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MEDIA ADVISORY

November 1, 2023

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Columbia Fire Department receives final condition reports on Fire Stations 2 and 6

(COLUMBIA, MO) - The Columbia Fire Department has received the final condition reports from Nova Group on Fire Stations 2 and 6 following reports of potential mold.

This advisory includes a summary of the findings found in the reports. The reported results show better indoor air quality in relation to mold in both fire stations than the exterior ambient air. No specific hazards or concerns were found in the air sample testing. Some areas in both fire stations had surface mold, and it is recommended to either clean or remove them to address specific areas of concern.

Both fire stations were noted as requiring cleaning, along with some minor repairs and improvements to prevent future concerns. Additional recommendations were made and will be implemented. The Columbia Fire Department and the City of Columbia will work with ARSI, environmental and demolition contractors, to contract professional cleaning at both stations.

The City of Columbia and the Columbia Fire Department will implement all recommendations to prevent future occurrences or concerns.

Timeline

On Oct. 1, 2023, a Fire Station crew member requested HVAC duct cleaning at Fire Station 2, 1212 W. Worley St., along with the uncertain possibility of mold being in the building. Staff reviewed a photograph of the area in question and felt comfortable the area revealed signs of dust and dirt commonly associated with a duct in need of cleaning.

On Oct. 16, Fire Administration was informed of an anonymous report of potential mold in Fire Station 6, 3112 Chapel Hill Road. Following the report and on the same day, staff with the Columbia Fire Department and Public Works Department visited Fire Station 6 and Fire Station 2.

Public Works staff identified areas within several ceiling tiles at Station 6, which gave them concern.

Out of an abundance of caution, Station 6 crews were relocated to Fire Station 7, 400 Green Meadows Circle, until a full evaluation of the building could occur and any areas of concern were properly addressed. Crews were requested to avoid entering the building until the evaluation was completed.

Staff also evaluated Fire Station 2, and staff felt two areas adjacent to air intakes were a collection of a few years worth of dirt and dust and did not present any immediate concern. However, out of an abundance of caution, the crews from Fire Station 2 were also relocated on Tuesday, Oct. 17.

City staff made contact with a firm to help test for the possible presence of mold in both Fire Station 2 and Fire Station 6 beginning Wednesday, Oct. 18.

The City of Columbia and the Columbia Fire Department have received the final reports from Nova Group, and the full reports are being released with this media advisory.

The following are conclusions and recommendations directly from both reports.

Station 2

Summary:

Nova conducted a Limited Indoor Air Quality (IAQ) Survey of the Fire Station 2 facility located at 1212 W. Worley Street in Columbia, Missouri.

NOTE: There are currently no Federal standards regarding permissible levels of airborne fungi that may be present in buildings. Mold spores are ubiquitous and it is expected that some spores will be present in normal indoor environments. A general guideline that is widely accepted in the industrial hygiene industry is that the types and number of mold spores present in the indoor environment should be similar to those present in the outdoor environment. If the inside spore counts are substantially higher than outside counts, this may indicate a potential mold problem. The comparison of outdoor and indoor spore types and concentrations is a useful tool in assessing abnormal mold contamination; however, it should not be the sole determining factor in evaluating health risks and remediation strategies.

The following summary provides an overview of activities conducted, findings, and conclusions. The report should be read in its entirety.

- Fire Station 2 was unoccupied during Nova's site visit.
- No damp or musty odors were observed.
- Drywall water intrusion/staining was observed. Suspect fungal growth was observed on HVAC exterior ductwork.
- Plaster wall cracks and damage was observed.
- Interior duct insulation was observed with dust accumulation.
- General poor housekeeping and the presence of dust accumulation was observed on window ledges, HVAC louvers, walls and dormitory fans.
- Temperature, Relative Humidity, and Carbon Dioxide were reported with ASHRAE and EPA recommended levels.
- No elevated moisture meter readings were observed.
- Four interior ambient air samples plus two exterior comparison samples were collected
- and submitted to an AIHA laboratory for mold analysis. Molds most commonly associated with indoor mold growth in buildings with long-term water intrusion issues, reported as Water Indicator, were not reported in the samples collected from the Living Room/Kitchen, East Office/Bedroom, Dormitory, or Weight Room/Bathroom. The Living Room/Kitchen and Dormitory samples reported two and four raw mold spores, respectively, of Unspecified spores (common habitat being various) which are found predominantly outdoors. Background debris in the interior ambient air samples were reported as Light and Moderate.

Five surface samples were collected and submitted to an AIHA laboratory for mold analysis. Background debris in the surface samples were reported as Trace and Heavy. Surface sample molds were reported with MGR's ranging from 0 to 4.

Recommendations:

Given the above information/observations, Nova recommends the following:

- Maintain temperatures within ASHRAE recommended levels.
- Investigation of the roof and exterior sealants for effective water barriers and repair as necessary.
- Interior areas of water impact and suspect fungal growth on building materials should be cleaned and then coated with an EPA registered antimicrobial solution to aide in the prevention of potential mold growth.
- Additional housekeeping/cleaning is recommended.
- After cleaning activities, including interior duct cleaning, replacement of HVAC filter(s) is recommended.
- Investigate associated landscaping to ensure appropriate drainage away from building.

Station 6

Summary:

Nova conducted a Limited Indoor Air Quality (IAQ) Survey of the Fire Station 6 facility located at 3112 Chapel Hill Road in Columbia, Missouri.

NOTE: There are currently no Federal standards regarding permissible levels of airborne fungi that may be present in buildings. Mold spores are ubiquitous and it is expected that some spores will be present in normal indoor environments. A general guideline that is widely accepted in the industrial hygiene industry is that the types and number of mold spores present in the indoor environment should be similar to those present in the outdoor environment. If the inside spore counts are substantially higher than outside counts, this may indicate a potential mold problem. The comparison of outdoor and indoor spore types and concentrations is a useful tool in assessing abnormal mold contamination; however, it should not be the sole determining factor in evaluating health risks and remediation strategies.

The following summary provides an overview of activities conducted, findings, and conclusions. The report should be read in its entirety.

- Fire Station 6 was unoccupied during Nova's site visit.
- Ceiling panels and drywall were observed with water stains and areas of suspect fungal growth.
- Staining of carpet was observed.
- Plaster wall cracks and damage was observed.
- Standing water was observed (around washing machine).
- Interior duct insulation was observed with dust accumulation.
- General poor housekeeping and the presence of dust accumulation observed on window ledges, HVAC louvers, personal items, equipment (humidifier/fan) was observed.
- Temperature, Relative Humidity, and Carbon Dioxide were reported with ASHRAE and EPA recommended levels.
- No elevated moisture meter readings were observed.
- Four interior ambient air samples plus two exterior comparison samples were collected and submitted to an AIHA laboratory for mold analysis. Molds most commonly associated with indoor mold growth in buildings with long-term water intrusion issues, reported as Water Indicator, were not reported in the samples collected from the Bedroom/Dormitory, Locker Room or Engine Bay. The Kitchen sample reported one raw mold spore of Chaetomium, a water indicator (common habitats include cellulose-containing materials, soil, seeds, dung). Background debris in the interior ambient air samples were reported as Light and Moderate. The presence of one raw count of these spores is not considered a building mold growth concern as the spore likely came from the building exterior.
- Five surface samples were collected and submitted to an AIHA laboratory for mold analysis. Background debris in the surface samples were reported as Trace and Moderate. Surface sample molds were reported with MGR's ranging from 0 to 5.

Recommendations:

Given the above information/observations, Nova recommends the following:

- Maintain temperatures within ASHRAE recommended levels (meaning, maintain the bedroom temperature similar to other areas within the building to avoid condensation)
- Although not in use during Nova's site visit, minimize the usage of the humidification machine within the bedroom during warm weather.
- Interior water impacted and damaged building materials should be further evaluated to determine the source and extent of water intrusion. Damaged materials that cannot be cleaned should be removed and replaced.
- Investigation of the roof and associated sealants for effective water barriers.
- Interior areas of water impact and suspect fungal growth on building materials should be cleaned and then coated with an EPA registered antimicrobial solution to aide in the prevention of potential mold growth.
- Installation of duct insulation in efforts to minimize condensation
- After removal/replacement of water impacted materials and the installation of insulation, interior duct cleaning and HVAC filter(s) replacement is recommended.
- Additional housekeeping/cleaning and carpet cleaning is recommended.
- Investigate exterior sealants and repair as necessary.
- Investigate roof gutter drainage and associated landscaping to ensure appropriate drainage away from the building.

Attachments:

- [Fire Station 2 report](#)
- [Fire Station 6 report](#)

City of Columbia Vision

Columbia is the best place for everyone to live, work, learn and play.

City of Columbia Mission

To serve the public equitably through democratic, transparent and efficient government.