evacuated until such time as the area is free of water release and a clean up plan has been completed.

Fungal Swab/Vacuum Samples

Fungal swab samples on the inside of Air Handling Unit #10 revealed 996,300 CFU/in². 20,500 CFU/in² was analyzed as *Aspergillus Ustus*. 12,300 CFU/in² of *Fusarium* were observed in the sample. *Penicillium* which is often associated with water damaged materials was analyzed at 299,300 CFU/in². This is unacceptable.

In Air Handling Unit #5, *Stachybotrys Chartum*, 200,900 CFU/in². *Aspergillus Sydowii*, 12,300 CFU/in². *Aspergillus Versicolor*, 69,700 CFU/in². *Penicillium*, 45,100 CFU/in². Total populations, 373,100 CFU/in². This is unacceptable.

Social Security under perimeter vent, *Aspergillus Niger*, 44,444 CFU/g. *Penicillium*, 1,013,333 CFU/g. Total population: 1,102,222 CFU/g of dust.

Judge's Chamber, 6th Floor, Southwest Corner of building. *Alternaria Alternata*, 512,500 CFU/g, *Penicillium*, 205,000 CFU/g. Total 1,845,000 CFU/g of dust.

Judge's chamber, 6th Floor, Under refrigerator. *Aspergillus ustus*, 29,676,190 CFU/g. *Penicillium*, 20,304,760 CFU/g. **Total, 78,876,198 CFU/gram of dust.**

Judge's chambers, 5th Floor, Ceiling under toilet leak. *Aspergillus Ustus*, 2,733,334 CFU/g. *Penicillium*, 1,202,667 CFU/g. Total 4,920,000 CFU/g.

It is our opinion that the building may be contaminated with microbiological organisms.

For now, it is evident that the air handling system and ductwork must be cleaned or replaced immediately. Interior walls must be evaluated through destructive testing or boroscope to determine the extent of contamination in the walls. Carpeting should be removed throughout the building and tile or other non-hydroscopic material should be installed.

Specifications for microbiological contamination abatement should be considered now.

Fungi in Air

In general, air samples throughout the building were less than outside samples and were of similar species.

Results for air samples are considered low. *Cladosporium* was the dominant isolation in most samples. There are also isolations for sp:*Aspergillus*, sp:*Penicillium*, sp:*Alternaria* and other suspected allergenic and pathogenic species. They were found in roughly the same percentages as the outdoor samples.

The fungal air samples should be considered as a baseline for the building understanding that air sampling is a snapshot in time and airborne fungi can erupt quite suddenly when sporulation occurs.

Again, the medical data will make the determination as to how this should proceed.

Temperature and Humidity

Temperature and humidity readings were taken throughout the testing process. Exterior temperatures ranged from 82 degrees F to 87 degrees F throughout the process. Exterior humidity ranged from 85% to 100% RH during the process.

Interior temperatures throughout the building on a consistent basis ranged from 72 degrees F to 82degrees F. Relative humidity in the building ranged from 65% RH to 74%RH during our visit. The predominant or norm RH was in the 70% range.

This building is not on a 24/7 ventilation/air-conditioning cycle. It is highly recommended that this building go on a 24/7 cycle immediately. Currently the building's ventilation system is shut down at 5:00 or 6:00 PM and remains off until 5:00 AM. The ventilation system remains off over weekends and holidays. There are some local air conditioning units in some Judge's chambers for night or weekend work.

The swings in temperature and humidity under this system provide an opportunity for sporulation and growth for fungal matter. Since most of the work areas are carpeted and therefore hydroscopic, the increase in humidity provides the moisture nutrient necessary for amplification. It is our understanding that some carpet has been installed using fungal retardant glue and the carpet is treated. In one Judge's office where this was done, we found that visible

colonies of fungi in or around the carpet along the untreated carpet tape. Upon testing the area, we found high fungal and bacterial levels. It is not our recommendation that procedure be used in this particular building.

Moisture Detection

The moisture detector was used to test 68 test points throughout the building. Since the detector is sensitive to metal, test points with the possibility of metal behind the walls were ignored.

No positive identifications for moisture behind the walls were recorded. This in no way prohibits the assumption that there may be moisture or fungal amplification behind walls. It is our opinion that there is no obvious moisture behind walls at specific test points. Please note that water and molds have been observed behind walls near window bottoms. Since the window bottoms have metal bottom plates, testing under windows could not be accomplished with this instrument.

We do recommend that a boroscope be utilized to investigate exterior wall vacancies to determine if molds exist in specific areas. This requires a destructive intrusion into the wall on a limited basis.

The exterior walls and interior areas with known water release events would be prime areas for boroscopic observation.

Ambient Asbestos Air Samples

Asbestos containing material (ACM) has been identified and documented in the Building Asbestos Survey Management Plan and in re-inspection reports on file in the building's GSA office. AET was requested to conduct ambient asbestos air samples throughout the building to detect possible occupant exposure to asbestos fibers.

Five (5) Transmission Electron Microscopy (TEM) samples were collected from each floor of the building including the basement. Thirty-four (34) samples did not detect any airborne asbestos fibers. One (1) sample obtained from the 1st floor west corridor, was reported to have trace amounts of chrysotile. However, this sample was well within the clearance standard of 0.01 fibers per cubic centimeter of air (<0.01 f/cc) and is not detrimental to the occupants.

Observations

It is our observation that there is an abundance of biological and microbiological activity in this courthouse. The 6th floor Judge's chambers have a problem with moths and insects swarms certain times of the year.

We observed a Law Clerk's temporary office with buckets to catch the water dripping down from a light fixture.

We observed visible molds on carpets and the unlining carpet tape.

We have heard witness accounts of numerous water flooding events.

Housekeeping in some areas of the building is virtually non-existent.

We have observed fungi growing around windows and behind vinyl wallpaper.

We have observed particulate spewing out of ventilation diffusers and accumulating on desks and other horizontal surfaces and carpet. The particulate seems to be consistent throughout the ventilation system. We obtained a sample of the particulate and had the laboratory provide a dust characterization. The sample was predominantly carbonaceous in character that may indicate buildup of carbon from auto exhaust fume over the years from the adjacent highway. This appears to be a filtration problem and certainly an upgrade in the efficiency of filters is warranted. No testing was accomplished for carbon monoxide or other byproducts of combustion in the building.

The fresh air intakes appear to be below grade in a grated area that has a buildup of leaves and other organic matter.

Recommendations

- A. Conduct a boroscopic examination on interior walls in locations of known water release events.
- B. Conduct a boroscopic examination on all exterior walls.
- C. Thoroughly clean or replace the existing air handlers and ventilation ducts and boxes throughout the building. All interior insulation in the system should be removed. If replacement is necessary, replace with a hard, smooth replacement, if possible.
- D. Go to a 24/7 operation of the ventilation system immediately to avoid swings in temperature and humidity.
- E. Conduct a mechanical review of all systems using water in the building to assure that there is no seepage in the walls or ceilings.
- F. Remove all carpeting and replace with a suitable non-hydroscopic floor system such as tile or other suitable system.
- G. Clean out organic matter from fresh air intake areas below grade.
- H. We recommend awareness training for housekeeping employees and a standardized method of cleaning areas in an environmentally prudent system.
- I. We promote the appointment of an Indoor Air Quality Manager who can log complaints, document events and monitor the response of the building managers. This IAQ Manager

should be trained as the maintenance and operations staff so they have a full comprehension of the problem and remedies. An official chronology of events and complaints is essential documentation to the identification and abatement of indoor air quality problems. The manager should be a building occupant and accept this duty as an extra responsibility and not a full time position. Our experience has found that employees in the community residence of the building are the most effective in logging activity.

- J. We recommend that training in the hazards of microbiological contamination, the control of water incursions into the building and their environmental effects on the building and health effects of microbial disease, be mandatory for all maintenance and operations personnel assigned to the site.
- K. We recommend a upgrade in the efficiency of filters. Filters or pre-filters should be used to limit carbonaceous materials and combustion gases from entering the building.
- L. Specifications for abatement of microbiological contamination should be considered now.

**United States Courthouse
Jacksonville, Florida**

Endotoxin in Air

The exterior sample for endotoxin at the Jacksonville Courthouse registered 0.67 EU/m³. 33.3% of the samples in the courthouse were analyzed below the outdoor sample. 66.7% of the samples were above the exterior sample. 50% of the samples were above the reference number of 1 EU/m³.

Two (2) samples were considered elevated endotoxin in air samples. A reading of 2.80 EU/m³ in the 4th floor 11th District Court of Appeals Courtroom is considered elevated. A reading of 5.60 EU/m³ in the 1st floor Tax Court Room 137 is considered elevated.

Based on this and other evidence, we have recommended that Court staff avoid the Tax Court Room 137 and adjacent chambers. We do not recommend anyone using this room at present.

Since not all areas of the building were tested, it is possible that other areas have high endotoxin in air. Depending on the medical interviews, other areas may require testing to determine if specific areas are elevated.

Endotoxin Vacuum Samples

58% of the samples taken in the courthouse were below the 75,000 EU/g level. 42% of the samples were above the level.

Three (3) samples are considered elevated. The Tax Courtroom on the 1st floor had a reading of 530,000 EU/g. The room off of 423A had a reading of 1,200,000 EU/g. Room 250 had a reading of 2,100,000 EU/gram of dust. Again, elevated carpet dust samples only show a potential for becoming airborne. Therefore these rooms should not be vacuumed for the present.

Fungal Swab/Vacuum Samples

Some very high fungal swab and vacuum samples were observed during the testing process. 27% of the samples were over 500,000 CFU/in² or g. 21% of the total samples were over 1,000,000 CFU/in² or g. 10% of the samples were over 5,000,000 CFU/in² or g and 6% of the total samples were over 10,000,000 CFU/in² or g.

Most elevated samples contained high numbers of sp:Aspergillus which is a suspected opportunistic pathogen. High levels of Penicillium were observed in the samples. These species are all associated with water-damaged materials.

Much of the water damage appears to be associated with condensation pans that overflow or leak. This creates a situation where the carpet gets wet and fungal spores start to amplify. Since the building is not on a 24/7 ventilation pattern, the problem is amplified by swings in temperature and humidity.

It is our opinion that this building is contaminated with microbiological organisms. Depending on the medical review, continued occupancy may not be wise.

A Mechanical Engineering review of the systems in the building should be conducted to

determine a remedy for the leaking condensation pans, if any.

Again, not all rooms were tested and it is probable that other contaminated areas exist. A full study of the building should commence immediately. Boroscopic intrusion into the walls should be done to determine conditions behind walls and ceilings.

Specifications for microbiological contamination should be considered now.

Fungi in Air

Exterior air samples for fungi are considered low. Only one sample contained sp:aspergillus.

Interior samples were also considered low but a high percentage contained several species of aspergillus. One (1) sample in room 517 was overloaded with sp:aspergillus and Penicillium dominant in the sample. A recommendation was made to the court to restrict access to this room. Room 551 was also recommended to be restricted.

These samples indicate water-damaged materials. The indication from all samples is that aspergillus may be amplifying on the interior of the building.

Again, it is our opinion that this building may be contaminated and abatement should be considered. The results of medical interviews and interpretation compared to the control will be helpful in decision-making.

Temperature and Humidity

Temperature in the building ranged from 72 degrees F to 80 degrees F. Exterior temperatures ranged from 70 degrees F to 89 degrees F.

Humidity was considered high in the building ranging from 70%RH to 85%RH. Exterior relative humidity ranged from 85% to 100% RH.

Moisture Detection

The moisture detector was used to test 83 test points throughout the building. Since the detector is sensitive to metal, test points with the possibility of metal behind the walls were ignored.

No positive identifications for moisture behind the walls were recorded. This in no way prohibits the assumption that there may be moisture or fungal amplification behind walls. It is our opinion that there is no obvious moisture behind walls at specific test points.

Water-damage on walls and ceilings were observed. It is recommended that walls be explored using a boroscope in suspect areas.

Numerous ceiling tiles were observed to be water-damaged. It is recommended that water damaged ceiling tiles be replaced immediately to deter fungal growth. The reason for the water damage on the ceiling tile should be investigated and repaired immediately.

Observations

It is our observation that this building has been water-damaged in many areas throughout the years. If a maintenance log is available that has recorded these incidents, that log would be helpful.

Significant visible mold can be seen throughout the building. Much of this mold is under perimeter air conditioning units where the condensation drip pans are overflowing or leaking. We have observed where occupants place books or boards over the air vents to restrict airflow because they fear to what they are being exposed.

We have noticed molds on light fixtures with obvious water stains on the fixtures.

We have observed molds with high content of aspergillus growing on asbestos containing materials.

We have observed an unused drug detention bathroom on the second floor filled with dead insects.

We have seen paper cups placed by occupants to catch water leaks from the perimeter systems.

We have observed dust covered drapes in occupied areas. The dust was tested and high levels of aspergillus was found in the sample.

We observed rows of books in storage visibly contaminated with mold.

We observed a refrigerator in room 423A that is covered with mold both inside and outside. A sample taken on the gasket of the refrigerator revealed 512,000 CFU/in². Employees are still using this refrigerator for food. It is our recommendation that this refrigerator be wrapped in 6 mil poly sheeting, sealed and disposed of immediately.

Other refrigerators and bottled water dispensers were observed with visible mold. It is our observation that airborne spores are finding moisture on these appliances and are amplifying. This is another indication of contamination. Refrigerators and similar appliances are not recommended to be in the building.

Recommendations

- A. Refrigerators and similar appliances should be disposed of if they have obvious molds.
- B. Water-damaged ceiling tiles should be replaced and the water source detected and repaired.
- C. Conduct a boroscopic examination on interior walls in locations of known water release events.
- D. Conduct a boroscopic examination on all exterior walls.
- E. Thoroughly clean or replace the existing air handlers and ventilation ducts and boxes throughout the building. All interior insulation in the system should be removed. If replacement is necessary, replace with a hard, smooth replacement, if possible.
- F. Go to a 24/7 operation of the ventilation system immediately to avoid swings in temperature and humidity.
- G. Conduct a mechanical review of all systems using water in the building to assure that there is no seepage in the walls or ceilings.
- H. Remove all carpeting and replace with a suitable non-hydroscopic floor system such as tile or other suitable system.
- I. We recommend awareness training for housekeeping employees and a standardized method of cleaning areas in an environmentally prudent system.
- J. We promote the appointment of an Indoor Air Quality Manager who can log complaints, document events and monitor the response of the building managers. This IAQ Manager should be trained as the maintenance and operations staff so they have a full comprehension of the problem and remedies. An official chronology of events and complaints is essential documentation to the identification and abatement of indoor air quality problems. The manager should be a building occupant and accept this duty as an extra responsibility and not a full time position. Our experience has found that employees in the community residence of the building are the most effective in logging activity.
- K. We recommend that training in the hazards of microbiological contamination, the control of water incursions into the building and their environmental effects on the building and health effects of microbial disease, be mandatory for all maintenance and operations personnel assigned to the site.
- L. We recommend a upgrade in the efficiency of filters.
- M. Specifications for abatement of microbiological contamination should be considered now.

**United States Courthouse and Federal Building
Fort Myers, Florida**

Endotoxin in Air

All samples taken for endotoxin in air were found to be substantially below the exterior sample. No recommendations.

Endotoxin in Dust

All samples appear to be well within target levels. It is not our opinion that endotoxin is of concern in this building.

Fungi in Dust

Most samples appeared to be low with the following exceptions:

- A. Chair in Room 5-116 52,275 CFU/in².
- B. Computer Table in Room 6-147 139,400 CFU/in²
- C. Chair in Room 5-116 40,000 CFU/g
- D. Chair in Room 4-146 40,000 CFU/g
- E. Fabric acoustical panel in Room 5-156 300,000 CFU/g (200,000 aspergillus versicolor, 100,000 penicillium).

It is our opinion that the standard for furniture must be much lower than building components; around 1000 CFU/in² in ambient state in the building. This may be an indication that these furniture items were taken from the old courthouse. Fabric acoustical should be avoided if at all possible. A cleaning regiment for furniture from the old building may be considered.

Older documents can be seen to have visible molds. A system for decontamination, copying or disposing of these old files should be considered.

Fungi in Air

All air samples inside the building were low compared to outside samples. Opportunistic pathogens were observed in some samples but colony counts were low. These colonies may be a result of furniture from the old courthouse.

No recommendations.

Temperature and Humidity

Temperature and humidity inside the building ranged from 70 degrees F to 76 degrees F. Relative Humidity ranged from 55% RH to 62%RH.

Exterior temperatures ranged from 82 degrees F to 93 degrees F. Relative Humidity ranged from 80% RH to 100% RH.

Since this building is not on a 24/7 ventilation protocol, it is recommended that a 24/7 operation of the ventilation system commence immediately to help avoid problems in the future.

Observations

Our observation is that furniture moved over from the old courthouse may be contaminated. Consideration should be given to cleaning this older furniture that is to be retained. A considerable amount of furniture in the courthouse is new.

We also observed a stuffiness in the building. This is most probably an engineering matter and should be investigated by a Mechanical Engineer.

Recommendations

- A. Consider a cleaning regiment for decontamination of furniture moved from the old courthouse.
- B. Have a Mechanical Engineer conduct a full study of the ventilation system to determine how ventilation can be improved.
- C. We recommend awareness training for housekeeping employees and a standardized method of cleaning areas in an environmentally prudent system.
- D. We promote the appointment of an Indoor Air Quality Manager who can log complaints, document events and monitor the response of the building managers. This IAQ Manager should be trained as the maintenance and operations staff so they have a full comprehension of the problem and remedies. An official chronology of events and complaints is essential documentation to the identification and abatement of indoor air quality problems. The manager should be a building occupant and accept this duty as an extra responsibility and not a full time position. Our experience has found that employees in the community residence of the building are the most effective in logging activity.
- E. We recommend that training in the hazards of microbiological contamination, the control of water incursions into the building and their environmental effects on the building and health effects of microbial disease, be mandatory for all maintenance and operations personnel assigned to the site.
- F. Use this study as a baseline if additional problems or symptoms change.

G. Since this building is not on a 24/7 ventilation protocol, it is recommended that a 24/7 operation of the ventilation system commence immediately to help avoid problems in the future.

H. This report is contingent on medical data when available

**Golden-Collum Memorial
Federal Building & U.S.Courthouse
Ocala, Florida**

Endotoxin in Air

All endotoxin in air samples were well below the outside control sample except one. The Hearing Room on the 2nd floor had a level of 1.00 EU/m³ which is at the recommended standard.

No recommendations

Fungi in Air

All air samples inside the building were low compared to outside samples. Opportunistic pathogens were observed in some samples but colony counts were low.

Fungi in Dust

Most samples for fungi in dust appeared to be moderate to low. Some of the highest samples were from furniture that had just arrived from another courthouse and had not been cleaned.

Fungus was observed behind wallpaper in the CSO office. 35% of the sample was opportunistic pathogens.

Black dust from a vent in the basement indicated a moderate level of fungi with a majority of the identifications being opportunistic pathogens or allergens.

Temperature and Humidity

Temperatures inside the building ranged from 70 degrees F to 80 degrees F. There were complaints on a Monday morning that it was hot in the building. This is from the policy of shutting down the ventilation system over the weekends and overnight. The building did not really cool down to an acceptable level until about noon. Temperatures on the exterior of the building ranged from 85 degrees F to 94 degrees F.

Relative humidity ranged from 60% RH to 85% RH. Again, the readings were higher on Monday morning. Outside relative humidity ranged from 85% RH to 100 % RH.

Observations

We were made aware that a water release event had occurred recently in the main lobby of the building. Carpet in the main hall was stained. Since most of the hall is not carpeted, it is recommended that this small section of carpet be removed and tile or other non-hydroscopic system replace the carpet.

We observed mold growing outside on the cement just under the air intakes. It appears that condensation drops from the pipe and gives this mold consistent nutrient. Sporulation from the mold can easily enter the fresh air intakes. It is recommended that this area be cleaned and checked periodically to monitor reoccurrence

Black dust was seen around the diffusers in the basement. This dust was tested and contains molds. We recommend that the duct system be cleaned environmentally to avoid molds being carried into occupied spaces in the air.

Furniture stored in the basement from another courthouse (thought to be Tallahassee) was dusty and had molds. It is recommended that this furniture be cleaned or disposed of properly.

Recommendations

- A. We recommend awareness training for housekeeping employees and a standardized method of cleaning areas in an environmentally prudent system.
- B. We promote the appointment of an Indoor Air Quality Manager who can log complaints, document events and monitor the response of the building managers. This IAQ Manager should be trained as the maintenance and operations staff so they have a full comprehension of the problem and remedies. An official chronology of events and complaints is essential documentation to the identification and abatement of indoor air quality problems. The manager should be a building occupant and accept this duty as an extra responsibility and not a full time position. Our experience has found that employees in the community residence of the building are the most effective in logging activity.
- D. We recommend that training in the hazards of microbiological contamination, the control of water incursions into the building and their environmental effects on the building and health effects of microbial disease, be mandatory for all maintenance and operations personnel assigned to the site.
- E. Use this study as a baseline if additional problems or symptoms change.
- F. Since this building is not on a 24/7 ventilation protocol, it is recommended that a 24/7 operation of the ventilation system commence immediately to help avoid problems in the future.
- G. It is recommended that an environmental duct cleaning be done in all ductwork in the building.
- H. Furniture from other courthouses should not be accepted if not cleaned in advance.
- I. This report is contingent on the medical data.

MIDDLE DISTRICT OF FLORIDA COURTHOUSES RECOMMENDATIONS

In addition to specific courthouse recommendations, the following recommendations are on a district wide level and should be considered for all courthouses in similar climates.

These recommendations are as follows:

- A. Conduct an environmental review of all construction in progress to determine if the same mistakes that are current can be avoided in the new construction.
- B. Conduct an environmental review of all construction in design to avoid future problems in construction and architecture.
- C. Promote a policy of moving contaminated components and furniture to a new courthouse out of a contaminated courthouse. A testing and decontamination process should be utilized when furniture and other items are to be moved into a new building.
- D. Determine a proper way to proceed with older documents that may be contaminated through disposal, copying under controlled conditions by an environmental contractor or processing by a professional conservator of documents if originals are necessary.
- E. Strengthen General Contractor specifications to avoid water-damage during construction of new buildings.
- F. Insist on training in microbiological contaminations for personnel and sub-contractors who will provide operations and maintenance services or housekeeping services in buildings where the Courts will occupy.

**FT. MYERS FLORIDA
US COURTHOUSE
AIR ENDOTOXIN RESULTS**

Sample #	Location	Air Volume	EU/m ³
RSWEN-1	Exterior	480	0.66
RSWEN-2	Field Blank	N/A	0.28
RSWEN-3	Jury Assembly 5-107	480	0.13
RSWEN-4	Judge's office 6-181	480	0.31
RSWEN-5	Arbitration 5-152	480	0.44
RSWEN-6	Judge's office 4-146	480	0.06
RSWEN-7	4-102	452	0.23
RSWEN-8	Clerk's office Intake	480	0.12
RSWEN-9	Elevator lobby 3 rd floor	340	0.46
RSWEN-10	US Attorney conference - 3 rd floor	480	0.46
RSWEN-11	Main lobby CSO security post - 1 st floor	480	0.30

**FT. MYERS FLORIDA
US COURTHOUSE
VAC ENDOTOXIN RESULTS**

Sample #	Location	Weight used	EU/g
RSWV-1	Room 4 -147	0.002	370
RSWV-2	Room 5-152	0.010	66,000

**FT. MYERS FLORIDA
US COURTHOUSE
FUNGAL EXTERIOR AIR RESULTS**

Sample #	Location	Fungal/Bacteria ID	CFU/m ³
RSWEX-1	34/2/2001 - 10:02	Acremonium strictum	18
		Alternaria alternata	71
		Basidiomycetes	107
		Cladosporium	1,036
		Fusarium	18
		Penicillium	125
		Phome	36
		sterile fungi	18
		yeasts	18
		Total	1,446
RSWEX-2	4/0/01 - exterior - 14:15	Alternaria alternata	89
		Basidiomycetes	71
		Cladosporium	1,643
		Epicoccum nigrum	36
		Fusarium	18
		Penicillium	304
		sterile fungi	18
Total	2,179		
RSWEX-3	4/3/01 - 9:49 a.m.	Aspergillus ochraceus	18
		Basidiomycetes	107
		Cladosporium	446
		Paecilomyces variotii	54
		Penicillium	71
		Total	696
RSWEX-4	4/3/01 - 3:47 p.m.	Aspergillus fumigatus	18
		Aspergillus sydowii	18
		Basidiomycetes	143
		Cladosporium	464
		Epicoccum nigrum	36
		Fusarium	18
		Penicillium	161
		Total	857

**FT. MYERS FLORIDA
US COURTHOUSE
FUNGAL EXTERIOR AIR RESULTS**

Sample #	Location	Fungal/Bacteria ID	CFU/m ³	
RSWEX-5	4/4/2001 - 9:35	Aspergillus niger	18	
		Basidiomycetes	107	
		Cladosporium	232	
		Paecilomyces variotii	18	
		sterile fungi	18	
		yeasts	18	
		Total	411	
		Aspergillus fumigatus	36	
		Aspergillus niger	18	
		Aspergillus terreus	18	
RSWEX-6	4/4/01 - 14:56	Basidiomycetes	107	
		Cladosporium	196	
		Curvularia lunata	18	
		Epicoccum nigrum	18	
		Paecilomyces variotii	36	
		Penicillium	125	
		Phoma glomerata	18	
		Pithomyces chartarum	18	
		Sporobolomyces salmonicolor	89	
		sterile fungi	18	
yeasts	18			
Total	732			
RSWEX-7	4/5/01 - 8:56	Basidiomycetes	71	
		Cladosporium	268	
		Paecilomyces variotii	18	
		sterile fungi	18	
		Total	375	
RSWEX-8	4/5/01 - 16:45	Aurobasidium pullulans	18	
		Basidiomycetes	36	
		Cladosporium	661	
		Curvularia lunata	36	
		Emericella (Aspergillus) nidulans	18	
		Paecilomyces variotii	36	
		Penicillium	89	
		Phoma sp	18	
		Pithomyces chartarum	18	
		sterile fungi	18	
		Total	18	
				946

**FT. MYERS
US COURTHOUSE
FUNGAL/SWAB RESULTS**

Sample #	Location	Fungal/Bacteria ID	CFU/m2
RSWW-1	5-183 Bookshelf	<i>Alternaria alternata</i>	25
		<i>Aspergillus sydowii</i>	25
		<i>Aspergillus ustus</i>	175
		<i>Aspergillus versicolor</i>	50
		<i>Chaetomium globosum</i>	75
		<i>Curvularia lunata</i>	175
		<i>Penicillium</i>	200
		<i>Pithomyces chartarum</i>	100
		Total	25
		Total	850
RSWW-2	5-181 - Reception baseboard	<i>Penicillium</i>	25
		Total	25
RSWW-3	Furniture storage - 6 th floor	<i>Alternaria alternata</i>	75
		<i>Chaetomium globosum</i>	75
		Total	150
RSWW-4	Furniture storage - 6 th floor	<i>Acremonium strictum</i>	925
		<i>Alternaria alternata</i>	25
		<i>Cladosporium</i>	150
		<i>Curvularia lunata</i>	125
		<i>Epicoccum nigrum</i>	75
		<i>Pithomyces chartarum</i>	125
		sterile fungi	25
		Total	1,450
RSWW-5	6-149 - door	<i>Epicoccum nigrum</i>	100
		<i>Fusarium</i>	325
		yeasts	25
		Total	450
RSWW-6	Door frame furniture storage - 6 th floor	<i>Alternaria alternata</i>	100
		<i>Cladosporium</i>	350
		<i>Curvularia lunata</i>	50
		<i>Epicoccum nigrum</i>	175
		<i>Mucor hiemalis</i>	525
		<i>Penicillium</i>	100
		<i>Rhodotorula glutinis</i>	50
		<i>Sporobolomyces salmonicolor</i>	275
		yeasts	50
		Total	1,675

**FT. MYERS
US COURTHOUSE
FUNGAL/SWAB RESULTS**

Sample #	Location	Fungal/Bacteria ID	CFU/in ²
RSWW-7	Furniture storage, desk - 6 th floor	NO GROWTH	<100
RSWW-10	5-116 - chair	Fusarium	2,050
		Rhodotorula glutinis	50,225
		Total	52,275
RSWW-11	Control unit clerk file area - 2 nd floor	sterile fungi	100
		yeasts	100
		Total	200
RSWW-12	Clerk's office shelf in file room - 2 nd floor	Alternaria alternata	25
		Curvularia lunata	25
		Rhodotorula glutinis	675
		Total	725
RSWW-13	Book shelf in reception area 6-109	NO GROWTH	<25
RSWW-14	6-147 - computer table	Fusarium	12,300
		Rhodotorula glutinis	106,600
		yeasts	20,500
		Total	139,400
RSWW-16	5-156 - wood door jamb	Aspergillus versicolor	75
		Penicillium	50
		Total	125

**FT MYERS FLORIDA
US COURTHOUSE
FUNGAL BULK DUST SAMPLE RESULTS**

Sample #	Location	Fungal/Bacteria ID	CFU/g
RSWW-8	5-116 - chair	sterile fungi Total	40,000 40,000
RSWW-9	4-146 - chair	Cladosporium Total	40,000 40,000
RSWW-15	5-156 - Acoustical panel	Aspergillus versicolor Penicillium Total	200,000 100,000 300,000

**FT. MYERS FLORIDA
US COURTHOUSE
FUNGAL AIR RESULTS**

Sample #	Location	Fungal/Bacteria ID	CFU/m ³
RSW-1	Grand jury - Room #1	Alternaria alternata	18
		Cladosporium	36
		Curvularia lunata	18
		Nigrospora sphaerica	18
		Penicillium	71
		Total	161
RSW-2	5-152 - Arbitration	Acremonium strictum	18
		Chaetomium globosum	18
		Cladosporium	18
		Penicillium	143
		Total	196
RSW-3	5-181 Entrance hall	yeasts	18
		Total	18
RSW-4	5-183 - Law clerk	Curvularia lunata	36
		Total	36
RSW-5	5-181 Reception Area	Cladosporium	18
		Total	18
RSW-6	5-181 Judge's office	NO GROWTH	<18
RSW-7	5-160 Courtroom C Judge's bench	NO GROWTH	<18
RSW-8	5-160 Courtroom C - Visitor gallery	NO GROWTH	<18
RSW-9	5-126 Witness waiting area	sterile fungi	18
		Total	18
RSW-10	5-107 Jury assembly storage	Cladosporium	18
		Penicillium	36
		Rhinocladiella sp	18
		Torulomyces lagena	18
		Total	89
RSW-11	Jury's reception - 5 th floor	Aspergillus versicolor	18
		Penicillium	36
		Total	54
RSW-12	5-102 Jury's Reception	Cladosporium	125
		Penicillium	36
		Total	161

**FT. MYERS FLORIDA
US COURTHOUSE
FUNGAL AIR RESULTS**

Sample #	Location	Fungal/Bacteria ID	CFU/m ³
RSW-13	6-186 Entrance hallway	Cladosporium Total	18 18
RSW-14	6-180 Law Clerk	Cladosporium Total	36 36
RSW-15	6-186 Reception	Cladosporium Total	18 18
RSW-16	6-186 Judge's office	NO GROWTH	<18
RSW-17	6-177 Library	Cladosporium Total	36 36
RSW-18	6-157 Courtroom B, Judge's bench	Cladosporium Total	89 89
RSW-19	6-157 Courtroom B, Visitor's gallery	Curvularia lunata Total	18 18
RSW-20	6-153 Furniture storage	NO GROWTH	<18
RSW-21	Public hallway - 6 th floor	Penicillium Total	18 18
RSW-22	4-128 hall	Penicillium Total	18 18
RSW-23	4-128 Reception area	Curvularia lunata Total	18 18
RSW-24	4-146 Judge's office	NO GROWTH	<18
RSW-25	4-143 Law Clerk's office	Chaetomium globosum Penicillium Total	36 18 54
RSW-26	4-117 Bankruptcy Courtroom	Chaetomium globosum Penicillium Total	18 36 54
RSW-27	4-102 by Judge's elevator	Aspergillus ustus Total	18 18

**FT. MYERS FLORIDA
US COURTHOUSE
FUNGAL AIR RESULTS**

Sample #	Location	Fungal/Bacteria ID	CFU/m ³
RSW-28	4-114	Aspergillus ustus	18
		Chaetomium globosum	18
		Total	18
RSW-29	4-101 Bankruptcy	Cladosporium	18
		Total	18
RSW-30	4-107	Aspergillus versicolor	18
		Penicillium	18
		Total	36
RSW-31	2-107	Chaetomium globosum	18
		Total	18
RSW-32	File room off intake - 2 nd floor	Chaetomium globosum	18
		Cladosporium	161
		Penicillium	36
RSW-33	Clerk's office intake - 2 nd floor	Total	214
		Cladosporium	36
		Total	36
RSW-34	2-111	Cladosporium	196
		Total	196
RSW-35	Clerk's office, open area by intake - 2 nd floor	Alternaria alternata	18
		Cladosporium	446
		Total	464
RSW-36	2-124	NO GROWTH	<18
RSW-37	Clerk's office, open area	Cladosporium	18
		sterile fungi	18
		Total	36
RSW-38	2-128	Cladosporium	18
		Penicillium	18
		Total	36
RSW-39	Public hall - 2 nd floor	Cladosporium	18
		sterile fungi	54
		Total	72

**FT. MYERS FLORIDA
US COURTHOUSE
FUNGAL AIR RESULTS**

Sample #	Location	Fungal/Bacteria ID	CFU/m ³
RSW-40	Trustees hear room - 2 nd floor	Cladosporium	18
		Pithomyces chartarum	18
		Yeasts	18
		Total	54
RSW-41	6-109 hall by 6-118	Cladosporium	18
		Total	18
RSW-42	6-109 Reception area	Penicillium	18
		Total	18
RSW-43	6-107 Judge's office	Cladosporium	18
		Total	18
RSW-44	6-111 Library	Acremonium strictum	18
		Chaetomium globosum	71
		Cladosporium	54
		Penicillium	36
		Total	179
RSW-45	6-130 Courtroom A, Judge's bench	Chaetomium globosum	18
		Yeasts	18
		Total	36
RSW-46	6-130 Courtroom A, visitor's gallery	Cladosporium	18
		Total	18
RSW-47	3-111	Basidiomycetes	71
		Chaetomium globosum	18
		Cladosporium	36
		Yeasts	18
		Total	143
RSW-48	3-115 Library	NO GROWTH	<18
RSW-49	Hall by 3-150	Cladosporium	18
		Total	18
RSW-50	3-102 Conference room	Epicoccum nigrum	18
		Total	18

**FT. MYERS FLORIDA
US COURTHOUSE
FUNGAL AIR RESULTS**

Sample #	Location	Fungal/Bacteria ID	CFU/m ³
RSW-51	US Attorney's office by 3-176 - 3 rd floor	Aspergillus sydowii	36
		Botrytis cinerea	18
		Cladosporium	36
		Penicillium	36
		Phoma sterile fungi	18
Total	161		
RSW-52	Common space 3-128	Aureobasidium pullulans Chaetomium globosum Cladosporium Penicillium Total	36 18 18 18 89
RSW-53	Conference room 3-152	Cladosporium Penicillium Total	36 18 54
RSW-54	3-126	Curvularia lunata Total	18 18
RSW-55	Elevator lobby 3 rd floor	Cladosporium Total	36 36
RSW-56	3-165	NO GROWTH	<18
RSW-57	CSO Check station - Main lobby	Acremonium strictum Cladosporium Curvularia lunata Total	18 36 18 71
RSW-58	Court security 1-129	Epicoccum nigrum Fusarium Total	18 18 36
RSW-59	Common area 1-122	Cladosporium Total	18 18
RSW-60	US Marshall's office by 1-119	Cladosporium Total	36 36
RSW-61	Hall by 1-148	Alternaria alternata Cladosporium Total	18 54 71

**FT. MYERS FLORIDA
US COURTHOUSE
FUNGAL AIR RESULTS**

Sample #	Location	Fungal/Bacteria ID	CFU/m ³
RSW-62	Marshall's office, open area by 1-154	Cladosporium Total	36 36
RSW-63	US Marshall's conference area by 1-161	Aspergillus ustus Auerobasidium pullulans Total	18 18 36
RSW-64	Loading dock area by elevator	Curvularia lunata Total	18 18
RSW-65	Hall by 1-122	Penicillium yeasts Total	18 18 36
RSW-66	Witness waiting area - 5-140	Cladosporium Penicillium Total	18 18 36
RSW-67	Furniture storage - 6 th floor	Cladosporium Penicillium Total	18 36 54
RSW-68	Furniture storage - 5 th floor	NO GROWTH	<18
RSW-69	Elevator lobby - 5 th floor	Penicillium Total	18 18
RSW-70	Elevator lobby - 2 nd floor	NO GROWTH	<18

**JACKSONVILLE FLORIDA
 JACKSONVILLE FEDERAL COURTHOUSE
 AIR ENDOTOXIN RESULTS**

Sample #	Location	Air Volume	EU/m ³
JACEN-1	Room 520	552	0.44
JACEN-2	Courtroom 137	720	5.60
JACEN-3	Room 517	520	1.80
JACEN-4	Field Blank	N/A	0.03
JACEN-5	11 th Court of Appeals Courtroom - 4 th floor	600	2.80
JACEN-6	Systems Training - 3 rd floor	500	0.62
JACEN-7		480	1.10
JACEN-8	Room 423A - 4 th floor	420	1.10
JACEN-9	Room 110 - 1 st floor	420	0.60
JACEN-10	Room off of 423A - 4 th floor	600	0.61
JACEN-11	Exterior	900	0.67
JACEN-12	Basement by furniture storage	480	0.71
JACEN-13	Room 320	720	1.20

**JACKSONVILLE FLORIDA
 JACKSONVILLE FEDERAL COURTHOUSE
 VAC ENDOTOXIN RESULTS**

Sample #	Location	Weight used	EU/g
JACV-1	Carpet by window - Room 520	0.057	12,000
JACV-2	Courtroom #137, carpet by window	0.108	530,000
JACV-3	Room 517 - carpet by window	0.071	99,000
JACV-4	Room 551	0.102	61,000
JACV-5	Court of Appeals Courtroom - 4 th floor	0.079	29,000
JACV-6	Room 423A	0.038	36,000
JACV-7	Room 110 - water damaged carpet	0.011	36,000
JACV-8	Room off of 423A	0.010	1,200,000
JACV-9	Room 407 - under window unit	0.084	120,000
JACV-243	Room 243 - Manager's office	0.0001	26,000
JACV-250	Room 250	0.0320	2,100,000
JACV-210	Room 210	0.0040	32,000

**JACKSONVILLE FLORIDA
JACKSONVILLE FEDERAL COURTHOUSE
FUNGAL EXTERIOR AIR RESULTS**

Sample #	Location	Fungal/Bacteria ID	CFU/m ³
JACEX-1	3/20/01 - Dock - area rear of building 9:53	Alternaria alternata	18
		Aspergillus fumigatus	18
		Aspergillus niger	18
		Aspergillus ustus	18
		Basidiomycetes	393
		Chaetomium	36
		Cladosporium	500
		Curvularia lunata	18
		Epicoccum nigrum	36
		sterile fungi	18
		Total	1,071
JACEX-2	3/20/01 - exterior - 14:46	Basidiomycetes	71
		Botrytis cinerea	18
		Chaetomium	18
		Cladosporium	36
		Fusarium graminearum	18
		sterile fungi	18
		yeasts	18
		Total	196
		Arthrinium phaeospermum	18
		Basidiomycetes	36
		Cladosporium	36
JACEX-3	3/21/01 - exterior 8:42	Penicillium	18
		sterile fungi	18
		yeasts	18
		Total	143
		Basidiomycetes	36
		Cladosporium	36
		Penicillium	18
		sterile fungi	18
		yeasts	18
		Total	125
		JACEX-4	3/21/01 - exterior 14:57
Cladosporium	36		
Penicillium	18		
sterile fungi	18		
yeasts	18		
Total	125		

**JACKSONVILLE FLORIDA
JACKSONVILLE FEDERAL COURTHOUSE
FUNGAL EXTERIOR AIR RESULTS**

Sample #	Location	Fungal/Bacteria ID	CFU/m ³
JACEX-5	3/22/01 - Exterior 9:26	Basidiomycetes	321
		Botrytis cinerea	18
		Cladosporium	125
		Penicillium	36
		Phoma	18
		sterile fungi	18
		Total	536
JACEX-6	3/22/01 - Exterior 16:07	Basidiomycetes	179
		Botrytis cinerea	18
		Cladosporium	107
		Penicillium	18
		Phoma	18
		Total	339
JACEX-7	3/23/01 - Exterior 9:53	Arthrinium phaeospermum	18
		Aureobasidium pullulans	18
		Basidiomycetes	143
		Cladosporium	71
		Penicillium	18
		Tritrachium	18
		Total	286
JACEX-8	3/23/02 - Exterior 14:10	Basidiomycetes	143
		Chaetomium globosum	18
		Cladosporium	18
		Penicillium	18
		sterile fungi	18
		Total	214

**JACKSONVILLE FLORIDA
JACKSONVILLE FEDERAL COURTHOUSE
FUNGAL /SWAB RESULTS**

Sample #	Location	Fungal/Bacteria ID	CFU/m ²		
JACW-1	Bridwater water dispenser - Room 520	Acremonium strictum	2,050		
		Aureobasidium pullulans	5,125		
		Cladosporium yeasts	48,175		
		Total	8,200		
		Total	63,550		
JACW-3	Courtroom 137 -wall	sterile fungi Total	25 25		
JACW-4	Courtroom 137 - tile under carpet	Aspergillus ustus	69,700		
		Chaetormium globosum	24,600		
		Cladosporium Penicillium	270,600		
		Total	164,000		
		Total	528,900		
JACW-6	Room 520 - by windows, behind wallpaper	Acremonium strictum	69,700		
		Aspergillus sydowii	24,600		
		Aspergillus ustus	4,100		
		Cladosporium Penicillium	258,300		
		Total	4,100		
		Tritrachium oryzae	8,200		
		Tritrachium sp	90,200		
		Total	459,200		
		JACW-7	Library 523 - by windows, behind vent	Aureobasidium pullulans	4,700
				Epicoccum nigrum yeasts	300
Total	600				
Total	5,600				
Total	300				
JACW-11	Room 551 - books	Aureobasidium pullulans	300		
		Cladosporium globosum	125		
		Epicoccum nigrum	50		
		Phoma yeasts	25		
		Total	850		
JACW-12	Room 547 - behind vinyl wallpaper	Cladosporium globosum	1,350		
		Total	100		
		Total	100		
JACW-13	Room 547 - material on baseboard	Aureobasidium pullulans	41,000		
		Fusarium yeasts	4,100		
		Total	4,100		
		Total	49,200		

**JACKSONVILLE FLORIDA
JACKSONVILLE FEDERAL COURTHOUSE
FUNGAL /SWAB RESULTS**

Sample #	Location	Fungal/Bacteria ID	CFU/m ²
JACW-14	Courtroom #3 Jury seats - 5 th floor	sterile fungi Total	25 25
JACW-15	Hall vent HNU 536 - 5 th floor	NO GROWTH	<100
JACW-16	Room 551 - bookshelf	Aspergillus niger Aureobasidium pullulans Cladosporium sterile fungi yeasts Total	100 300 300 200 600 1,400
JACW-17	Under floor mat - 3 rd floor	Aspergillus ustus Mucor hiemalis Penicillium Rhodotorula glutinis sterile fungi yeasts Total	24,600 4,100 20,500 426,400 4,100 45,100 524,800
JACW-18	Courtroom #1 - wall rail by window	Cladosporium yeasts Total	300 100 400
JACW-19	Courtroom #1 - window frame	sterile fungi Total	100 100
JACW-20	Court of Appeals, window - 4 th floor	Cladosporium Scoleobasidium humicola sterile fungi Trichoderma harzianum yeasts Total	3,400 2,400 100 100 200 6,200
JACW-21	Room 423A cooler - exterior	Aspergillus ustus Cladosporium yeasts Total	200 25,300 600 26,100

**JACKSONVILLE FLORIDA
JACKSONVILLE FEDERAL COURTHOUSE
FUNGAL /SWAB RESULTS**

Sample #	Location	Fungal/Bacteria ID	CFU/in ²
JACW-22	Room 423A - refrigerator gasket	Cladosporium Penicillium Total	487,900 24,600 512,500
JACW-23	Room 423A - window frame	Cladosporium Rhodotorula glutinis yeasts Total	1,600 300 5,200 7,100
JACW-24	Room 520 - Refrigerator gasket	Cladosporium Total	1,836,800 1,836,800
JACW-25	Room 110- Couch rear conference area	Alternaria alternata Aspergillus glaucus Aureobasidium pullulans Basidiomycetes Cladosporium Epicoccum nigrum Phoma Pithomyces chartarum sterile fungi Total	2,353 1,176 1,176 2,353 4,706 1,176 2,353 1,176 1,176 17,647
JACW-26	Room 110- arm chair	Alternaria alternata Aspergillus fumigatus Aspergillus sydowii Aspergillus versicolor Aureobasidium pullulans Chaetomium globosum Cladosporium Curvularia lunata Penicillium sterile fungi yeasts Total	727 727 727 1,455 1,455 2,182 13,091 727 1,455 727 4,364 27,636
JACW-27	Room 110 - Perimeter unit insulation cover	Cladosporium Total	100 100

**JACKSONVILLE FLORIDA
JACKSONVILLE FEDERAL COURTHOUSE
FUNGAL /SWAB RESULTS**

Sample #	Location	Fungal/Bacteria ID	CFU/in ²
JACW-28	Staining under leak on floor - 1 st floor	Rhodotorula glutinis	9,300
		sterile fungi	100
		Yeasts	400
		Total	9,800
JACW-30	Room 110 - at window	Cladosporium	14,200
		Yeasts	300
		Total	14,500
JACW-31	Room off of 432A - floor	Aspergillus ustus	3,280,000
		Cladosporium	2,186,667
		Paecilomyces lilacinus	546,667
		Yeasts	546,667
		Total	6,560,000
JACW-32	Room 407 - air diffuser	Aspergillus niger	100
		Aspergillus sydowii	200
		Aspergillus ustus	1,200
		Cladosporium	100
		Penicillium	600
		Total	2,200
JACW-33	Room 407 - baseboard	Aspergillus versicolor	100
		sterile fungi	100
		Total	200
JACW-34	Room 407 - at window unit	Alternaria alternata	56,552
		Aspergillus sydowii	169,655
		Aspergillus ustus	141,379
		Aspergillus versicolor	28,276
		Chaetomium globosum	28,276
		Cladosporium	367,586
		Penicillium	113,103
		Phoma	56,552
		Rhodotorula glutinis	56,552
		sterile fungi	28,276
		Tritirachium	56,552
		Yeasts	56,552
		Total	1,159,310

**JACKSONVILLE FLORIDA
JACKSONVILLE FEDERAL COURTHOUSE
FUNGAL /SWAB RESULTS**

Sample #	Location	Fungal/Bacteria ID	CFU/m ²
JACW-35	Room 407 - at window unit	<i>Alternaria alternata</i> <i>Aspergillus ustus</i> <i>Cladosporium</i> <i>Penicillium</i> Total	86,316 13,637,900 258,947 86,316 14,069,470
JACW-36	Room 423A - Metal file cabinet	<i>Aspergillus sydowii</i> <i>Aspergillus ustus</i> <i>Chaetomium globosum</i> <i>Cladosporium</i> <i>Memnoniella echinata</i> <i>Penicillium</i> Phoma Total	200 300 400 100 300 100 100 1,500
JACW-37	Room 511 - under sink	<i>Aspergillus versicolor</i> <i>Cladosporium</i> <i>Penicillium</i> sterile fungi Total	480,000 800,000 120,000 40,000 1,440,000
JACW-38	Room 511 - Center office light	<i>Aspergillus niger</i> <i>Aureobasidium pullulans</i> <i>Cladosporium</i> <i>Penicillium</i> yeasts Total	700 300 4,150 50 125 5,325
JACW-39	Room 511 - Law Clerk's office under air conditioner	<i>Aureobasidium pullulans</i> <i>Cladosporium</i> <i>Rhodotorula glutinis</i> yeasts Total	200 100 400 900 1,600

**JACKSONVILLE FLORIDA
JACKSONVILLE FEDERAL COURTHOUSE
FUNGAL /SWAB RESULTS**

Sample #	Location	Fungal/Bacteria ID	CFU/m ²
JACW-40	Room 336A - desk chair	<i>Alternaria alternata</i> <i>Aureobasidium pullulans</i> <i>Cladosporium</i> <i>Curvularia lunata</i> <i>Epicoccum nigrum</i> <i>Pithomyces chartarum</i> sterile fungi yeasts Total	3,556 5,333 14,222 1,778 16,889 10,667 1,778 7,111 61,333
JACW-41	Room 347 - window	NO GROWTH	<100
JACW-42	Room 340 - chair	<i>Aureobasidium pullulans</i> <i>Chaetomium globosum</i> sterile fungi yeasts Total	1,961 980 980 1,961 5,882
JACW-43	Room 340 - diffuser window unit	<i>Aureobasidium pullulans</i> <i>Phoma</i> yeasts Total	32,800 237,800 1,402,200 1,672,800
JACW-44	Courtroom #4 visitor bench - 3 rd floor	<i>Aspergillus niger</i> <i>Aspergillus sydowii</i> <i>Aureobasidium pullulans</i> <i>Cladosporium</i> <i>Curvularia lunata</i> <i>Epicoccum nigrum</i> <i>Nigrospora sphaerica</i> <i>Paecilomyces variotii</i> <i>Penicillium</i> <i>Phoma</i> <i>Pithomyces chartarum</i> sterile fungi <i>Trichoderma koningi</i> yeasts Total	1,905 952 5,714 10,476 952 10,476 952 952 3,810 2,857 2,857 952 952 4,762 48,571

**JACKSONVILLE FLORIDA
JACKSONVILLE FEDERAL COURTHOUSE
FUNGAL /SWAB RESULTS**

Sample #	Location	Funga/Bacteria ID	CFU/in ²
JACW-45	Room 250 - gallery	Aspergillus niger Chaetomium globosum Nigrospora sphaerica Penicillium Total	585,714 7,614,286 25,185,710 585,714 33,971,430
JACW-46	Room 210 - curtains, Duval Ave. Sill	Alternaria alternata Aspergillus ustus Aureobasidium pullulans Chaetomium globosum Cladosporium Curvularia lunata Penicillium sterile fungi Trichoderma koningii Total	20,000 40,000 20,000 20,000 300,000 20,000 280,000 20,000 20,000 740,000
JACW-47	Room 210 - under perimeter unit	Acremonium rutilum Alternaria alternata Aspergillus niger Aspergillus sydowii Aspergillus ustus Aureobasidium pullulans Basidiomycetes Cladosporium Curvularia lunata Epicoccum nigrum Fusarium Penicillium Pithomyces chartarum Rhodotorula glutinis sterile fungi yeasts Total	258 516 258 258 258 516 516 5,935 1,290 1,548 258 3,355 516 258 516 1,548 17,806

**JACKSONVILLE FLORIDA
JACKSONVILLE FEDERAL COURTHOUSE
FUNGAL DUST SAMPLE RESULTS**

Sample #	Location	Fungal/Bacteria ID	CFU/g		
JACW-2	Courtroom 137 - carpet by window	<i>Aspergillus niger</i>	149,091		
		<i>Aspergillus ustus</i>	1,938,182		
		<i>Penicillium</i>	13,269,090		
		Total	15,356,360		
JACW-5	Courtroom 137 - Clerk's chair	<i>Alternaria alternata</i>	1,961		
		<i>Aspergillus sydowii</i>	980		
		<i>Chaetomium</i>	1,961		
		<i>Curvularia lunata</i>	980		
		<i>Epicoccum nigrum</i>	1,961		
		<i>Nigrospora sphaerica</i>	980		
		<i>Penicillium</i>	980		
		<i>Pithomyces chartarum</i>	980		
		Total	10,784		
		JACW-8	Room 551 - Random books	<i>Aspergillus ustus</i>	5,714
				<i>Cladosporium</i>	25,714
<i>Fusarium</i>	8,571				
<i>Scopulariopsis candida</i>	2,857				
sterile fungi	2,857				
Total	45,714				
JACW-9	Room 517 - Perimeter filter	<i>Alternaria alternata</i>	1,739		
		<i>Aspergillus flavus</i>	870		
		<i>Aspergillus niger</i>	1,739		
		<i>Aspergillus sydowii</i>	11,304		
		<i>Aspergillus ustus</i>	2,609		
		<i>Aspergillus versicolor</i>	3,478		
		<i>Cladosporium</i>	26,957		
		<i>Penicillium</i>	46,087		
		<i>Trichoderma koningii</i>	1,739		
		Total	96,522		
		JACW-10	Room 551 - under perimeter unit	<i>Aspergillus sydowii</i>	796,117
				<i>Aspergillus ustus</i>	5,254,369
				<i>Cladosporium</i>	1,114,563
<i>Paecilomyces lilacinus</i>	477,670				
Total	7,642,719				

**JACKSONVILLE FLORIDA
JACKSONVILLE FEDERAL COURTHOUSE
FUNGAL AIR RESULTS**

Sample #	Location	Fungal/Bacteria ID	CFU/m ³		
JAC-1	Room 520 by window	Aspergillus ustus	18		
		Basidiomycetes	250		
		Chaetomium globosum	36		
		Cladosporium	54		
		Total	357		
JAC-2	Guard shack, rear dock	Alternaria alternata	18		
		Basidiomycetes	250		
		Cladosporium	500		
Total	768				
JAC-3	Room 137A - reception	Aspergillus sydowii	18		
		Aspergillus ustus	18		
		Aspergillus versicolor	36		
		Basidiomycetes	143		
		Cladosporium	18		
		Paecilomyces lilacinus	18		
		sterile fungi	18		
		Total	268		
		JAC-4	Room 137A - Judge's chambers	Aspergillus sydowii	18
				Aspergillus ustus	36
Basidiomycetes	71				
Chaetomium globosum	36				
Cladosporium	18				
Fusarium	36				
sterile fungi	18				
Total	232				
JAC-5	Room 137 - Tax Court			Aspergillus niger	12
				Aspergillus sydowii	12
		Aspergillus versicolor	12		
		Basidiomycetes	71		
		Cladosporium	95		
		Paecilomyces lilacinus	24		
		sterile fungi	12		
		Tritirachium	12		
		Total	250		

**JACKSONVILLE FLORIDA
JACKSONVILLE FEDERAL COURTHOUSE
FUNGAL AIR RESULTS**

Sample #	Location	Fungal/Bacteria ID	CFU/m ³		
JAC-6	Hall by 523 - 5 th floor	Basidiomycetes	36		
		Cladosporium	71		
		Penicillium	18		
		Phoma	36		
		Pithomyces chartarum	18		
		sterile fungi	36		
		yeasts	18		
		Total	232		
		JAC-7	Library, 513 east side - 5 th floor	Aspergillus sydowii	18
				Aspergillus versicolor	36
Basidiomycetes	71				
Cladosporium	143				
Penicillium	18				
Phoma	18				
sterile fungi	18				
Tritrachium	18				
Total	339				
JAC-8	Library, 523 - 5 th floor			Acremonium rutilum	18
		Cladosporium	107		
		Oidiodendron griseum	18		
		sterile fungi	36		
		Total	179		
JAC-9	Room 517 - 5 th floor	OVERLOADED	>7,143		
		Alternaria alternata			
		Aspergillus sydowii			
		Aspergillus ustus			
		Aspergillus versicolor			
		Cladosporium			
		Penicillium			
		sterile fungi			
		Total			
				DOMINANT	

**JACKSONVILLE FLORIDA
JACKSONVILLE FEDERAL COURTHOUSE
FUNGAL AIR RESULTS**

Sample #	Location	Fungal/Bacteria ID	CFU/m ³
JAC-10	Room 551	Aspergillus sydowii	14
		Aspergillus ustus	736
		Aspergillus versicolor	36
		Cladosporium	50
		Penicillium	136
Total	971		
JAC-11	Courtroom #3 - 5 th floor	Aspergillus sydowii	36
		Cladosporium	18
		Paecilomyces lilacinus	89
		Penicillium	18
		Total	161
JAC-12	Hall - 4 th floor	Aspergillus sydowii	89
		Aspergillus ustus	18
		Cladosporium	71
		Penicillium	18
		yeasts	18
		Total	214
JAC-13	Hall - 4 th floor	Aspergillus nidulans	18
		Aspergillus sydowii	143
		Aspergillus ustus	71
		Cladosporium	143
		Penicillium	179
		Total	554
JAC-14	US Court of Appeals Courtroom - 4 th floor	Alternaria alternata	18
		Cladosporium	71
		Phoma	36
		sterile fungi	18
		yeasts	18
		Total	161
JAC-15	Room 306, systems - 3 rd floor	Acremonium	18
		Cladosporium	36
		Total	54

**JACKSONVILLE FLORIDA
JACKSONVILLE FEDERAL COURTHOUSE
FUNGAL AIR RESULTS**

Sample #	Location	Fungal/Bacteria ID	CFU/m ³
JAC-16	Courtroom #1, visitors gallery - 5 th floor	Cladosporium sterile fungi	107 18
		Total	125
		JAC-17	Courtroom #1, Attorney's desk - 5 th floor
JAC-18	Courtroom #1, Judge's bench - 5 th floor	Aspergillus nidulans Cladosporium Penicillium Total	18 125 18 161
JAC-19	Room 423A - 4 th floor	Aspergillus sydowii Aureobasidium pullulans Chaetomium globosum Cladosporium Penicillium Rhodotorula glutinis Total	18 18 18 89 18 18 179
JAC-20	Room 433 - 4 th floor	Aspergillus sydowii Aspergillus ustus Aspergillus versicolor Cladosporium Penicillium Total	179 339 18 232 54 821
JAC-21	Room 110, rear fill room	Alternaria alternata Basidiomycetes Cladosporium Total	18 36 54 107
JAC-22	Room 110, by water fountain	Cladosporium Penicillium sterile fungi Total	8 18 89

**JACKSONVILLE FLORIDA
JACKSONVILLE FEDERAL COURTHOUSE
FUNGAL AIR RESULTS**

Sample #	Location	Fungal/Bacteria ID	CFU/m ³		
JAC-23	Hall by room 128 - 1 st floor	Aspergillus ustus	18		
		Cladosporium	54		
		Scopulariopsis brevicaulis	18		
		Total	89		
JAC-24	Room 110, file sections by restrooms	Cladosporium	54		
		Penicillium	18		
		Yeasts	18		
		Total	89		
JAC-25	Room 110, by center, fire extinguisher	Basidiomycetes	36		
		Cladosporium	18		
		Penicillium	36		
		Phoma sterile fungi	18		
Total	125				
JAC-26	Room 110, by reception station	Aspergillus ustus	18		
		Aureobasidium pullulans	18		
		Botrytis cinerea	18		
		Cladosporium	18		
		Curvularia lunata	18		
		Penicillium	54		
		sterile fungi	18		
		Total	161		
		JAC-27	Room 110, hall by enclosed offices	Cladosporium	18
				Penicillium	18
Yeasts	18				
Total	54				
JAC-28	Room 110, Division Manager's reception	Cladosporium	89		
		Penicillium	54		
		Yeasts	36		
		Total	179		

**JACKSONVILLE FLORIDA
JACKSONVILLE FEDERAL COURTHOUSE
FUNGAL AIR RESULTS**

Sample #	Location	Fungal/Bacteria ID	CFU/m ³
JAC-29	Room 110, Interior office	Basidiomycetes	36
		Cladosporium	18
		Penicillium	18
		Pithomyces chartarum	18
		Total	89
JAC-30	Room 110, Division Manager's office	Acremonium strictum	18
		Cladosporium	71
		Penicillium	18
		sterile fungi	18
		Total	125
JAC-31	Room 110, public reception area	Cladosporium	36
		Rhodotorula glutinis	18
		Tritrachium sp	18
		Total	71
JAC-32	Public area, postal drop off and base - 1 st floor	Aspergillus sydowii	18
		Cladosporium	71
		Penicillium	54
		sterile fungi	18
		Total	161
JAC-33	Room off of 423A - 4 th floor	Aspergillus niger	18
		Aspergillus sydowii	71
		Aspergillus ustus	71
		Aspergillus versicolor	9
		Chaetomium globosum	27
		Cladosporium	107
		Penicillium	36
		Total	339

**JACKSONVILLE FLORIDA
JACKSONVILLE FEDERAL COURTHOUSE
FUNGAL AIR RESULTS**

Sample #	Location	Fungal/Bacteria ID	CFU/m ³		
JAC-34	Room 407, right side of room	Cladosporium	71		
		Curvularia lunata	18		
		Eurotium (Aspergillus) amstelodami	18		
		Penicillium	18		
		sterile fungi	18		
		yeasts	18		
		Total	161		
		Alternaria alternata	18		
		Aspergillus sydowii	36		
		Aspergillus ustus	18		
JAC-35	Room 407, Jury room, left side of room	Basidiomycetes	36		
		Cladosporium	107		
		Epicoccum nigrum	18		
		Penicillium	18		
		Pithomyces chartarum	18		
		Total	268		
		Basidiomycetes	71		
		Total	71		
		JAC-36	Suite 511 - Law Clerk's office	Aspergillus sydowii	18
				Cladosporium	36
yeasts	18				
Total	71				
Aspergillus niger	18				
JAC-37	Suite 511 - Judge's office	Penicillium	36		
		yeasts	18		
		Total	71		
		Cladosporium	18		
		Penicillium	18		
JAC-38	Room 336A	yeasts	18		
		Total	71		
		Cladosporium	36		
		Penicillium	18		
		yeasts	18		
JAC-39	Room 347	Cladosporium	36		
		Penicillium	18		
		Total	54		
		Cladosporium	18		
		Penicillium	18		

**JACKSONVILLE FLORIDA
JACKSONVILLE FEDERAL COURTHOUSE
FUNGAL AIR RESULTS**

Sample #	Location	Fungal/Bacteria ID	CFU/m ³
JAC-40	Room 340	Acremonium	18
		Aspergillus fumigatus	18
		Cladosporium	54
		Penicillium	36
		Total	125
JAC-41	Courtroom #4, visitor's area - 3 rd floor	Basidiomycetes	36
		Cladosporium	54
		Penicillium	18
		Total	107
JAC-42	Courtroom #4, Judge's bench - 3 rd floor	Cladosporium	54
		sterile fungi	18
		yeasts	18
		Total	89
JAC-43	Room 225 interior office	Cladosporium	18
		Nodulisporium himmuleum	18
		Pitheomyces chartarum	18
		sterile fungi	18
		Total	71
JAC-44	Room 250 - galley	Acremonium	18
		Aspergillus versicolor	18
		Cladosporium	125
		Epicoccum nigrum	36
		Penicillium	18
		Total	214
JAC-45	Room 218	Basidiomycetes	36
		Chaetomium globosum	18
		Cladosporium	54
		Penicillium	54
		Total	161
JAC-46	Room 210 - Deval Street side	Aspergillus glaucus	18
		Basidiomycetes	36
		Cladosporium	54
		Total	107

**JACKSONVILLE FLORIDA
JACKSONVILLE FEDERAL COURTHOUSE
FUNGAL AIR RESULTS**

Sample #	Location	Fungal/Bacteria ID	CFU/m ³
JAC-47	Room 210 - intake area	Acremonium	18
		Cladosporium	71
		Epicoccum nigrum	18
		Penicillium	18
		Total	125
JAC-48	Room 212	Aspergillus fumigatus	18
		Basidiomycetes	36
		Cladosporium	89
		Penicillium	18
		Pitthomyces chartarum	18
JAC-49	Room 227	yeasts	18
		Total	196
		Aspergillus fumigatus	18
		Aspergillus niger	18
		Aspergillus sydowii	18
JAC-50	Room 243 - reception	Penicillium	18
		Phoma	18
		yeasts	18
		Total	107
		Aspergillus fumigatus	36
JAC-51	Room 243- Manager's office	Cladosporium	54
		Penicillium	18
		sterile fungi	18
		Total	125
		Aspergillus sydowii	18
JAC-52	US Marshall's Warrent office, mezzanine	Aspergillus ustus	143
		Cladosporium	71
		Penicillium	161
		Total	393
		Basidiomycetes	36
JAC-53	US Marshall's reception area - 1 st floor	Cladosporium	36
		Phoma	18
		Total	89
		Aspergillus ustus	18
		Total	18

**OCCALA FLORIDA
MCCOLLUM FEDERAL COURTHOUSE
AIR ENDOTOXIN RESULTS**

Sample #	Location	Air Volume	EU/m ³
OCAEN-1	Clerk's Office - 3 rd floor	480	0.37
OCAEN-2	Court Room - 3 rd floor	480	0.13
OCAEN-3	Room, 2 nd floor	480	1.00
OCAEN-4	Exterior	480	0.66
OCAEN-5	Basement	480	0.29
OCAEN-6	Lobby by drinking fountain - 1 st floor	480	0.40
OCAEN-7	Social Security - 1 st floor	480	0.17
OCAEN-8	Field Blank	n/a	0.05

**OCALA FLORIDA
MCCOLLUM FEDERAL COURTHOUSE
AIR EXTERIOR RESULTS**

Sample #	Location	Fungal/Bacteria ID	CFU/m ³		
OCAEX-1	4/9/2001 Exterior - 11:15 a.m.	Basidiomycetes	143		
		Cladosporium	679		
		Curvularia lunata	18		
		Phoma	36		
		Sterile fungi	18		
		Yeasts	54		
		Total	946		
OCAEX-2	4/9/2001 Exterior 15:32 .	Alternaria alternata	18		
		Aspergillus fumigatus	54		
		Basidiomycetes	286		
		Botrytis cinerea	18		
		Cladosporium	679		
		Curvularia lunata	36		
		Penicillium	18		
		Phoma	89		
		sterile fungi	18		
		Yeasts	143		
				Total	1,357
		OCAEX-3	4/10/2001 Exterior 9:18 a.m.	Aspergillus fumigatus	36
				Basidiomycetes	107
Cladosporium	661				
Penicillium	71				
Phoma	36				
Rhizopus stolonifer	18				
sterile fungi	18				
Yeasts	36				
				Total	982
OCAEX-4	4/10/2001 Exterior 15:35			Alternaria alternata	36
		Aspergillus fumigatus	18		
		Aspergillus versicolor	18		
		Basidiomycetes	643		
		Cladosporium	786		
		Curvularia lunata	18		
		Fusarium	18		
		Nigrospora sphaerica	18		
		Penicillium	89		
		Yeasts	36		
				Total	1679

**OCALA FLORIDA
MCCOLLUM FEDERAL COURTHOUSE
FUNGAL AIR RESULTS**

Sample #	Location	Fungal/Bacteria ID	CFU/m ³
OCA-1	Clerk's office file _____	Basidiomycetes	36
		Cladosporium	18
		Total	54
OCA-2	Courtroom, Judge's bench - 3 rd floor	Cladosporium	18
		Total	18
OCA-3	Courtroom, Visitors gallery - 3 rd floor	yeasts	18
		Total	18
OCA-4	Room 250 - 2 nd floor	Basidiomycetes	36
		Cladosporium	54
		Phoma	18
		Rhodotorula glutinis	18
		yeasts	18
		Total	143
OCA-5	Probation intake - 2 nd floor	Cladosporium	54
		Curvularia lunata	18
		sterile fungi	18
Total	89		
OCA-6	Back office Probation - 2 nd floor	Cladosporium	36
		Curcularia lunata	18
		Penicillium	18
		sterile fungi	18
		Total	89
		Total	89
OCA-7	IRS Room 211 - 2 nd floor	Basidiomycetes	36
		Pithomyces chartarum	18
		sterile fungi	18
		Total	71
OCA-8	IRS Room 211, 2 nd street side	Basidiomycetes	36
		Cladosporium	18
		Total	54
OCA-9	US Marshall reception - 2 nd floor	NO GROWTH	<18
		sterile fungi	18
OCA-10	US Marshall back office - 2 nd floor	sterile fungi	18
		Total	18

**OCALA FLORIDA
MCCOLLUM FEDERAL COURTHOUSE
FUNGAL /SWAB RESULTS**

Sample #	Location	Fungal/Bacteria ID	CFU/m ²		
OCAW-44	Room 250 Baseboard	Aspergillus flavus	1,025		
		Rhodotorula glutinis yeasts	2,050		
		Total	93,275		
OCAW-45	Behind CSO window wallpaper	Alternaria alternata	500		
		Aspergillus fumigatus	200		
		Aspergillus ustus	500		
		Curvularia lunata	1,800		
		Ulocladium botrytis yeasts	200		
Total	5,400				
OCAW-46	Wood chair - Hearing room - 2 nd floor	Aureobasidium pullulans	20,500		
		Phoma	4,100		
		Rhodotorula glutinis yeasts	90,200		
		Total	86,100		
		Total	200,900		
OCAW-47	Wood chair - Attorney's/witness room - 2 nd floor	Aspergillus ustus	4,100		
		Aureobasidium pullulans	24,600		
		Epicoccum nigrum	12,300		
		Penicillium	4,100		
		Rhodotorula glutinis yeasts	24,600		
		Total	36,900		
		Total	106,600		
		OCAW-48	Wood chair - Attorney's/witness room - 2 nd floor	Acremonium strictum	200
				Paecilomyces variotii	100
				Penicillium	100
Rhodotorula glutinis sterile fungi	100				
Total	100				
Total	600				
OCAW-49	Black dust from vent - basement	Alternaria alternata	12,300		
		Aspergillus niger	8,200		
		Aspergillus ustus	12,300		
		Cladosporium	8,200		
		Fusarium	69,700		
		Penicillium	53,300		
		Yeasts	16,400		
		Total	180,400		

**OCALA FLORIDA
MCCOLLUM FEDERAL COURTHOUSE
FUNGAL AIR RESULTS**

Sample #	Location	Fungal/Bacteria ID	CFU/m ³
OCA-11	Reception Court clerk Room 337	Acremonium sp.	18
		Aspergillus fumigatus	18
		Cladosporium	36
		Paecilomyces lilacinus	18
		Total	89
OCA-12	Room 341 FBI Common hall	yeasts	18
		Total	18
OCA-13	Social security break room - Room 107	Aspergillus fumigatus	18
		Total	18
OCA-14	Social security - main open area	Penicillium	36
		Pithomyces chartarum	18
		Total	54
OCA-15	Social security center - 1 st floor	Basidiomycetes	36
		Beauveria bassiana	18
		Cladosporium	36
		Total	89
OCA-16	Social security, 3 rd Avenue side - 1 st floor	Basidiomycetes	36
		Cladosporium	36
OCA-17	Hall by room 321 - 3 rd floor	Total	71
		Cladosporium	36
OCA-18	Hall by room 226 - 2 nd floor	yeasts	18
		Total	54
OCA-19	Hall by rooms 111 & 113 - 1 st floor	Cladosporium	71
		Epicoccum nigrum	18
		Pithomyces chartarum	18
		sterile fungi	18
		Total	125
OCA-19	Hall by rooms 111 & 113 - 1 st floor	Alternaria alternata	18
		Aspergillus versicolor	18
		Beauveria	18
		Cladosporium	161
		Penicillium	18
		yeasts	436
Total	268		

**Ocala Florida
McCOLLUM FEDERAL COURTHOUSE
FUNGAL AIR RESULTS**

OCA-21	Basement by B14	Aspergillus fumigatus Cladosporium Epicoccum nigrum Penicillium sterile fungi Torulomyces lagena yeasts Total	54 89 18 18 36 18 18 18 250
OCA-22	CSO ----- - 1 st floor	Acremonium Aspergillus fumigatus Aspergillus sydowii Cladosporium Epicoccum nigrum Penicillium sterile fungi Total	18 18 18 89 18 18 54 232
OCA-23	CSO office - 1 st floor	Aspergillus fumigatus Cladosporium Penicillium sterile fungi Total	36 125 18 18 196
OCA-24	Room 116 - 1 st floor	Aureobasidium pullulans Cladosporium Curvularia Rhizopus stolonifer sterile fungi Total	18 89 18 18 18 161
OCA-25	Room 120 Back office - 1 st floor	Cladosporium Penicillium Rhizopus stolonifer Total	18 1,893 18 1,929
OCA-26	Judge's office, Room 330 - 3 rd floor	Aspergillus fumigatus Cladosporium Penicillium sterile fungi Total	71 18 18 18 125

**OCALA FLORIDA
MCCOLLUM FEDERAL COURTHOUSE
FUNGAL AIR RESULTS**

OCA-27	Judge's reception area Room 330 - 3 rd floor	Cladosporium Rhodotorula glutinis sterile fungi	18 18 18 54
OCA-28	Law Clerk Room 330 - 3 rd floor	Aspergillus fumigatus Penicillium Total	36 36 71
OCA-29	Judge's office - 3 rd floor	Aspergillus fumigatus Cladosporium Total	18 54 54
OCA-30	Judge's reception area - 3 rd floor	Beauveria Curvularia Penicillium Rhizopus stolonifer Total	18 18 36 18 89
OCA-31	Room 310 Law Clerk - 3 rd floor	Cladosporium Rhizopus stolonifer Total	54 18 71
OCA-32	Hearing Room, Judge's bench - 2 nd floor	Penicillium sterile fungi Total	18 18 36
OCA-33	Hearing Room, Visitor gallery - 2 nd floor	Aspergillus fumigatus Cladosporium Total	36 18 54
OCA-34	Hearing room area, kitchen area - 2 nd floor	Cladosporium Penicillium sterile fungi Tritirachium Wallemia sebi Total	18 18 18 18 18 89
OCA-35	Attorney/Client room - 2 nd floor	Cladosporium Penicillium Phoma Tritirachium Total	107 18 18 18 161

**ORLANDO FLORIDA
YOUNG FEDERAL COURTHOUSE
AIR ENDOTOXIN RESULTS**

Sample #	Location	Air Volume	EU/m ³
MCOEN-1	Southwest corner - 3 rd floor	480	1.8
MCOEN-2	3 rd floor	480	1.0
MCOEN-3	Probation, P. Westerman Office - 3 rd floor	480	0.51
CMOEN-3	Courtroom #1	652.5	0.20
CMOEN-4	Courtroom #4	544.0	0.11
CMOEN-5	Field Blank	N/A	0.04
CMOEN-6	Exterior	450.0	0.89
CMOEN-7	Basement Hall	544.0	0.07
OMCEN-8	By CSO checkpoint - 1 st floor	480	1.90
OMCEN-9	Inside air supply - 5 th floor	480	0.10
OMCEN-10	Judge's chambers, northeast corner - 6 th floor	480	0.09
OMCEN-11	Elevator lobby - 5 th floor	480	0.69
256050310	Reception area	360	0.78
256050311	Outside	360	0.91

**ORLANDO FLORIDA
YOUNG FEDERAL COURTHOUSE
VAC ENDOTOXIN RESULTS**

Sample #	Location	Weight used	EU/g
OMCV-1	Southwest corner - 3 rd floor	0.009	160,000
OMCV-2	Probation, Pat Westernman Office - 3 rd floor	0.027	120,000
OMCV-3	Courtroom #1, carpet - 6 th floor	0.033	6,300
OMCV-4	Courtroom #4, Judge's bench - 6 th floor	0.009	21,000
OMCV-6	Internal Supply Box - 4 th floor	0.059	430
OMCV-7	Judge's chambers - 6 th floor	0.020	45,000
OMCV-8	Social security reception area - 1 st floor	0.011	48,000
OMCV-9	Air leading from roof, AHU 6, Interior Insulation	0.030	57,000
OMCV-10		0.017	300,000
OMCV-11		0.027	1,700,000
OMCV-12		0.011	1,400
OMCV-13		0.020	33,000

**ORLANDO FLORIDA
YOUNG FEDERAL COURTHOUSE
FUNGAL EXTERIOR AIR RESULTS**

Sample #	Location	Fungal/Bacteria ID	CFU/m ³		
OMCEX-1	3/13/2001 Exterior - 9:47	<i>Alternaria alternata</i>	36		
		<i>Aspergillus fumigatus</i>	18		
		Basidiomycetes	71		
		<i>Cladosporium</i>	643		
		<i>Curvularia lunata</i>	18		
		<i>Stilbum</i>	18		
		yeasts	18		
	Total	821			
OMCEX-2	3/13/2001 Exterior - 15:49	<i>Alternaria alternata</i>	54		
		<i>Aureobasidium pullulans</i>	18		
		Basidiomycetes	36		
		<i>Cladosporium</i>	607		
		<i>Curvularia lunata</i>	18		
		<i>Penicillium</i>	18		
		Phoma	18		
		sterile fungi	18		
		Total	786		
		OMCEX-3	3/14/2001 Exterior - 9:35	<i>Alternaria alternata</i>	18
<i>Aspergillus candidus</i>	18				
Basidiomycetes	36				
<i>Cladosporium</i>	946				
<i>Penicillium</i>	18				
sterile fungi	18				
<i>Tritirachium</i>	18				
Total	1,071				
OMCEX-4	3/14/2001 Exterior - 13:35			<i>Alternaria alternata</i>	36
				Basidiomycetes	36
		<i>Botrytis cinerea</i>	18		
		<i>Cladosporium</i>	679		
		<i>Curvularia lunata</i>	36		
		<i>Penicillium</i>	18		
		<i>Tritirachium</i>	18		
		Total	839		

**ORLANDO FLORIDA
YOUNG FEDERAL COURTHOUSE
FUNGAL EXTERIOR AIR RESULTS**

Sample #	Location	Fungal/Bacteria ID	CFU/m ³
OMCEX-5	3/15/2001 - Exterior 10:25	Aureobasidium pullulans	54
		Cladosporium	3,000
		Epicoccum nigrum	107
		Fusarium	36
		Penicillium	18
		sterile fungi	18
		Trichoderma koningii	18
		Total	3,250
		Arthrinium phaeospermum	18
		Cladosporium	2,375
Curvularia lunata	18		
Epicoccum nigrum	18		
Fusarium	18		
Penicillium	125		
Phoma	18		
Rhodotorula glutinis	18		
sterile fungi	18		
yeasts	18		
Total	2,643		
OMCEX-7	3/16/2001 - Exterior 8:35	Aspergillus niger	18
		Cladosporium	3,107
		Curvularia lunata	18
		Epicoccum nigrum	71
		Fusarium	36
		Penicillium	54
		sterile fungi	18
		Total	3,321
		Cladosporium	3,696
		Curvularia lunata	36
Epicoccum nigrum	18		
Fusarium	36		
Penicillium	36		
Phizopus stolonifer	18		
sterile fungi	18		
Total	3,857		
OMCEX-8	3/16/2001 Exterior 14:30		

**ORLANDO FLORIDA
YOUNG FEDERAL COURTHOUSE
FUNGAL VAC RESULTS**

Sample #	Location	Fungal/Bacteria ID	CFU/m ³
256050320	Reception area	Alternaria alternata	2,000
		Aureobasidium pullulans	3,333
256050321	Reception area	Cladosporium	10,667
		Curvularia lunata	667
256050321	Reception area	Epicoccum nigrum	10,667
		Nigrospora sphaerica	1,333
256050321	Reception area	Penicillium	667
		Phoma	2,667
256050321	Reception area	Pithomyces chartarum	2,667
		Rhodotorula glutinis	1,333
256050321	Reception area	Sporobolomyces salmonicolor	8,000
		sterile fungi	667
256050321	Reception area	yeasts	12,667
		Total	57,333
256050320	Reception area	Bacillus	246,000
		Flavobacterium	246,000
256050321	Reception area	gram negative bacteria and others	191,333
		Methylobacterium	82,000
256050321	Reception area	Pseudomonas sp. non aeruginosa	246,000
		Rhodococcus	27,333
256050321	Reception area	Shewanella putrefaciens	1,148,000
		Staphylococcus	164,000
256050321	Reception area	Total	2,350,667
		Total	2,350,667
256050320	Reception area	Alternaria alternata	5,714
		Chaetomium globosum	2,857
256050321	Reception area	Cladosporium	14,286
		Curvularia lunata	11,429
256050321	Reception area	Epicoccum nigrum	14,429
		Nigrospora sphaerica	8,571
256050321	Reception area	sterile fungi	5,714
		yeasts	2,857
256050321	Reception area	Total	14,286
		Total	65,714
256050320	Reception area	Bacillus	57,143
		Flavobacterium	11,429
256050321	Reception area	gram negative bacteria and others	31,429
		Pseudomonas sp. non aeruginosa	17,143
256050321	Reception area	Shewanella putrefaciens	65,714
		Staphylococcus	28,571
256050321	Reception area	Total	211,429
		Total	211,429

**ORLANDO FLORIDA
YOUNG FEDERAL COURTHOUSE
FUNGAL AIR RESULTS**

Sample #	Location	Fungal/Bacteria ID	CFU/m ³
2560503-01	Marshall's office file room - 5 th floor	Cladosporium	107
		Phoma	18
		Total	125
2560503-02	US Marshall's office reception area - 5 th floor	Cladosporium	107
		Total	107
2560503-03	US Marshall's office cell block - 5 th floor	Yeasts	54
		Total	54
2560503-04	US Marshall's office cubical area - 5 th floor	Cladosporium	18
		Yeasts	464
		Total	482
2560503-05	US Marshall's office gym - 5 th floor	Aspergillus ustus	18
		Chaetomium globosum	181
		Pithomyces chartarum	18
		Total	54
2560503-06	Outside	Alternaria alternata	18
		Aureobasidium pullulans	18
		Basidiomycetes	71
		Cladosporium	2,268
		Epicoccum nigrum	36
		Penicillium	36
		Phoma	71
		Yeasts	71
			36
			Total

**ORLANDO FLORIDA
YOUNG FEDERAL COURTHOUSE
FUNGAL /SWAB RESULTS**

Sample #	Location	Fungal/Bacteria ID	CFU/in ²
OMCW-1	Coat tree, southwest corner - 3 rd floor	Cladosporium Rhodotorula glutinis Total	100 200 300
OMCW-2	Shelf, Court clerk's file room	Aspergillus ustus Penicillium Syncephalastrum racemosum Total	200 100 100 400
OMCW-3	VAC, insulation south window - 3 rd floor	NO GROWTH	<40,000
OMCW-4	Courtroom #1, shelf behind bench - 6 th floor	Cladosporium Curvularia lunata Penicillium Phodotorula glutinis yeasts Total	25 25 25 25 25 125
OMCW-5	Courtroom #1, metal connector, flag - 6 th floor	NO GROWTH	<25
OMCW-6	Courtroom #4, wall - 6 th floor	NO GROWTH	<25
OMCW-7	Courtroom #4, Attorney table under glass - 6 th floor	NO GROWTH	<25
OMCW-8	Water damaged ceiling tile - 6 th floor	NO GROWTH	<25
OMCW-9	Water damaged tile - 6 th floor	NO GROWTH	<25
OMCW-10	Air supply vent - 6 th floor	NO GROWTH	<25
OMCW-11	Water damaged ceiling tile - 6 th floor	NO GROWTH	<25
OMCW-12	Ambient desk dust, US Attorney's office - 2 nd floor	Aureobasidium pullulans Exophiala jeanselmei yeasts Total	15 75 425 650
OMCW-14	Courtroom #6, Attorney table, under glass - 5 th floor	NO GROWTH	<25

**ORLANDO FLORIDA
YOUNG FEDERAL COURTHOUSE
FUNGAL /SWAB RESULTS**

Sample #	Location	Fungal/Bacteria ID	CFU/m ²
OMCW-16	Inside AHU-10	Aspergillus ustus	20,500
		Cladosporium	8,200
		Fusarium	12,300
		Penicillium	299,300
		Rhodotorula glutinis Yeasts	442,800 213,200
Total	996,300		
OMCW-17	Inside AHU-5	Acremonium rutilum	8,200
		Aspergillus sydowii	12,300
		Aspergillus versicolor	69,700
		Cladosporium	32,800
		Paecilomyces lilacinus Penicillium Stachybotrys chartarum Total	4,100 45,100 200,900 373,100
OMCW-18	Inside AHU-6	Epicoccum nigrum	4,100
		Fusarium	303,400
		Rhodotorula glutinis	4,100
		Total	311,600
OMCW-19	Judge's chambers inside permeant vent	Acremonium kilense	77,900
		Aspergillus ustus	1,025
		Cladosporium	1,025
		Curvularia lunata	1,025
		Rhodotorula glutinis Yeasts	20,500 3,075
		Total	104,550
		OMCW-21	Social security reception area - 1 st floor
Aureobasidium pullulans	10,250		
Cladosporium	9,225		
Epicoccum nigrum	2,050		
Penicillium	1,025		
Rhodotorula glutinis	1,025		
Total	25,625		

**ORLANDO FLORIDA
YOUNG FEDERAL COURTHOUSE
FUNGAL /SWAB RESULTS**

Sample #	Location	Fungal/Bacteria ID	CFU/in ²
OMCW-30	Library diffuser	Aspergillus ustus Cladosporium Paecilomyces lilacinus Penicillium Total	200 200 400 500 1,300
OMCW-31	Library conference	NO GROWTH	<100

**ORLANDO FLORIDA
YOUNG FEDERAL COURTHOUSE
FUNGAL /SWAB RESULTS**

Sample #	Location	Fungal/Bacteria ID	CFU/in ²
256050330	Judge Ann Conway's desk bottom area	Aspergillus sydowii Chaetorium globosum Total	8,200 557,600 565,800
256050331	Judge Ann Conway's rug pad top - 6 th floor	Bacteria NO GOWTH Aspergillus ustus Chaetorium globosum Total Acinetobacter gram negative bacteria and others Methylobacterium Stenotrophomonas maltophilia Total	<50 18,450 32,800 51,250 1,650 2,350 700 7,350 12,050

**ORLANDO FLORIDA
YOUNG FEDERAL COURTHOUSE
BULK DUST RESULTS**

Sample #	Location	Dust Component	CFU/g
OMCW-13	Supply box - air, Internal Insulation - 3 rd floor	Chaetomium globosum	2,564
		Cladosporium	3,846
		Penicillium	3,846
		Total	10,256
OMCW-15	AHU 6, insulation	Aspergillus ustus	909
		Chaetomium globosum	1,818
		Cladosporium	1,818
		Exophiala jeanselmei	1,818
		Penicillium	1,818
		sterile fungi	909
Total	9,091		
OMCW-20	Social security, under permeant vent	Aspergillus niger	44,444
		Penicillium	1,013,333
		sterile fungi	8,889
		Syncephalastrum racemosum	35,556
		Total	1,102,222
OMCW-22	Judge's chambers, reception Floor - 6 th floor	Alternaria alternata	512,500
		Cladosporium	922,500
		Penicillium	205,000
		sterile fungi	205,000
Total	1,845,000		
OMCW-23	Judge's chambers, under refrigerator - 6 th floor	Aspergillus ustus	29,676,190
		Cladosporium	20,304,760
		Penicillium	20,304,760
		Syncephalastrum racemosum	3,904,762
		Tritirachium	4,685,715
		Total	78,876,190
OMCW-24	Judge's chambers, under toilet leak - 5 th floor	Aspergillus ustus	2,733,334
		Chaetomium globosum	109,333
		Cladosporium	218,667
		Epicoccum nigrum	109,333
		Penicillium	1,202,667
		sterile fungi	109,333
		yeasts	437,333
		Total	4,920,000

ORLANDO FLORIDA
YOUNG FEDERAL COURTHOUSE
DUST CHARACTERIZATION RESULTS

Sample #	Location	Dust Component	CFU/g
OMC DC-1	Vac Dust from AHU #6	Carbonaceous particles fiber glass fungal matter insect parts miscellaneous	25 70 Trace Trace 5

**ORLANDO FLORIDA
YOUNG FEDERAL COURTHOUSE
FUNGAL AIR RESULTS**

Sample #	Location	Fungal/Bacteria ID	CFU/m ³
OMC-1	Center office, south side by window - 3 rd floor	Acremonium strictum	36
		Aspergillus fumigatus	36
		Cladosporium	536
		Curvularia lunata	36
		Epicoccum nigrum	36
		Penicillium	36
		Phoma	71
		sterile fungi	36
		Total	821
		OMC-2	Southwest corner - 3 rd floor
OMC-3	Clerk/Human Resources, southeast corner - 3 rd floor	Acremonium strictum	36
		Alternaria alternata	71
		Aphanocladium sp.	36
		Cladosporium	500
		Phoma	36
		Rhinocladiella sp.	36
		Sterile fungi	71
Total	786		
OMC-4	West window, clerk's office - 3 rd floor	Basidiomycetes	71
		Cladosporium	357
		Phoma	143
		sterile fungi	36
		yeasts	36
Total	643		
OMC-5	Northwest corner - 3 rd floor	Alternaria alternata	36
		Basidiomycetes	71
		Cladosporium	250
		Penicillium	36
		Phoma	71
		Total	464

**ORLANDO FLORIDA
YOUNG FEDERAL COURTHOUSE
FUNGAL AIR RESULTS**

OMC-6	Court Clerk's intake window - 3 rd floor	Cladosporium Penicillium Phoma sterile fungi Total	36 36 36 36 143
OMC-7	Court Clerk, file room - 3 rd floor	Cladosporium Tritirachium Total	36 36 71
OMC-8	Jury Assembly, 3 rd floor	Cladosporium Phoma Pithomyces chartarum Total	71 36 36 143
OMC-9	Probation, east window - 3 rd floor	Basidiomycetes Cladosporium Oidiodendron griseum sterile fungi Torulomyces lagena Total	71 71 36 36 36 250
OMC-10	Probation by copy room - 3 rd floor	Alternaria alternata Cladosporium Penicillium Phoma Tritirachium Total	36 321 36 36 36 464
OMS-11	Probation, northeast corner - 3 rd floor	Alternaria alternata Basidiomycetes Cladosporium Eurotium (Aspergillus) amstelodami Penicillium yeasts Total	36 71 36 36 36 71 286
OMS-12	Score office, Room 455 - 4 th floor	Aspergillus niger Aureobasidium pullulans Cladosporium Neurospora sitophila Penicillium Phoma sterile fungi Total	12 12 107 12 24 12 12 190

**ORLANDO FLORIDA
YOUNG FEDERAL COURTHOUSE
FUNGAL AIR RESULTS**

Sample #	Location	Fungal/Bacteria ID	CFU/m ³
OMS-13	Outside women's room, southeast corridor - 4 th floor	Aureobasidium pullulans	18
		Chrysosporium pannorum	18
		Cladosporium	36
		Neurospora sitophila	18
		Penicillium	18
Total	107		
OMS-14	Cafeteria - 4 th floor	Cladosporium	143
		Neurospora sitophila	36
		Penicillium	36
		Total	214
OMS-15	Room 410, Probation, far north office - 4 th floor	Cladosporium	18
		Total	18
OMS-16	Room 410, Probation hall - 4 th floor	Aspergillus fumigatus	36
		Basidiomycetes	71
		Cladosporium	36
		Phoma	36
		Total	179
OMS-17	Room 41-, Probation, Secretary cubical area - 4 th floor	Chrysosporium pannorum	36
		Cladosporium	107
		Penicillium	71
		sterile fungi	36
		Total	250
OMS-18	Room 410, Probation, office next to south exit - 4 th floor	Aspergillus sydowii	36
		Cladosporium	107
		Rhinoctadiella sp.	36
		Sterile fungi	36
		yeasts	607
		Total	821
OMS-19	Room 410, Probation, southwest corner office - 4 th floor	Cladosporium	71
		Neurospora sitophila	36
		Penicillium	36
		Total	143
OMS-20	Support facility, office open space - 4 th floor	NO GROWTH	<36

**ORLANDO FLORIDA
YOUNG FEDERAL COURTHOUSE
FUNGAL AIR RESULTS**

Sample #	Location	Fungal/Bacteria ID	CFU/m ³
OMS-21	Corridor by freight elevator - 4 th floor	Cladosporium	36
		Neurospora sitophila	36
		Total	71
OMS-22	US Attorney office, docketing office, center west of floor - 2 nd floor	Basidiomycetes	286
		Cladosporium	179
		Total	464
OMS-23	US Attorney office, hall outside women's room - 2 nd floor	Basidiomycetes	71
		Cladosporium	71
		Pithomyces chartarum	36
		Rhodotorula glutinis	36
		Total	214
OMS-24	US Attorney offices, northwest corner, 2 nd floor	Basidiomycetes	71
		Cladosporium	71
		Total	143
OMS-25	US Attorney office, northeast corner office, 2 nd floor	sterile fungi	36
		yeasts	786
		Total	821
OMC-26	Courtroom #1 - 6 th floor	Cladosporium	36
		yeasts	36
		Total	71
OMC-27	West hall by central library - 6 th floor	Basidiomycetes	36
		Cladosporium	36
		Rhodotorula glutinis	18
		yeasts	625
		Total	714
OMC-28	Courtroom #2 - 6 th floor	Aureobasidium pullulans	18
		Cladosporium	36
		Penicillium	18
		Total	71
OMC-29	Courtroom #3 - 6 th floor	Acremonium strictum	18
		Basidiomycetes	36
		Cladosporium	71
		Total	125

**ORLANDO FLORIDA
YOUNG FEDERAL COURTHOUSE
FUNGAL AIR RESULTS**

Sample #	Location	Fungal/Bacteria ID	CFU/m ³
OMC-30	Courtroom #4 gallery - 6 th floor	Aspergillus fumigatus	18
		Cladosporium sterile fungi	18
		Total	54
OMC-31	Courtroom #4, Judge's bench - 6 th floor	Alternaria alternata	18
		Cladosporium	54
		Hyalodendron sp.	18
		Penicillium	18
		Total	107
OMC-32	CSO post, elevator lobby - 6 th floor	Cladosporium	54
		Penicillium	18
		Total	71
OMC-33	US Attorney's office, center of exit corridor - 2 nd floor	Acremonium strictum	18
		Cladosporium sterile fungi	18
		yeasts	36
		Total	89
		Cladosporium Neurospora sitophila	89
OMC-34	US Attorney's office, southeast corner - 2 nd floor	Total	107
		Total	107
OMC-35	US Attorney's office, library - 2 nd floor	Cladosporium	89
		Total	89
		Total	89
OMC-36	US Attorney's office, southwest corner - 2 nd floor	Cladosporium yeasts	71
		Total	36
		Total	107
OMC-37	US Attorney's office by freight elevator, northwest corner - 2 nd floor	Acremonium strictum	18
		Cladosporium	18
		Total	36
OMC-38	US Attorney's office, training room - 2 nd floor	Cladosporium yeasts	71
		Total	18
		Total	89

**ORLANDO FLORIDA
YOUNG FEDERAL COURTHOUSE
FUNGAL AIR RESULTS**

Sample #	Location	Fungal/Bacteria ID	CFU/m ³
OMC-39	CSO front door, check point - 1 st floor	Cladosporium	214
		sterile fungi	18
		Tritirachium	18
		Total	250
OMC-40	Social security reception - 1 st floor	Cladosporium	36
		Curvularia lunata	36
		Epicoccum nigrum	18
		sterile fungi	18
		Tritirachium	18
Total	125		
OMC-41	CSO Security office - 1 st floor	Acremonium strictum	18
		Cladosporium	107
		Epicoccum nigrum	18
		Total	143
OMC-42	Employees entrance - 1 st floor	Cladosporium	911
		Curvularia lunata	36
		Fusarium oxysporum	18
		Penicillium	18
		sterile fungi	18
		Total	1,000
OMC-43	Courtroom #5, Judge's bench - 5 th floor	Cladosporium	625
		Penicillium	18
		Total	643
OMC-44	Courtroom #7, jury box - 5 th floor	Cladosporium	304
		sterile fungi	18
		yeasts	36
		Total	357
OMC-45	Courtroom #6, window - 5 th floor	Alternaria alternata	54
		Aureobasidium pullulans	18
		Basidiomycetes	36
		Cladosporium	1,750
		Curvularia lunata	18
		Fusarium solani	36
		Penicillium	54
		sterile fungi	18
		Total	1,982

**ORLANDO FLORIDA
YOUNG FEDERAL COURTHOUSE
FUNGAL AIR RESULTS**

Sample #	Location	Fungal/Bacteria ID	CFU/m ³		
OMC-46	Judge's chambers, northeast corner - 6 th floor	Cladosporium	107		
		sterile fungi	18		
		yeasts	17		
		Total	143		
OMC-47	Judge's chambers, east window - 6 th floor	Cladosporium	18		
		Tritrachium	18		
		Total	36		
OMC-48	Judge's chambers, southeast corner - 6 th floor	Cladosporium	36		
		Total	36		
OMC-49	Judge's chambers, east window - 6 th floor	Cladosporium	36		
		Tritrachium	18		
		Total	54		
OMC-50	Ground floor, Mechanical room	Cladosporium	2,464		
		Curvularia	18		
		Epicoccum nigrum	54		
		Penicillium	54		
		Phoma	18		
		sterile fungi	18		
		Total	2,625		
		OMC-51	Air handling room - roof	Aureobasidium pullulans	18
				Cladosporium	321
				Fusarium	18
Penicillium	18				
yeasts	18				
Total	393				
OMC-52	Judge's chambers, southwest corner, reception - 6 th floor			Aspergillus ustus	1,143
		Chaetomium globosum	161		
		Cladosporium	375		
		Penicillium	18		
		Syncephalastrum racemosum	36		
		Total	1,732		

**ORLANDO FLORIDA
YOUNG FEDERAL COURTHOUSE
FUNGAL AIR RESULTS**

Sample #	Location	Fungal/Bacteria ID	CFU/m ³
OMC-53	Library conference, southwest corner - 6 th floor	Aspergillus ustus	1,018
		Chaetomium globosum	125
		Cladosporium	518
		sterile fungi	18
		Syncephalastrum racemosum	71
		Total	1,750
OMC-54	Judge's chambers, southeast corner - 5 th floor	Chaetomium globosum	18
		Cladosporium	71
		Total	89
OMC-55	Reception area, southeast corner - 5 th floor	Cladosporium	179
		Phoma	54
		Total	232

**ORLANDO FLORIDA
YOUNG FEDERAL COURTHOUSE
AMBIENT AIR RESULTS**

Sample #	Location	Results - s/mm ²	Results - s/cc
256031401	Elevator lobby - 6 th floor	<19.2	<0.0040
256031402	Southwest area under renovation - 6 th floor	<19.2	<0.0040
256031403	Courtroom #1 - 6 th floor	<19.2	<0.0043
256031404	Courtroom #2 - 6 th floor	<19.2	<0.0041
256031405	Courtroom #3 - 6 th floor	<19.2	<0.0042
256031406	Judge's chambers, reception area - 5 th floor	<15.4	<0.0045
256031407	Hall outside Courtroom #6 - 5 th floor	<15.4	<0.0048
256031408	Courtroom #6 - 5 th floor	<15.4	<0.0048
256031409	South corridor - 5 th floor	<15.4	<0.0048
2560314010	Elevator lobby - 5 th floor	<15.4	<0.0048
2560314011	Cafeteria - 4 th floor	<19.2	<0.0039
2560314012	Southwest corridor - 4 th floor	<19.2	<0.0039
2560314013	Room 410, Probation hall - 4 th floor	<19.2	<0.0039
2560314014	Hall by freight elevator - 4 th floor	<19.2	<0.0040
2560314015	Support facility office, open space - 4 th floor	<19.2	<0.0040
2560314016	Elevator lobby - 3 rd floor	<19.2	<0.0041
2560314017	Southwest corner - 3 rd floor	<19.2	<0.0041
2560314018	Probation, northeast corner - 3 rd floor	<19.2	<0.0041
2560314019	Room 303, reception area - 3 rd floor	<19.2	<0.0041
2560314020	Office - 3 rd floor	<19.2	<0.0040
2560314021	Field Blank		
2560314022	Field Blank		

**ORLANDO FLORIDA
YOUNG FEDERAL COURTHOUSE
AMBIENT AIR RESULTS**

Sample #	Location	Results - s/mm ²	Results - s/cc
256031501	US Attorney's office ^{os} , center of east corridor - 2 nd floor	<19.2	<0.0041
256031502	US Attorney's office, southeast corner - 2 nd floor	<19.2	<0.0041
256031503	US Attorney's office, southwest corner - 2 nd floor	<19.2	<0.0042
256031504	US Attorney's office by freight elevator - 2 nd floor	<19.2	<0.0042
256031505	US Attorney's office, training room - 2 nd floor	<19.2	<0.0042
256031506	Employee's entrance - 1 st floor	<19.2	<0.0042
256031507	Social security reception area - 1 st floor	<19.2	<0.0042
256031508	West corridor - 1 st floor	<19.2	<0.0042
256031509	South corridor - 1 st floor	<19.2	<0.0042
2560315010	Corridor by freight elevator - 1 st floor	<19.2	<0.0042
2560315011	Elevator lobby - basement	<19.2	<0.0041
2560315012	Mechanical equipment room by entrance - basement	<19.2	<0.0041
2560315013	Mechanical equipment room, southwest corner - basement	<19.2	<0.0041
2560315014	Southeast corridor - basement	<19.2	<0.0041
2560315015	North corridor - basement	<19.2	<0.0041



**TAMPA FLORIDA
SAM GIBBONS COURTHOUSE
AIR ENDOTOXIN RESULTS**

Sample #	Location	Air Volume	EU/m ³
TRAPEN-1	CSO Break Area - 1 st floor	480	0.32
TRAPEN-2	Dock area - 1 st floor	480	1.70
TRAPEN-3	Judge's Office 11A - 11 th floor	480	0.34
TRAPEN-4	Clerk's Office, east wing - 22 nd floor	480	0.27
TRAPEN-5	Clerk's Intake Office - 22 nd floor	480	0.26
TRAPEN-6	Systems Room - 3 rd floor	480	0.63
TRAPEN-7	Law Clerk's Office 10B - 10 th floor	472	0.24
TRAPEN-8	Field Blank	N/A	<0.025
TRAPEN-9	Exterior	960	0.17
TRAPEN-10	Jury Clerk's Room	488	0.28
TRAPEN-11	Library, east window - 6 th floor	492	0.32
TRAPEN-12	Library, southwest corner - 6 th floor	488	2.90
TRAPEN-13	Hall, 8A - 8 th floor	480	0.39
TRAPEN-14	Bankruptcy Court Lobby - 5 th floor	480	0.18
TRAPEN-15	Open Area, northeast corner - 5 th floor	480	0.16
TRAPEN-16	Judge's Office - 17 th floor	584	0.19
TRAPEN-17	17 th floor	564	0.11
TRAPEN-18	Judge's Office - 17 th floor	628	0.08
TRAPEN-19	Judge's Reception - 17 th floor	560	0.07
TRAPEN-20	Judge's Hall - 9 th floor	620	<0.04

**TAMPA FLORIDA
SAM GIBBONS COURTHOUSE
AIR ENDOTOXIN RESULTS**

Sample #	Location	Air Volume	EU/m ³
TRAPEN-21	New Clerk's Office by window - 16 th floor	480	0.41
TRAPEN-22	East side window - 16 th floor	480	0.37
TRAPEN-23	Mechanical Room by AHU 16A - 16 th floor	364	1.90
TRAPEN-24	Hall by AHU - 4 th floor	480	0.09
TRAPEN-25	Storage area, east window - 7 th floor	480	0.15
TRAPEN-26	Elevator lobby - 10 th floor	540	0.15
TRAPEN-27	West window - 11 th floor	480	0.25
TRAPEN-28	Attorney Conference Room, 12B - 12 th floor	480	0.31
TRAPEN-29	South window - 13 th floor	480	0.22
TRAPEN-30	AHU, 14A - 14 th floor	480	0.55
TRAPEN-31	Clerk's intake lobby - 7 th floor	480	0.26
TRAPEN-32	West window - 15 th floor	480	0.31
TRAPEN-33	Attorney's Conference Room, 8B - 8 th floor	480	0.18

**TAMPA FLORIDA
SAM GIBBONS COURTHOUSE
VAC ENDOTOXIN RESULTS**

Sample #	Location	Weight used	EU/g
TPAV-1	Judge's Office - 17 th floor	0.006	11,000
TPAV-2	Law Clerk's Office - 17 th floor	0.016	9,500
TPAV-3	Clerk's Office - 2 nd floor	0.012	11,000
TPAV-4	CSO Break Room - 1 st floor	0.001	28,000
TPAV-5	Hall, west window - 3 rd floor	0.009	18,000
TPAV-6	Hall by AFU, US Marshall's Office - 4 th floor	0.001	16,000
TPAV-7	Open area by east window - 5 th floor	0.012	23,000
TPAV-8	Library, by east window - 6 th floor	0.0001	66,000
TPAV-9	Open area by AHU - 7 th floor	0.002	68,000
TPAV-10	Judge's Hall by AHU - 9 th floor	0.014	44,000
TPAV-11	Attorney's Conference Room - 10 th floor	.012	42,000
TPAV-12	Elevator Lobby - 11 th floor	.017	15,000
TPAV-13	12A Hall - 12 th floor	.018	41,000
TPAV-14	West window - 13 th floor	.001	23,000
TPAV-15	14B Hall by AHU - 14 th floor	.011	32,000
TPAV-16	South window - 15 th floor	.013	14,000
TPAV-17	Clerk's Office, by window - 16 th floor	.007	38,000
TPAV-18	Clerk's Office, east window - 16 th floor	.010	140,000
TPAV-19	Clerk's Office, north window - 16 th floor	.005	33,000
TPAV-20	Clerk's Office by Unisex Bathroom - 2 nd floor	.013	61,000

**TAMPA FLORIDA
SAM GIBBONS COURTHOUSE
FUNGAL EXTERIOR AIR RESULTS**

Sample #	Location	Fungal/Bacteria ID	CFU/m ³
TPAEX-1	Exterior 2/14/01 - 9:22 a.m.	Alternaria alternata	36
		Basidiomycetes	71
		Cladosporium	3,107
		Epicoccum nigrum	71
		Fusarium	36
		Penicillium	71
		Pithomyces chartarum	36
		Sterile fungi	36
		Total	3,464
TPAEX-2	Exterior 2/14/01 - 4:25 p.m.	Basidiomycetes	71
		Cladosporium	2,286
		Epicoccum nigrum	36
		Phoma	36
		Pithomyces chartarum	71
		sterile fungi	36
		Total	2,536
TPAEX-3	Exterior 2/15/01 - 8:48 a.m.	Alternaria alternata	71
		Aspergillus niger	36
		Cladosporium	3,321
		Curvularia	36
		Emericella (Aspergillus) nidulans	36
		Epicoccum nigrum	107
		Penicillium	71
		Phoma	71
		Rhodotorula glutinis	36
		Total	3,786
TPAEX-4	Exterior 2/15/01 - 3:47 p.m.	Alternaria alternata	107
		Cladosporium	929
		Curvularia	36
		Epicoccum nigrum	321
		Fusarium	36
		Penicillium	71
		Pithomyces chartarum	36
		sterile fungi	36
		Total	1,571

**TAMPA FLORIDA
SAM GIBBONS COURTHOUSE
FUNGAL EXTERIOR AIR RESULTS**

Sample #	Location	Fungal/Bacteria ID	CFU/m ³		
TPAEX-5	2/16/2001 - Exterior 8:56 a.m.	Cladosporium	36		
		Total	36		
TPAEX-6	2/16/2001 - Exterior 4:07 p.m.	Acremonium strictum	36		
		Alternaria alternata	36		
		Cladosporium	1,107		
		Curvularia lunata	179		
		Penicillium	71		
		sterile fungi	36		
		Tritirachium	71		
		Total	1,536		
		TPAEX-7	2/19/2001 - Exterior 9:17 a.m.	Acremonium furcatum	71
				Cladosporium	5,500
Curvularia lunata	107				
Nigrospora sphaerica	71				
Penicillium	107				
sterile fungi	36				
yeasts	71				
Total	5,964				
TPAEX-8	2/19/2001 Exterior 2:46 p.m.			Alternaria alternata	71
				Basidiomycetes	71
		Cladosporium	5,893		
		Curvularia lunata	107		
		Pithomyces chartarum	71		
		Total	6,214		
		TPAEX-9	2/20/2001 Exterior 8:48 a.m.	Acremonium furcatum	71
				Basidiomycetes	71
				Cladosporium	1,536
				Fusarium	36
Nigrospora sphaerica	71				
Total	1,786				
TPAEX-10	2/20/2001 Exterior 4:15 p.m.			Alternaria alternata	36
				Basidiomycetes	71
				Cladosporium	1,000
				Curvularia lunata	107
		Penicillium	36		
		sterile fungi	36		
		Total	1,286		

**TAMPA FLORIDA
SAM GIBBONS COURTHOUSE
FUNGAL EXTERIOR AIR RESULTS**

Sample #	Location	Fungal/Bacteria ID	CFU/m ³
TPAEX-11	2/21/2001 Exterior 9:35 a.m.	Acremonium furcatum	71
		Basidiomycetes	71
		Cladosporium	4,500
		Total	4,643
TPAEX-12	2/21/2001 Exterior 3:49 p.m.	Basidiomycetes	71
		Cladosporium	1,143
		Curvularia lunata	71
		Exophiala jeanselmei	36
		sterile fungi	36
		Total	1,357
TPAEX-13	2/22/2001 Exterior 8:47 a.m.	Aureobasidium pullulans	36
		Total	36
TPAEX-14	2/22/2001 Exterior 2:32 p.m.	Cladosporium	107
		Total	107
TPAEX-15	2/23/2001 Exterior 10:24 a.m.	Cladosporium	36
		Total	36
TPAEX-16	2/23/2001 Exterior 3:06 p.m.	Cladosporium	36
		Total	36
TPAEX-17	2/26/2001 Exterior 10:10 a.m.	Cladosporium	36
		Total	36
TPAEX-18	2/26/2001 Exterior 2:49 p.m.	Cladosporium	36
		Penicillium	36
		Total	71
TPAEX-19	Exterior 2/27/01 - 8:54 a.m.	Cladosporium	321
		Fusarium	36
		Total	357
TPAEX-20	Exterior 2/27/01 - 15:23	Penicillium	71
		Total	71
TPAEX-21	Exterior 2/28/01 - 09:13	Cladosporium	71
		Curvularia lunata	36
		Total	107

**TAMPA FLORIDA
SAM GIBBONS COURTHOUSE
FUNGAL EXTERIOR AIR RESULTS**

Sample #	Location	Fungal/Bacteria ID	CFU/m ³
TPAEX-22	Exterior 2/28/01 - 16:05	Cladosporium Total	36 36
TPAEX-23	Exterior 3/1/01 - 10:10	Cladosporium yeasts Total	36 36 72
TPAEX-24	Exterior 3/1/01 - 14:50	yeasts Total	36 36
TPAEX-26	Exterior 3/2/01 - 15:15	Cladosporium Total	107 107

**TAMPA FLORIDA
SAM GIBBONS COURTHOUSE
FUNGAL /SWAB RESULTS**

Sample #	Location	Fungal/Bacteria ID	CFU/m ²
TPAW-1	Room 627 - Library Book Rack - 6 th floor	NO GROWTH	<100
TPAW-2	Room 320 - Behind Rear corner ice _____, 3 rd floor	Phoma Total	700 700
TPAW-3	Judges's office - wall above entrance - 17 th floor	Aureobasidium pullulans Cladosporium Epicoccum nigrum Nigrospora sphaerica yeasts Total	23,800 3,100 1,900 200 7,400 36,400
TPAW-4	Room 244 Supply - 2 nd floor	NO GROWTH	<25
TPAW-5	Room 353 Supply - 3 rd floor	NO GROWTH	<25
TPAW-6	Supply - 4 th floor	Aureobasidium pullulans Cladosporium Total	300 400 700
TPAW-7	Horizontal Pipe off of AHU 16A - 16 th floor	Acremonium strictum Phoma Rhodotorula glutinis yeasts Total	53,300 4,100 8,200 4,100 69,700
TPAW-8	Vertical pipe off of AHU 16A - 16 th floor	NO GROWTH	<100
TPAW-9	Supply off AHU 16A - 16 th floor	Chaetomium sp. Total	400 400
TPAW-10	AHU 16A - 16 th floor	Cladosporium Rhodotorula glutinis yeasts Total	5,500 400 200 6,100
TPAW-11	Mechanical Room supply - 9 th floor	Acremonium strictum Aspergillus niger Aureobasidium pullulans Chaetomium sp. Cladosporium Nigrospora sphaerica Penicillium sterile fungi yeasts Total	200 100 3,200 100 1,500 200 300 100 300 6,000

**TAMPA FLORIDA
SAM GIBBONS COURTHOUSE
FUNGAL /SWAB RESULTS**

Sample #	Location	Fungal/Bacteria ID	CFU/m ²		
TPAW-12	South AHU Supply - 5 th floor	Chaetorium globosum	4,100		
		Cladosporium	4,100		
		Fusarium	65,600		
		Total	73,800		
TPAW-13	North AHU Supply - 5 th floor	Aureobasidium pullulans	8,200		
		Cladosporium	41,000		
		Penicillium	8,200		
		sterile fungi	4,100		
		yeasts	8,200		
Total	69,700				
TPAW-14	North AHU Supply - 7 th floor	Acremonium kilense	139,400		
		Aureobasidium pullulans	73,800		
		Cladosporium	65,600		
		Curvularia lunata	4,100		
		Epicoccum nigrum	8,200		
		Penicillium	8,200		
		yeasts	4,100		
		Total	303,400		
		TPAW-15	South AHU Supply - 7 th floor	Paecilomyces lilacinus	28,700
				Phoma	28,700
yeasts	32,800				
Total	90,200				
TPAW-16	North AHU Supply - 8 th floor	Alternaria alternata	4,100		
		Cladosporium	41,000		
		Total	45,100		
TPAW-17	South AHU Supply - 8 th floor	Acremonium kilense	12,300		
		Alternaria alternata	8,200		
		Cladosporium	8,200		
		Curvularia lunata	4,100		
		Penicillium	12,300		
		sterile fungi	4,100		
		yeasts	24,600		
Total	73,800				

**TAMPA FLORIDA
SAM GIBBONS COURTHOUSE
FUNGAL/SWAB RESULTS**

Sample #	Location	Fungal/Bacteria ID	CFU/m ²
TPAW-18	South AHU Supply - 9 th floor	Aureobasidium pullulans	20,500
		Cladosporium	4,100
		Curvularia lunata	4,100
		Epicoccum nigrum	8,200
		Phoma	16,400
		yeasts	90,200
		Total	143,500
TPAW-19	North AHU Supply - 9 th floor	Acremonium kiliense	135,300
		Aureobasidium pullulans	24,600
		Chaetomium globosum	8,200
		Cladosporium	24,600
		Phoma	4,100
		sterile fungi	4,100
		Total	200,900
TPAW-20	South AHU Supply - 10 th floor	Acremonium kiliense	82,000
		Aureobasidium pullulans	53,300
		Chaetomium globosum	4,100
		Cladosporium	49,200
		Graphium sp.	4,100
		Penicillium	20,500
		Total	213,200
TPAW-21	North AHU Supply - 10 th floor	Aureobasidium pullulans	4,100
		Cladosporium	20,500
		Phoma	8,200
		yeasts	8,200
		Total	41,000
		Cladosporium	41,000
TPAW-22	North AHU Supply - 11 th floor	Fusarium	41,000
		Penicillium	8,200
		Total	90,200
		Aureobasidium pullulans	4,100
		Cladosporium	28,700
		Penicillium	12,300
TPAW-23	South AHU Supply - 11 th floor	yeasts	12,300
		Total	57,400
		Aureobasidium pullulans	4,100
		Cladosporium	28,700
		Penicillium	12,300
		yeasts	12,300
		Total	57,400

**TAMPA FLORIDA
SAM GIBBONS COURTHOUSE
FUNGAL/SWAB RESULTS**

Sample #	Location	Fungal/Bacteria ID	CFU/m ²
TPAW-24	North AHU Supply - 12 th floor	Acremonium kilense	131,200
		Alternaria alternata	4,100
		Cladosporium	90,200
		Phoma yeasts	12,300
		Total	106,600
TPAW-25	South AHU Supply - 12 th floor	Acremonium kilense	344,400
		Cladosporium	8,200
		Rhodotorula glutinis	4,100
		sterile fungi	225,500
		Total	4,100
TPAW-26	North AHU Supply - 13 th floor	Acremonium kilense	241,900
		Aureobasidium pullulans	90,200
		Cladosporium	24,600
		Penicillium	16,400
		Phoma yeasts	12,300
TPAW-27	South AHU Supply - 13 th floor	Total	12,300
		Acremonium kilense	57,400
		Alternaria alternata	213,200
		Aureobasidium pullulans	8,200
		Cladosporium	4,100
TPAW-28	North AHU Supply - 14 th floor	Penicillium	16,400
		Phoma sterile fungi yeasts	94,300
		Total	114,800
		Acremonium kilense	57,400
		Cladosporium	8,200
TPAW-29	South AHU Supply - 14 th floor	Fusarium	8,200
		yeasts	8,200
		Total	188,600
		Fusarium	12,300
		Total	57,400
			69,700

**TAMPA FLORIDA
SAM GIBBONS COURTHOUSE
FUNGAL/SWAB RESULTS**

Sample #	Location	Fungal/Bacteria ID	CFU/m ²
TPAW-30	North AHU Supply - 15 th floor	Acremonium kilense	16,400
		Alternaria alternata	12,300
		Aureobasidium pullulans	8,200
		Cladosporium	4,100
		Epicoccum nigrum	4,100
		sterile fungi yeasts	4,100
		Total	61,500
TPAW-31	South AHU Supply - 15 th floor	Cladosporium	20,500
		Fusarium yeasts	24,600
		Total	24,600
TPAW-32	North AHU Supply - 16 th floor	Alternaria alternata	69,700
		Aureobasidium pullulans	4,100
		Cladosporium	12,300
TPAW-33	South AHU Supply - 16 th floor	Cladosporium	32,800
		Epicoccum nigrum	4,100
		Penicillium	4,100
		Phoma sterile fungi yeasts	4,100
		Total	36,900
TPAW-34	Under carpet tile - Unisex - 2 nd floor	Aureobasidium pullulans	12,300
		Cladosporium	4,100
		Fusarium	8,200
		Penicillium	4,100
		Phoma	4,100
		Rhodotorula glutinis yeasts	4,100
		Total	32,800
		Total	69,700

**TAMPA FLORIDA
SAM GIBBONS COURTHOUSE
FUNGAL/SWAB RESULTS**

Sample #	Location	Fungal/Bacteria ID	CFU/m ²		
TPAW-35	Under carpet tile - Hall - 4 th floor	Epicoccum nigrum	1,025		
		Penicillium	1,025		
		Rhodotorula glutinis	24,600		
		sterile fungi	1,025		
		yeasts	6,150		
		Total	33,825		
TPAW-36	Intake vent - exterior	Acremonium kilense	69,700		
		Aureobasidium pullulans	53,300		
		Cladosporium	8,200		
		yeasts	8,200		
		Total	139,400		
TPAW-37	Under carpet tile - Jury Room - 3 rd floor	Acremonium kilense	3,075		
		Aureobasidium pullulans	2,050		
		Cladosporium	1,025		
		Penicillium	1,025		
		yeasts	7,175		
		Total	14,350		
TPAW-38	East window - 5 th floor	Alternaria alternata	275		
		Aureobasidium pullulans	2,100		
		Cladosporium	575		
		Epicoccum nigrum	75		
		Penicillium	150		
		Phoma	100		
		yeasts	900		
				Total	4,175
		TPAW-39	East window - 5 th floor	Aureobasidium pullulans	950
				Cladosporium	2,125
Epicoccum nigrum	300				
Penicillium	175				
Phoma	25				
		sterile fungi	25		
		yeasts	725		
		Total	4,325		
TPAW-40	Filter - 16 th floor	NO GROWTH	<100		

**TAMPA FLORIDA
SAM GIBBONS COURTHOUSE
FUNGAL AIR RESULTS**

Sample #	Location	Fungal/Bacteria ID	CFU/m ³		
TPA-1	Room 229 - 2 nd floor	Cladosporium	36		
		Total	36		
TPA-2	Open area by freight elevator - 2 nd floor	Acremonium strictum	36		
		Basidiomycetes	71		
		Cladosporium	107		
		yeasts	36		
		Total	250		
TPA-3	Division, Manager Office - 2 nd floor	Basidiomycetes	71		
		Total	71		
TPA-4	Break Room, Room 230 - 2 nd floor	Cladosporium	71		
		yeasts	36		
		Total	107		
TPA-5	Court intake - 2 nd floor	Cladosporium	36		
		Total	36		
TPA-6	Wall next to freight elevator - 2 nd floor	Aspergillus terreus	36		
		Basidiomycetes	71		
		Cladosporium	1,036		
		Fusarium	36		
		Penicillium	36		
		sterile fungi	36		
		Tritirachium	71		
		yeasts	71		
		Total	36		
				1,357	
		TPA-7	CSO Security Checkpoint - Lobby	yeasts	36
				Total	36
		TPA-8	CSO Break Room 1 st floor	Acremonium strictum	36
Cladosporium	107				
yeasts	107				
Total	250				
TPA-9	Copy Room, Room 223 - 2 nd floor	Cladosporium	71		
		Total	71		

**TAMPA FLORIDA
SAM GIBBONS COURTHOUSE
FUNGAL AIR RESULTS**

Sample #	Location	Fungal/Bacteria ID	CFU/m ³
TPA-10	West Lobby, north side - 2 nd floor	Cladosporium Total	107 107
TPA-11	Court Library by Room 668 - 6 th floor	Cladosporium Total	71 71
TPA-12	Work Room, Room 628 - 6 th floor	Cladosporium Total	143 143
TPA-13	Library Clerk Desk, Room 627 - 6 th floor	Botrytis cinerea Cladosporium Total	36 143 179
TPA-14	Room 630 - 6 th floor	Cladosporium Pithomyces chartarum Total	71 36 107
TPA-15	Room 1719 - 17 th floor	Basidiomycetes Cladosporium Total	71 143 214
TPA-16	Room 327, E. Desktop - 3 rd floor	NO GROWTH	<36
TPA-17	Room 327, W. Desktop - 3 rd floor	NO GROWTH	<36
TPA-18	Jury Assembly, Main _____, 3 rd floor	Basidiomycetes Cladosporium Phoma yeasts Total	71 107 36 107 321
TPA-19	Jury Assembly, Kitchen area - 3 rd floor	Basidiomycetes Pithomyces chartarum Total	71 36 107
TPA-20	Sitting/Typing, off Jury Selection - 3 rd floor	Acremonium strictum Aspergillus ustus Cladosporium Total	36 36 107 179

**TAMPA FLORIDA
SAM GIBBONS COURTHOUSE
FUNGAL AIR RESULTS**

Sample #	Location	Fungal/Bacteria ID	CFU/m ³
TPA-21	Room 320, Food Services - 3 rd Floor	Acremonium	36
		Cladosporium	179
		Phoma	36
		Total	250
TPA-22	Room 496, U.S. Marshall's Office - 4 th floor	Cladosporium sterile fungi	286
		Total	321
		Cladosporium	36
TPA-23	Room 492, Chief Deputy's Office - 4 th floor	Total	36
		Cladosporium	36
TPA-24	Room 455, Assembly for _____, 4 th floor	Cladosporium	36
		Total	36
TPA-25	Marshall's Operations - 4 th floor	Cladosporium	36
		Total	36
TPA-26	U.S. Marshall, cell block - 4 th floor	Epicoccum nigrum	36
		Total	36
TPA-27	U.S. Marshall's Administration - 4 th floor	Cladosporium	250
		Total	250
TPA-28	Judicial Parking #19 - 1 st floor	Alternaria	71
		Aspergillus niger	36
		Aspergillus versicolor	36
		Cladosporium	1,107
		Curvularia	107
		Epicoccum nigrum	36
		Penicillium	357
		Pithomyces chartarum	71
		sterile fungi	36
		Total	1,857
TPA-29	CSO Judicial Parking Post, Room 116 - 1 st floor	Cladosporium	393
		Curvularia	36
		Penicillium	36
		Total	464
TPA-30	Systems Computer Room - 3 rd floor	Cladosporium	214
		Total	214

**TAMPA FLORIDA
SAM GIBBONS COURTHOUSE
FUNGAL AIR RESULTS**

Sample #	Location	Fungal/Bacteria ID	CFU/m ³
TPA-31	Systems Room East - 3 rd floor	Aureobasidium pullulans	71
		Cladosporium	143
		Penicillium	36
		yeasts	36
		Total	286
TPA-32	Systems Room West - 3 rd floor	Cladosporium sterile fungi	71 36
		Total	107
TPA-33	Clerks Office, east side windows - 2 nd floor	Alternaria alternata	36
		Cladosporium	214
		Total	250
TPA-34	Clerk's office, east window - 2 nd floor	Cladosporium	107
		Total	107
TPA-35	Clerk's office, south window - 2 nd floor	Cladosporium	71
		Penicillium	71
		Total	143
TPA-36	Video room off lobby - 9 th floor	Cladosporium	36
		Penicillium	35
		Total	71
TPA-37	Bankruptcy Court hall, north side - 16 th floor	Cladosporium	143
		yeasts	36
		Total	179
TPA-38	North hall window - 17 th floor	Aspergillus fumigatus	36
		Cladosporium	107
		Total	143
TPA-39	Elevator lobby - 15 th floor	Cladosporium	36
		Total	36
TPA-40	Elevator lobby - 14 th floor	Aspergillus fumigatus	36
		Cladosporium	179
		sterile fungi	36
		Total	250

**TAMPA FLORIDA
SAM GIBBONS COURTHOUSE
FUNGAL AIR RESULTS**

Sample #	Location	Fungal/Bacteria ID	CFU/m ³
TPA-41	Judge's Office - 17 th floor	Cladosporium	214
		Penicillium	36
		Total	250
TPA-42	Room 1740 - 17 th floor	Cladosporium	179
		Curvularia lunata	36
		Penicillium	71
		Total	286
TPA-43	Room 1738 - 17 th floor	Alternaria alternata	107
		Aspergillus fumigatus	36
		Cladosporium	143
		Epicoccum nigrum	36
		Pithomyces chartarum	36
		Total	357
TPA-44	Room 1739 - 17 th floor	Cladosporium sterile fungi	179 36
		Total	214
TPA-45	Secretary/Lobby Area - 17 th floor	Cladosporium	179
		Penicillium	36
		yeasts	36
		Total	250
TPA-46	Courtroom 17, Counsels Desk - 17 th floor	Acremonium strictum	36
		Cladosporium	71
		Penicillium	36
		Total	143
TPA-47	Courtroom 17, Judge's Bench - 17 th floor	Cladosporium	107
		Penicillium	36
		Total	143
TPA-48	Office north of Courtroom 17 - 17 th floor	Acremonium strictum	36
		Cladosporium	71
		Total	107

**TAMPA FLORIDA
SAM GIBBONS COURTHOUSE
FUNGAL AIR RESULTS**

Sample #	Location	Fungal/Bacteria ID	CFU/m ³
TPA-49	Judge's Conference Room - 17 th floor	Cladosporium Penicillium yeasts Total	214 36 36 286
TPA-50	South side Public Hall - 17 th floor	Cladosporium Curvularia lunata Total	71 36 107
TPA-51	Reception Area - 15 th floor	Cladosporium Total	71 71
TPA-52	Judge's Office - 15 th floor	NO GROWTH	<36
TPA-53	15A by 1539 - 15 th floor	NO GROWTH	<36
TPA-54	Courtroom 15A, Counselor's desk - 15 th floor	NO GROWTH	<36
TPA-55	Courtroom 15A, Judge's bench - 15 th floor	NO GROWTH	<36
TPA-56	15B Reception - 15 th floor	Cladosporium Total	71 71
TPA-57	15B, Judge's office - 15 th floor	NO GROWTH	<36
TPA-58	15B Law Clerk's desk - 15 th floor	NO GROWTH	<36
TPA-59	15B Courtroom Counsels desk - 15 th floor	Cladosporium Total	36 36
TPA-60	15B Courtroom, Judge's bench - 15 th floor	NO GROWTH	<36
TPA-61	14A Reception - 14 th floor	Aureobasidium pullulans Cladosporium Total	36 36 71
TPA-62	14A Judge's office - 14 th floor	Cladosporium Penicillium Total	36 36 71
TPA-63	14A Law Clerks Area - 14 th floor	Cladosporium Epicoccum nigrum Total	179 36 214

**TAMPA FLORIDA
SAM GIBBONS COURTHOUSE
FUNGAL AIR RESULTS**

Sample #	Location	Fungal/Bacteria ID	CFU/m ³
TPA-64	14A Courtroom Councils Desk - 14 th floor	NO GROWTH	<36
TPA-65	14A Courtroom, Judge's bench - 14 th floor	Cladosporium Total	36 36
TPA-66	13B Judge's office - 13 th floor	yeasts Total	71 71
TPA-67	13B - Reception area - 13 th floor	Cladosporium yeasts Total	71 71 143
TPA-68	13B Law Clerks Area - 13 th floor	Cladosporium sterile fungi Tritirachium Total	107 36 36 179
TPA-71	13A Courtroom, Attorney's desk - 13 th floor	NO GROWTH	<36
TPA-72	13A Courtroom, Judge's bench - 13 th floor	Aspergillus glaucus Total	36 36
TPA-73	13A Reception - 13 th floor	Aspergillus sydowii Phoma Total	36 36 71
TPA-74	13A Judge's office - 13 th floor	Penicillium Total	71 71
TPA-75	13A Law Clerk Area - 13 th floor	Alternaria alternata Total	36 3
TPA-76	12A Reception - 12 th floor	Cladosporium Total	71 71
TPA-77	12A Judge's office - 12 th floor	NO GROWTH	<36
TPA-78	12A Room 1235 - 12 th floor	NO GROWTH	<36
TPA-79	Courtroom 12A, Judge's bench - 12 th floor	Cladosporium yeasts Total	36 36 71

**TAMPA FLORIDA
SAM GIBBONS COURTHOUSE
FUNGAL AIR RESULTS**

Sample #	Location	Fungal/Bacteria ID	CFU/m ³
TPA-80	Courtroom 12A, Attorney table - 12 th floor	NO GROWTH	<36
TPA-81	Courtroom 11A, Judge's bench - 11 th floor	NO GROWTH	<36
TPA-82	Courtroom 11A, Attorney's table - 11 th floor	NO GROWTH	<36
TPA-83	11A- Room 1135 - 11 th floor	Cladosporium yeasts	71 36 107
TPA-84	11A - Reception - 11 th floor	Cladosporium Total	71 71
TPA-85	11A Judge's Office at entrance - 11 th floor	NO GROWTH	<36
TPA-86	11A Judge's office at Judge's desk - 11 th floor	NO GROWTH	<36
TPA-87	11A Judge's library - 11 th floor	NO GROWTH	<36
TPA-91	12B Judge's office - 12 th floor	NO GROWTH	<36
TPA-92	12B Reception - 12 th floor	NO GROWTH	<36
TPA-93	12B Law Clerk's office - 12 th floor	Cladosporium Total	36 36
TPA-94	12B Courtroom, Judge's bench - 12 th floor	Cladosporium Epicoccum nigrum Total	36 36 71
TPA-95	12B Courtroom, Attorney's table - 12 th floor	Cladosporium Total	71 71
TPA-96	11B Judge's office - 11 th floor	NO GROWTH	<36
TPA-97	11B Reception - 11 th floor	NO GROWTH	<36
TPA-98	11B Room 1151 - 11 th floor	NO GROWTH	<36
TPA-99	11B Courtroom, Judge's bench - 11 th floor	NO GROWTH	<36
TPA-100	11B Courtroom, Attorney's table - 11 th floor	Cladosporium Total	36 36

**TAMPA FLORIDA
SAM GIBBONS COURTHOUSE
FUNGAL AIR RESULTS**

Sample #	Location	Fungal/Bacteria ID	CFU/m ³		
TPA-101	Room 1030, Reception - 10 th floor	Penicillium	36		
		Total	36		
TPA-102	Room 1032 - 10 th floor	Cladosporium	71		
		Pithomyces chartarum	36		
		Ulocladium botrytis	36		
		Total	143		
TPA-103	Room 1033 - 10 th floor	Cladosporium	36		
		Total	36		
TPA-104	Sky bridge security post - 3 rd floor	Aureobasidium pullulans	36		
		Cladosporium	250		
		Epicoccum nigrum	107		
		Fusarium	36		
		Penicillium	71		
		Pithomyces chartarum	36		
		Total	536		
		TPA-105	Room 337 - 3 rd floor	sterile fungi	36
				Total	36
		TPA-106	Mail Room - Dock	Basidiomycetes	71
Cladosporium	321				
Epicoccum nigrum	36				
Pithomyces chartarum	786				
Total	1,214				
Aspergillus	36				
TPA-107	Dock to Garage - walkway	Cladosporium	643		
		Curvularia lunata	36		
		Paecilomyces variotii	36		
		Penicillium	71		
		sterile fungi	36		
		Total	857		
		Aspergillus versicolor	36		
TPA-108	Room 225 file room - 2 nd floor	Cladosporium	71		
		yeasts	71		
		Total	179		
		Total	179		

**TAMPA FLORIDA
SAM GIBBONS COURTHOUSE
FUNGAL AIR RESULTS**

Sample #	Location	Fungal/Bacteria ID	CF/U ^m ³
TPA-111	9A Judge's office - 9 th floor	Aureobasidium pullulans	36
		Cladosporium	71
		Penicillium	36
		Pithomyces chartarum	36
		Total	179
TPA-112	9A Reception area - 9 th floor	Acremonium strictum	71
		Cladosporium	143
		Curvularia lunata	36
		Penicillium	107
		sterile fungi	36
Total	393		
TPA-113	9A law Library - 9 th floor	Cladosporium	36
		Total	36
TPA-114	Law Clerks area - 9 th floor	Acremonium furcatum	36
		Basidiomycetes	71
		Cladosporium	36
		Curvularia lunata	36
		Total	179
TPA-115	Courtroom 9A, Judge's bench - 9 th floor	NO GROWTH	<36
		Cladosporium	36
TPA-116	Courtroom 9A, Attorney's table - 9 th floor	Total	36
		yeasts	36
TPA-117	9B Judge's office - 9 th floor	Total	36
		NO GROWTH	<36
TPA-118	9B Reception - 9 th floor	Cladosporium	36
		Penicillium	36
TPA-119	9B Clerk's area - 9 th floor	Total	71
		NO GROWTH	<36
TPA-120	Courtroom 9B, Judge's bench - 9 th floor	NO GROWTH	<36

**TAMPA FLORIDA
SAM GIBBONS COURTHOUSE
FUNGAL AIR RESULTS**

Sample #	Location	Fungal/Bacteria ID	CFU/m ³
TPA-121	9B Courtroom, Attorney's Table - 9 th floor	Cladosporium Pithomyces chartarum Total	36 36 71
TPA-122	8A Judge's office - 8 th floor	Cladosporium Total	143 143
TPA-123	8A, Law Library - 8 th floor	Cladosporium sterile fungi Total	71 36 107
TPA-124	8A, Law Clerk's area - 8 th floor	Cladosporium Total	71 71
TPA-125	Courtroom 8A, Judge's bench - 8 th floor	NO GROWTH	<36
TPA-126	Courtroom 8A - Attorney's desk - 8 th floor	NO GROWTH	<36
TPA-127	8B, Judge's office - 8 th floor	Cladosporium Penicillium Total	143 71 214
TPA-128	8B Reception area - 8 th floor	Cladosporium Total	71 71
TPA-129	8B Clerk's office, southeast corner - 8 th floor	Cladosporium Total	71 71
TPA-130	Courtroom 8B, Judge's bench - 8 th floor	Acremonium furcatum Total	36 36
TPA-131	Courtroom 8B, Attorney table - 8 th floor	Cladosporium Total	36 36
TPA-132	Courtroom 10B, Judge's bench - 10 th floor	yeasts Total	71 71
TPA-133	Courtroom 10B, Attorney table - 10 th floor	NO GROWTH	<36

**TAMPA FLORIDA
SAM GIBBONS COURTHOUSE
FUNGAL AIR RESULTS**

Sample #	Location	Fungal/Bacteria ID	CFU/m ³
TPA-150	10B Law Clerk's office - 10 th floor	Cladosporium Total	107 107
TPA-151	10B Reception area - 10 th floor	Cladosporium Total	71 71
TPA-152	10B Judge's office - 10 th floor	Cladosporium Total	71 71
TPA-154	South clerk's office - 5 th floor	Cladosporium Penicillium yeasts Total	107 143 71 321
TPA-155	Open area, southeast corner - 5 th floor	Cladosporium Total	71 71
TPA-156	Open area, eastern window - 5 th floor	NO GROWTH	<36
TPA-157	Printer room - 5 th floor	Pithomyces chartarum Total	36 36
TPA-158	Open area - northeast corner - 5 th floor	Cladosporium Total	71 71
TPA-159	Open area, center - 5 th floor	Cladosporium Penicillium Total	36 36 71
TPA-160	Exit to elevator lobby - 5 th floor	NO GROWTH	<36
TPA-161	By south electrical room, open area - 5 th floor	NO GROWTH	<36
TPA-162	Open area, southwest corner - 5 th floor	NO GROWTH	<36
TPA-163	North side, Reception area - 5 th floor	Cladosporium Total	36 36

**TAMPA FLORIDA
SAM GIBBONS COURTHOUSE
FUNGAL AIR RESULTS**

Sample #	Location	Fungal/Bacteria ID	CFU/m ³
TPA-164	Clerk of the Court intake area - 7 th floor	Cladosporium Curvularia lunata Epicoccum nigrum Total	143 36 36 214
TPA-165	Exit elevator lobby - 7 th floor	NO GROWTH	<36
TPA-166	Southeast corner - 7 th floor	Cladosporium Total	36 36
TPA-167	East side window - 7 th floor	Cladosporium Total	71 71
TPA-168	Northeast corner - 7 th floor	NO GROWTH	<36
TPA-169	By freight elevator - 7 th floor	NO GROWTH	<36
TPA-170	Room 729 - 7 th floor	NO GROWTH	<36
TPA-171	By Judge's Elevator - 7 th floor	NO GROWTH	<37
TPA-172	Mail room - 7 th floor	Cladosporium Total	36 36
TPA-173	Public Hall, northwest corner - 7 th floor	Cladosporium Total	214 214
TPA-180	14B Attorney Conference - 14 th floor	Aspergillus niger Chaetomium globosum Cladosporium Rhizopus stolonifer Torulomyces Total	36 36 36 36 36 179
TPA-181	AHU - hall, 4 th floor	Aspergillus niger Paecilomyces variotii Penicillium Rhizopus stolonifer Total	71 36 71 36 214
TPA-182	West window - 16 th floor	Yeasts Total	36 36

FT. MYERS FURNITURE

Sample #	Location	Fungal/Bacteria ID	CFU/in ²
RSWW-1	5-183 - Book shelf	<i>Alternaria alternata</i>	25
		<i>Aspergillus sydowii</i>	25
		<i>Aspergillus ustus</i>	175
		<i>Aspergillus versicolor</i>	50
		<i>Chaetomium globosum</i>	75
		<i>Curvularia lunata</i>	175
		<i>Epicoccum nigrum</i>	200
		<i>Penicillium</i>	100
		<i>Pithomyces chartarum</i>	25
		Total	850
		RSWW-10	5-116 - chair
RSWW-12	Clerk's office shelf in file room - 2 nd floor	<i>Alternaria alternata</i>	25
		<i>Curvularia lunata</i>	25
		<i>Rhodotorula glutinis</i>	675
Total	725		
RSWW-13	Book shelf in reception area 6-109	NO GROWTH	<25
RSWW-14	6-147 - computer table	<i>Fusarium</i>	12,300
		<i>Rhodotorula glutinis</i>	106,600
		yeasts	20,500
Total	139,400		
RSWW-8	5-116 - chair	sterile fungi	40,000
		Total	40,000
RSWW-9	4-146 - chair	<i>Cladosporium</i>	40,000
		Total	40,000
RSWW-15	5-156 - Acoustical panel	<i>Aspergillus versicolor</i>	200,000
		<i>Penicillium</i>	100,000
		Total	300,000

JACKSONVILLE FURNITURE

Sample #	Location	Fungal/Bacteria ID	CFU/in ²
JACW-1	Bridwater water dispenser - Room 520	Acremonium strictum	2,050
		Aureobasidium pullulans	5,125
		Cladosporium	48,175
		Yeasts	8,200
		Total	63,550
JACW-5	Courtroom 137 - Clerk's chair	Alternaria alternata	1,961
		Aspergillus sydowii	980
		Chaetomium	1,961
		Curvularia lunata	980
		Epicoccum nigrum	1,961
		Nigrospora sphaerica	980
		Penicillium	980
		Pithomyces chartarum	980
		Total	10,784
		JACW-8	Room 551 - Random books
Cladosporium	25,714		
Fusarium	8,571		
Scopulariopsis candida	2,857		
		sterile fungi	2,857
		Total	45,714
JACW-11	Room 551 - books	Aureobasidium pullulans	300
		Cladosporium globosum	125
		Epicoccum nigrum	50
		Phoma	25
		yeasts	850
		Total	1,350
JACW-14	Courtroom #3 Jury seats - 5 th floor	sterile fungi	25
		Total	25
JACW-16	Room 551 - bookshelf	Aspergillus niger	100
		Aureobasidium pullulans	300
		Cladosporium	300
		sterile fungi	200
		yeasts	600
		Total	1,400

JACKSONVILLE FURNITURE

Sample #	Location	Fungal/Bacteria ID	CFU/in ²
JACW-25	Room 110- Couch rear conference area	<i>Alternaria alternata</i> <i>Aspergillus glaucus</i> <i>Aureobasidium pullulans</i> <i>Basidiomycetes</i> <i>Cladosporium</i> <i>Epicoccum nigrum</i> <i>Phoma</i> <i>Pithomyces chartarum</i> sterile fungi Total	2,353 1,176 1,176 2,353 4,706 1,176 2,353 1,176 1,176 17,647
JACW-26	Room 110- arm chair	<i>Alternaria alternata</i> <i>Aspergillus fumigatus</i> <i>Aspergillus sydowii</i> <i>Aspergillus versicolor</i> <i>Aureobasidium pullulans</i> <i>Chaetomium globosum</i> <i>Cladosporium</i> <i>Curvularia lunata</i> <i>Penicillium</i> sterile fungi yeasts Total	727 727 727 1,455 1,455 2,182 13,091 727 1,455 727 4,364 27,636
JACW-36	Room 423A - Metal file cabinet	<i>Aspergillus sydowii</i> <i>Aspergillus ustus</i> <i>Chaetomium globosum</i> <i>Cladosporium</i> <i>Memnoniella echinata</i> <i>Penicillium</i> <i>Phoma</i> Total	200 300 400 100 300 100 100 1,500
JACW-38	Room 511 - Center office light	<i>Aspergillus niger</i> <i>Aureobasidium pullulans</i> <i>Cladosporium</i> <i>Penicillium</i> yeasts Total	700 300 4,150 50 125 5,325

JACKSONVILLE FURNITURE

Sample #	Location	Fungal/Bacteria ID	CFU/m ²		
JACW-40	Room 336A - desk chair	<i>Alternaria alternata</i>	3,556		
		<i>Aureobasidium pullulans</i>	5,333		
		<i>Cladosporium</i>	14,222		
		<i>Curvularia lunata</i>	1,778		
		<i>Epicoccum nigrum</i>	16,889		
		<i>Pitheomyces chartarum</i>	10,667		
		sterile fungi	1,778		
		yeasts	7,111		
		Total	61,333		
		JACW-42	Room 340 - chair	<i>Aureobasidium pullulans</i> <i>Chaetomium globosum</i> sterile fungi yeasts Total	1,961 980 980 1,961 5,882
JACW-44	Courtroom #4 visitor bench - 3 rd floor	<i>Aspergillus niger</i>	1,905		
		<i>Aspergillus sydowii</i>	952		
		<i>Aureobasidium pullulans</i>	5,714		
		<i>Cladosporium</i>	10,476		
		<i>Curvularia lunata</i>	952		
		<i>Epicoccum nigrum</i>	10,476		
		<i>Nigrospora sphaerica</i>	952		
		<i>Paecilomyces variotii</i>	952		
		<i>Penicillium</i>	3,810		
		<i>Phoma</i>	2,857		
		<i>Pitheomyces chartarum</i>	2,857		
		sterile fungi	952		
		<i>Trichoderma koningii</i>	952		
		yeasts	4,762		
		Total	48,571		
		JACW-46	Room 210 - curtains, Duval Ave. Sill	<i>Alternaria alternata</i>	20,000
				<i>Aspergillus ustus</i>	40,000
<i>Aureobasidium pullulans</i>	20,000				
<i>Chaetomium globosum</i>	20,000				
<i>Cladosporium</i>	300,000				
<i>Curvularia lunata</i>	20,000				
<i>Penicillium</i>	280,000				
sterile fungi	20,000				
<i>Trichoderma koningii</i>	20,000				
Total	740,000				

OCALA FURNITURE

Sample #	Location	Fungal/Bacteria ID	CFU/in ²
OCAW-46	Wood chair - Hearing room - 2 nd floor	Aureobasidium pullulans	20,500
		Phoma	4,100
		Rhodotorula glutinis	90,200
		yeasts	86,100
		Total	200,900
OCAW-47	Wood chair - Attorney's/witness room - 2 nd floor	Aspergillus ustus	4,100
		Aureobasidium pullulans	24,600
		Epicoccum nigrum	12,300
		Penicillium	4,100
		Rhodotorula glutinis	24,600
		yeasts	36,900
		Total	106,600
OCAW-48	Wood chair - Attorney's/witness room - 2 nd floor	Acremonium strictum	200
		Paecilomyces variotii	100
		Penicillium	100
		Rhodotorula glutinis	100
		sterile fungi	100
		Total	600

ORLANDO FURNITURE

Sample #	Location	Fungal/Bacteria ID	CFU/m ²
OMCW-1	Coat tree, southwest corner - 3 rd floor	Cladosporium Rhodotorula glutinis Total	100 200 300
OMCW-4	Courtroom #1, shelf behind bench - 6 th floor	Cladosporium Curvularia lunata Penicillium Phodotorula glutinis yeasts Total	25 25 25 25 25 125
OMCW-5	Courtroom #1, metal connector, flag - 6 th floor	NO GROWTH	<25
OMCW-7	Courtroom #4, Attorney table under glass - 6 th floor	NO GROWTH	<25
OMCW-8	Water damaged ceiling tile - 6 th floor	NO GROWTH	<25
OMCW-9	Water damaged tile - 6 th floor	NO GROWTH	<25
OMCW-10	Air supply vent - 6 th floor	NO GROWTH	<25
OMCW-11	Water damaged ceiling tile - 6 th floor	NO GROWTH	<25
OMCW-12	Ambient desk dust, US Attorney's office - 2 nd floor	Aureobasidium pullulans Exophiala jeanselmei yeasts Total	15 75 425 650
OMCW-14	Courtroom #6, Attorney table, under glass - 5 th floor	NO GROWTH	<25

ORLANDO FURNITURE

Sample #	Location	Fungal/Bacteria ID	CFU/m ²
256050330	Judge Ann Conway's desk bottom area	Aspergillus sydowii Chaetomium globosum Total	8,200 557,600 565,800
256050331	Judge Ann Conway's rug pad top - 6 th floor	Bacteria NO GROWTH Aspergillus ustus Chaetomium globosum Total Acinetobacter gram negative bacteria and others Methylobacterium Stenotrophomonas maltophilia Total	<50 18,450 32,800 51,250 1,650 2,350 700 7,350 12,050