

RECENT MOLD TESTING AT HILTON ANCHORAGE DETECTS “PROBLEM MOLDS” IN SOME ROOMS UNDER RENOVATION

AUGUST 2018

I. Introduction

Over the last few months, the Hilton Anchorage has performed mold spore analyses in guest rooms in conjunction with ongoing renovations underway at the Hotel. Hilton Anchorage has contracted with EHS-Alaska (“EHS”) to perform the environmental testing, and EHS has in turn contracted with EMLab P&K to perform laboratory analyses.

While most rooms had no appreciable mold spores, the testing revealed instances where so-called “problem molds” were detected at levels that indicated a likelihood that the source of the mold was within the building. And in one case, the Hotel’s contractors recommended that a room with a high mold spore count for a “problem mold” be re-cleaned and encapsulated, but that no additional testing be performed. It remains to be seen whether the Hotel’s current remediation efforts will resolve the mold issues at the Hotel in the long term.

According to [documents](#) provided by the Hotel:

Although there are thousands of types (genus-species) of molds, a relatively small number account for most indoor and water damage situations. Some molds are considered worse (more allergenic or toxic) than others. The common mold *Cladosporium* is widespread inside and outside and is typically not considered as bad as some other molds. The wet black molds *Chaetomium* and *Stachybotrys* often occur on sheetrock and are considered problem molds. They have large spores and tend not to occur at high levels in the air unless disturbed. They require very damp conditions to grow. The most common problem molds are *Aspergillus-Penicillium*. They require only moderately damp conditions for growth. They have very small spores that are easily airborne and can float in the air for many hours when disturbed.

During the current remediation, EHS describes the criteria for a “pass/fail clearance” for a room as follows:

- No visible mold.
- Surfaces should be free of dust/debris.
- Levels of *Penicillium/Aspergillus* less than 1,000 spores per cubic meter.
- “Few” *Stachybotrys* and *Chaetomium* spores (EHS says that this means less than 50-100 spores per cubic meter).
- Hyphal fragments less than 100/m³.

Hotel documents show that while most tested rooms met that criteria, some did not.

II. Mold findings

A. *Penicillium/Aspergillus* detected in Old West Tower Rooms 501 and 511

On June 10, 2018, EHS found levels of *Penicillium/Aspergillus* spores in Room 501 at 1,200 spores per cubic meter. This registered in the “red” on EMLab P&K’s “MoldSCORE” ranking, which indicates a “high probability that the spores originated from inside, presumably from indoor mold growth.” Room 501 also had visual mold growing behind the toilet, which EHS stated was “likely some pen/asp.”

Location: A27 OWT, 501-Bathroom

Fungi Identified	Indoor sample spores/m ³				Raw count	Spores/m ³	MoldSCORE [‡]		
	<100	1K	10K	>100K			100	200	300
Generally able to grow indoors*									
Alternaria					ND	< 13			100
Bipolaris/Drechslera group					ND	< 13			100
Chaetomium	█				4	53	█	█	181
Cladosporium	█				1	53	█		103
Curvularia					ND	< 13			100
Nigrospora					ND	< 13			100
Other brown	█				2	27	█		111
Penicillium/Aspergillus types [†]	█	█	█	█	61	1,200	█	█	254
Stachybotrys	█				3	40	█	█	162
Torula					ND	< 13			100
Seldom found growing indoors**									
Ascospores					ND	< 13			100
Basidiospores	█				4	210			100
Rusts					ND	< 13			100
Smuts, Periconia, Myxomycetes	█				1	13			102
Total						1,647			Final MoldSCORE 254

On the same day, EHS found levels of *Penicillium/Aspergillus* in Room 511 at 1,100 spores/m³. This registered in the “yellow” on the MoldSCORE, which indicates a “moderate likelihood of indoor fungal growth.”

MoldSCORE™: Spore Trap Report

Location: A23 OWT, Rm 511-Main

Fungi Identified	Indoor sample spores/m3				Raw count	Spores/m3	MoldSCORE‡		
	<100	1K	10K	>100K			100	200	300
Generally able to grow indoors*									
Alternaria					ND	< 13			100
Bipolaris/Drechslera group					ND	< 13			100
Chaetomium		█			1	13	█		121
Cladosporium					ND	< 13			100
Curvularia					ND	< 13			100
Nigrospora					ND	< 13			100
Penicillium/Aspergillus types†	█	█	█	█	21	1,100	█	█	246
Stachybotrys					ND	< 13			100
Torula					ND	< 13			100
Seldom found growing indoors**									
Ascospores	█	█	█	█	7	370	█	█	187
Basidiospores	█	█	█	█	29	1,500	█	█	100
Oidium	█				1	13	█		105
Rusts					ND	< 13			100
Smuts, Periconia, Myxomycetes					ND	< 13			100
Total						3,015			Final MoldSCORE 246

EHS called these rooms “borderline failed clearances.” It made recommendations including “sealing all cracks and gaps which may contain hidden mold” and anticipated “running a few clearance samples following all other related work.”

B. Chaetomium in Old West Tower Room 611

On June 25, 2018, EHS-Alaska conducted spore testing on the 6th Floor of the Old West Tower. Room 611 tested in the “red” on the MoldSCORE for *Chaetomium* with a spore count of 350 spores per cubic meter. Again, that means that there is a “high probability” that the source of the *Chaetomium* spores was from inside mold growth.

Location: A33 Room 611-Main

Fungi Identified	Indoor sample spores/m3				Raw count	Spores/m3	MoldSCORE‡			
	<100	1K	10K	>100K			100	200	300	Score
Generally able to grow indoors*										
Alternaria					ND	< 13	█			100
Bipolaris/Drechslera group					ND	< 13	█			100
Chaetomium	█				26	350	█	█	█	300
Cladosporium	█				2	110	█			107
Curvularia					ND	< 13	█			100
Nigrospora					ND	< 13	█			100
Penicillium/Aspergillus types†	█	█			9	480	█	█		174
Stachybotrys					ND	< 13	█			100
Torula					ND	< 13	█			100
Seldom found growing indoors**										
Ascospores	█	█	█		24	1,300	█			100
Basidiospores	█	█	█		31	1,700	█			100
Rusts	█				1	13	█			105
Smuts, Periconia, Myxomycetes					ND	< 13	█			100
Total						3,880				Final MoldSCORE 300

The spore count of 350 spores per cubic meter considerably exceeded EHS’s clearance level of less than 50-100 spores per cubic meter. Nonetheless, EHS recommended that “Room 611 be re-cleaned and be encapsulated, but that no additional clearance testing be done on that room.”

C. New West Tower 7th Floor

On May 21, 2018, EHS reported resampling results on areas on the New West Tower 7th floor that EHS described as “borderline.” They found that the “levels were certainly lower. . . . The [*Penicillium/Aspergillus*] levels were all lower than 1000 spores/m³ which is the criteria we are using; and we noted the hyphal fragments were lower but still higher than what we would expect with a thorough cleaning and so we suggest either encap or additional cleaning followed by re-retesting.” (Emphasis in original.)

The sampling performed on May 21, 2018 was described as “resampling.” The Union requested the original sampling results, but has not received them. The Union has also requested information as to which recommendation was followed, but has not received that either.

D. New West Tower 8th Floor

On July 24, 2018, EHS reported sampling results from the New West Tower 8th Floor that passed visual and clearances. The MoldSCORE report for

Penicillium/Aspergillus was in the “yellow” for one hallway. In Room 826, it was in the “yellow” for both *Penicillium/Aspergillus* and for *Stachybotrys*—indicative of a “moderate likelihood of indoor fungal growth.” The *Penicillium/Aspergillus* count was at 530 spores per cubic meter and the *Stachybotrys* count was at 53 spores per cubic meter, both beneath the clearance thresholds for those molds of 1,000 spores per cubic meter and 50-100 spores per cubic meter respectively.

MoldSCORE™: Spore Trap Report

Location: A45 Rm 826 Main

Fungi Identified	Indoor sample spores/m3				Raw count	Spores/m3	MoldSCORE‡		
	<100	1K	10K	>100K			100	200	300
Generally able to grow indoors*									
Alternaria					ND	< 13			100
Bipolaris/Drechslera group					ND	< 13			100
Chaetomium					2	27			143
Cladosporium					1	53			100
Curvularia					ND	< 13			100
Nigrospora					ND	< 13			100
Other brown					1	13			104
Penicillium/Aspergillus types†					10	530			174
Stachybotrys					4	53			181
Torula					ND	< 13			100
Seldom found growing indoors**									
Ascospores					1	53			100
Basidiospores					3	160			100
Rusts					ND	< 13			100
Smuts, Periconia, Myxomycetes					1	13			102
Total						907			
							Final MoldSCORE	206	