

**TO:** Raymond Kenny  
Senior Vice President & General Manager of Rail Operations

**FROM:** Brian Lapp  
Senior Vice President & Chief Safety Officer

**DATE:** July 8, 2019

**SUBJECT:** Mold Sampling Report (March 6, May 7 & May 8, 2019)

**LOCATION:** Hoboken Long Hallway, Rooms and Offices

On March 6<sup>th</sup>, May 7<sup>th</sup>. and 8<sup>th</sup>., representatives from the Office of System Safety (OSS) and McCabe Environmental Services conducted a mold assessment in response to the partial ceiling collapse caused by the leaking roof. McCabe Environmental collected surface swab samples and air monitoring to determine the presence of surface and airborne mold throughout the rooms and offices in the Long Hallway. McCabe also conducted a visual inspection of the suspected areas to identify water-damaged materials, visible mold growth, and potential water intrusion pathways. The samples were sent out to an accredited laboratory for analysis.

The swab samples results received from the laboratory confirm the presence of surface mold in the following areas:

- General Asst. Manager's Office – Above Ceiling Tile at Window Sill
- General Foreman's Office – Ceiling Tile
- Training Room – Drywall Wall
- Training Room – Ceiling Tile
- TCU Break Room/Bathroom – Ceiling Tile

The air monitoring results confirm the presence of airborne mold species in the following rooms that was not identified in the outdoor sample or elevated when compared to the outdoor sample:

- General Assistance Manager's Office – Aspergillus/Penicillium
- TCU Break Room Bathroom – Aspergillus/Penicillium, Basidiospores
- Long Hallway Damaged Area – Aspergillus/Penicillium
- North Hallway – Cladosporium
- Engineer Lounge – Cladosporium
- Conductor Locker Room – Ascospores
- NJTPD – Cladosporium



- NJTPD – Captain’s Office – Cladosporium, Acremonium-like

Based on both the surface swab testing and the airborne mold spore samples, it is determined that the water intrusion from the roof caused the visible microbial growth. The overall airborne mold spore counts in the rooms and offices are relatively normal, as compared to the outdoor samples. However, there were unique species and higher levels of individual species found inside of the rooms and offices throughout the Long Hallway compared to the outdoor samples.

McCabe Environmental recommended that NJ TRANSIT use a mold abatement contractor to remediate and abate all visible microbial growth identified in the report until the water intrusion is eliminated. McCabe also suggested that NJ TRANSIT address the source of water intrusion before replacing any abated materials.

Based on the mold assessment, OSS recommended that NJ TRANSIT follow the aforementioned NJDHSS PEOSH N.J.A.C. 12:100-13.4 (c) and (d) regulation to abate and remediate the microbial growth.

*The NJDHSS Public Employees Occupational Safety and Health (PEOSH) enforces an Indoor Quality Standard for public employees in New Jersey for visible microbial contamination in buildings through N.J.A.C. 12:100-13.4 (c) and (d). The regulation stated that “Employer shall remediate damp or wet materials by drying, replacing, removing or cleaning within 48 hours of discovery and shall continue such remediation until the water intrusion is eliminated. The employer shall also take measure to remove visible microbial contamination in areas such as ductwork, humidifiers, dehumidifiers, condensate drips pans, heat exchange components, other HVAC and building system component, or on building surfaces, such as carpeting and ceiling tiles, when found during regular or emergency maintenance activities or during a visual inspection.”*



**Conductor Locker Room (suspected microbial growth)**



**Engineer Locker Room (suspected microbial growth)**



**Engineer Lounge** (suspected microbial growth)



**Engineer Lunch Room** (suspected microbial growth)



**Long Hallway (water intrusion)**



**Mechanical Dept. – Clerk Area (water intrusion)**





**Mechanical Dept. – General Asst. Manager Office (water intrusion)**



**Mechanical Dept. – General Asst. Manager Office (suspected microbial growth)**



**Mechanical Dept. – General Foreman Office (microbial growth)**



**Mechanical Dept. – General Foreman Office (water intrusion)**



**Mechanical Dept. – General Manager Office (water intrusion)**



**Mechanical Dept. – Manager Office (water intrusion)**





**Mechanical Dept. – Manager Office (suspected microbial growth)**



**Mechanical Dept. – Superintendent Office (water intrusion)**



**Railman for Children Office (suspected microbial growth)**



**TCU Break Room/Bathroom** (suspected microbial growth)



**TCU Break Room Bathroom (microbial growth)**



**TCU Break Room (water intrusion)**





**Training Room 8A-Conference Area (water intrusion)**



**Training Room 8A-Conference Area (microbial growth)**



Training Room 8A-Computer Room (microbial growth)





Mold Air Sample Results

5/7/2019

	M-01	M-02	M-03	M-04	M-05	M-06	M-07	M-08	M-09
	MECH DEPT- GENERAL ASSIS	MECH DEPT- GENERAL ASSIS	TRAINING ROOM 8A-CONFERENCE	TRAINING ROOM 8A-CBT ROOM	TCU BREAKROOM BATHROOM	TCU BREAKROOM- ROOM 12	HALLWAY DAMAGE AREA	NORTH HALLWAY	AMBIENT/ OUTSIDE
Alternaria (Ulocladium)								40	10
Ascospores	100	300	200	200	300	440	1300	2600	2400
Aspergillus/Penicillium	134000	300	300	400	740	90	1100	200	200
Basidiospores	200	700	570	830	5500	3400	1500	3500	3900
Bipolaris++									
Chaetomium									
Cladosporium	40		40	200	200		440	1000	200
Curvularia									
Epicoccum									
Fusarium									
Ganoderma									
Myxomycetes++								10	10
Pithomyces++									
Rust									
Scopulariopsis/Microascus									
Stachybotrys/Memnoniella									
Unidentifiable Spores									10
Zygomycetes									
Arthrospores					100				
Total Fungi	134340	1300	1110	1630	6840	3930	4340	7350	6730
Hyphal Fragment									
Insect Fragment									
Pollen							40	40	30

5/8/2019

	M-10	M-11	M-12	M-13	M-14	M-15	M-16	M-17	M-18	M-19
	WOMENS BATHROOM	MENS BATHROOM	LONG HALLWAY - FAR END	TCU SUPPLY ROOM	CONF. ROOM #8	ENG LUNCH RM/KITCHEN	ENGINEER LOUNGE	ENGINEER LOCKER ROOM- CORNER	ENGINEER LOCKER ROOM- HALL	CONDUCTOR LOCKER ROOM
Alternaria (Ulocladium)										
Ascospores	2100	2300	2200	870	400	2700	2300	2900	1600	2600
Aspergillus/Penicillium	300	300	660	1000	300	480	610	830	400	440
Basidiospores	13200	10100	11000	9300	4890	12300	9120	11100	9780	17200
Bipolaris++										
Chaetomium										
Cladosporium	40	90	90			100	300			90
Curvularia			10							
Fusarium										
Myxomycetes++			10						10	
Rust										
Scopulariopsis/Microascus										
Stachybotrys/Memnoniella										
Unidentifiable Spores				40					40	40
Acremonium-like										
Bispora										
Botryotrichum										
Botrytis	90									
Cercospora++					40			40		
Helicosporium		40	40					40		
Nigrospora										
Torula-like										
Zygothia/Schizothyrium				40						
Total Fungi	15730	12830	14010	11250	5630	15580	12330	14910	11830	20370
Hyphal Fragment								40		40
Insect Fragment										
Pollen			90			200			40	





Mold Air Sample Results

5/8/2019

	M-20	M-21	M-22	M-23	M-24	M-25	M-26	M-27	M-28	M-29
	CONDUCTOR OFFICE AREA	STATION DEPT MANAGERS OFFICE	MEDICAL OFFICE	LONG HALLWAY NEAR ENTRY	NORTH HALLWAY	NITPD	NITPD - CAPTAINS OFFICE	NIPD - MENS LOCKER ROOM	NIPD - WOMENS LOCKER ROOM	LONG HALLWAY - OUTSIDE CONF RM 8
Alternaria (Ulocladium)	10									
Ascospores	1500	920	1000	2100	2900	2400	2600	300	300	1700
Aspergillus/Penicillium	610	300	90	300	790	300	200	300	400	1000
Basidiospores	14500	3200	1500	3800	7290	2700	7200	1700	1800	4410
Bipolaris++										
Chaetomium				40	10					
Cladosporium		40	10	90	40	300	790	40	100	40
Curvularia							90			
Fusarium					40					
Myxomycetes++				200			40			10
Rust										40
Scopulariopsis/Microascus										
Stachybotrys/Memnoniella									40	
Unidentifiable Spores	40		40	40						
Acremonium-like							870			
Bispora										40
Botryotrichum							40			
Botrytis			40				40			
Cercospora++										
Helicosporium										
Nigrospora										40
Torula-like										
Zygothia/Schizothyrrium										
Total Fungi	16660	4460	2680	6570	11070	5700	11870	2340	2640	7280
Hyphal Fragment										40
Insect Fragment										
Pollen				100		610	300	40		10

5/8/2019

	M-30	M-31	M-32	M-33
	GENERAL FOREMAN OFFICE	SUPERINTENDENCE OFFICE - CLOSET	RAILMEN FOR CHILDREN OFFICE	OUTDOORS
Alternaria (Ulocladium)				
Ascospores	1400	1100	610	1700
Aspergillus/Penicillium	1100	660	480	1000
Basidiospores	5850	4890	2500	17600
Bipolaris++				
Chaetomium				
Cladosporium	30	90	90	90
Curvularia				
Fusarium				
Myxomycetes++		40	10	
Rust				
Scopulariopsis/Microascus	40			
Stachybotrys/Memnoniella				
Unidentifiable Spores				30
Acremonium-like				
Bispora				
Botryotrichum				
Botrytis				
Cercospora++				
Helicosporium				40
Nigrospora				
Torula-like				10
Zygothia/Schizothyrrium				
Total Fungi	8420	6780	3690	20470
Hyphal Fragment			40	
Insect Fragment				
Pollen	40	10		40





Please post this notification in a common, central, employee work area for five (5) work days and return the original to me.

Contact the Manager of Environmental Safety and Industrial Hygiene at 973-491-7386 if you have any additional concerns or questions.

**Location Posted:** \_\_\_\_\_

**Date Posted:** \_\_\_\_\_ **By:** \_\_\_\_\_

**Date Removed:** \_\_\_\_\_ **By:** \_\_\_\_\_