

## Moisture Control & Mold Prevention Informational Sheet

- What does mold need to grow?
  - o Food
    - Any biological or carbon-based life form (dust, paper, wood, drywall etc.)
  - Water
    - Liquid water
    - Elevated relative humidity (>70%)
  - Oxygen
  - o If one variable is removed or controlled, then mold growth should not occur
- Water vapor enters buildings through two main mechanisms
  - Vapor Diffusion
  - Air Infiltration
- Primary moisture sources in schools are typically related to poorly managed rainwater/groundwater, plumbing leaks, condensation on surfaces, damp earth in crawlspaces, and construction moisture such as concrete, gypsum mud/joint compound
- How to identify moisture issues?
  - Visual identification
    - Custodial staff during routine daily activities
    - Informing staff to report issues they identify
  - Odor concerns
    - Identify possible moisture issues in areas where odors are reported
    - Look for excessive use of fragranced products (used to cover up odors)
  - Use common sense
    - Touch or feel components, drains, and supply lines for leaks
    - Fix leaks/moisture issues immediately
    - Temporary measures may be used
- How should the district respond to mold contamination?
  - Identify
    - Extent of moisture damage and contamination
    - Dynamics of moisture sources
  - o Dry the wet areas in the short term
  - Discard or decontaminate contaminated material
  - o Design
    - Long term intervention in the moisture dynamics
    - Fungal clean-up procedures and clearance criteria
  - o Implement repairs and program changes to prevent future problems
  - See EPA Guidance mold remediation guidelines
- Each district needs to have an established process for identifying, drying, and resolving moisture issues
  - Key components of this process should include:

- Who's responsible for what?
- What steps should be taken to resolve issues?
- What steps should be taken to dry wetted areas?
- Restore conditions to original state?
- QC or verification of issue resolution?
- If the area is less than 10 square feet clean it up
  - Use detergent and hot water
  - Assorted brushes, rags, and buckets
  - Two bucket cleaning system
  - Do not use high pressure sprayers
  - Make sure PPE is worn
- If the area is over 10 square feet
  - o Respirator
    - P100 or P95 filter
  - Eye protection
  - Rubber gloves
  - o Coveralls
    - o Remove/bag them before you leave the work area
  - Containment
    - See EPA Guidance
- How to minimize moisture issues
  - o Maintain relative humidity levels in the facility between 30%-50%
    - Control dust mite populations
    - Dehumidifiers may be required in problem areas
  - o Routinely monitor the facility for moisture leaks or intrusion issues
    - System in place for staff to report issues
    - o If issues can be resolved and wetted materials dried within 48 hours, no mold growth should occur
  - Develop routine schedules for inspections and maintenance of facility
    - o HVAC systems
    - o Plumbing systems
    - Roof and building exterior

