

# MOLD CONTROL

Procedure for indoor mold contamination prevention and remediation in walk-in refrigeration units (coolers).

## CONCERN

Serious costs and health concerns. Recent estimated cost of professional remediation is more than \$50,000. In addition to financial concerns, health issues can arise from frequent long-term exposure. Some people develop sensitivities to various species of mold which may cause congestion, wheezing, eye/skin irritation and aggravate asthma. Some severe reactions are possible including fever, shortness of breath, and lung infections. This is all avoidable by preventing mold growth on a continuing basis with the information in this procedural guide.

## ABOUT MOLD

Mold belongs to the kingdom Fungi and grows in both indoor and outdoor environments. Warm, moist environments are favored, however colder temperatures where moisture levels are high can also support mold growth. Refrigerators and walk-in cooler units are ideal because of the moisture level and abundant food sources. Paper, cardboard, agars, medias, lab tape, Styrofoam, caulk, etc. can all be food sources. Frequent entries/exits and repair shut-downs exacerbate the growth. Older facilities on campus have equipment with less insulation or out-dated materials which can also make the growth more abundant.

## WHAT TO DO

- Observe the refrigerator unit and look for mold.
  - Black/grayish growth occurring more around sinks, bench paper, cardboard, or other cellulosic material, walls, ceilings, floors and equipment.
  - White and powdery, not as obvious, sometimes resembling oxidative degradation, is a species of mold which can cause ill health effects.
- Cleaning the unit on a bi-annual basis with or without mold present will help prevent mold. To clean\*:
  - remove all paper products
  - use a slightly diluted general dish detergent (Dawn dishwashing soap at a concentration that can be used to wash dishes)
  - Wipe all surfaces down thoroughly with the diluted dish soap
  - Wipe all surfaces dry with a cloth towel

\*It is recommended that you wear splash goggles, lab coat and disposable gloves for this process.

- Document the cleaning of the unit and have it available during inspections.
  - Due to health and financial concerns with mold contamination within walk-in coolers in particular, EHS will be asking for documentation of bi-annual cleanings during inspections.

## CONTINUED PREVENTION

Prevent or minimize mold growth by:

- Limit all food sources, if you must have them in the unit place them inside of a plastic container with sealable lid:
  - Paper
  - Cardboard
  - Lab tape
  - Agar
  - Media
- Remove or dry any excess water from the unit to limit moisture

## LONG TERM MAINTENANCE OR SHUT-DOWN (>24 HRS)

- Remove everything.
- Clean the unit with dish detergent
- Keep doors of unit OPEN to allow for complete drying of the unit.
- Do not close doors until unit is ready to re-enter service and is switched on to cool.



Questions or concerns please contact EHS at 517-355-0153