

## West Linn-Wilsonville Schools

To: Tim Woodley, Director of Operations

From: Pat McGough, Facilities Manager

Subject: Mold Protocol

Date: April 19, 2012

As the Maintenance Department receives reports of concerns regarding mold periodically, we have developed a standard protocol of response. When a report is received, we always believe that the report is made in good faith and the person that has raised the concern has a genuine belief that mold is present. We believe them and we respond to their reports immediately. The following are the steps taken in each case to address these concerns:

- Mold really needs three things to thrive: moisture, warmth and darkness. The first phase of investigation is to inspect the room for leaks. We will clean and inspect the heating system for leaks, inspect the roof, walls, windows and sink area. When leaks are discovered, they are repaired, as they are the most likely locations for mold growth. If mold is discovered, it is removed and the area is treated with a bleach/water solution to kill the remaining spores. If after this initial inspection no leaking nor mold is found, we move to the second phase of investigation.
- 2. The second phase is to perform indoor air quality tests specifically for mold. Mold is not a mystical entity that cannot be defined. It is detectable, measurable and can be remedied with straightforward methods. Mold occurs naturally in our environment. These tests are performed by a third party environmental engineering firm specializing in air quality and hazardous materials. Sampling techniques involve using an air pump that injects air into a plate of gelatin (Petrie Dishes) and then the plates are grown in an incubator for approximately two weeks. Fungal growths are then identified and counted by species. Indoor samples are measured against control (outside) samples. If samples are found to have higher concentrations outside than inside, it is more than likely that there is not mold growth inside the building. It is not unusual for spaces to vary widely in testing due to the orientation of the building (either the sunny or shady side of the building) and plant material close to the air intake for the ventilation system. If spore counts are inconclusive (spore counts measured in similar concentrations indoors vs. outdoors) a second set of tests are performed to either confirm or eliminate seasonal variations. If the spore count is significantly higher indoors, then we begin the third phase of the process: destructive investigation.
- 3. Destructive investigation starts with the relocation of the occupants of the space. Once relocated, that investigation includes removal of all casework (cabinets), gypsum walls,

carpets, ceilings and possibly exterior siding. If mold is found, remediation is very straightforward and effective. If no mold is found, then further destructive investigation of adjacent spaces may be necessary. If mold is located, simply removing the wall covering/ceiling and exposing the area is all that is needed. The one good thing about Hurricane Katrina is that we have learned how to deal with mold. Exposing the area (removing the sheetrock), remove any wet insulation, then spray the framing surfaces with a mixture of bleach and water solution at a four to one ratio. Allow the area to dry for three weeks, then replace the wall surface. We have a very successful history finding the mold source if present. To date, every report regarding mold in the District has been resolved to the satisfaction of the person that raised the original concern.

While no governmental agency or medical association will set a threshold limit for mold concentrations, historical indoor measurements have ranged from a low of 35 to a high of 860 fungal colonies with no indoor growth present. Outdoor measurements have been as high as 7,700 fungal colonies in the Spring. Again, as mold occurs naturally in the Oregon environment and the air supply for every building brings in outside air, mold will always be present in every test in every building. Only significantly higher spore counts indoors measured against outside concentrations will indicate the potential for mold growth indoors.