1.0 Objectives and Introduction

1.1 Purpose and Objectives

The purpose of the Water Response and Mold Prevention Program (WRMPP) is to minimize property damage and liabilities resulting from a water loss or mold growth condition associated with HVAC systems being installed or maintained/serviced by Sunbelt Controls.

The objectives of the WRMPP are to:

- Detect water losses and mold growth early to minimize property damage and liability
- Provide guidance for preventing and responding to moisture/water or mold growth conditions
- Outline the minimum required procedures for responding to a moisture/water or mold growth condition

1.2 Application

This program is only applicable to HVAC systems and associated work under the control of Sunbelt Controls. Those systems under the control of clients (current and previous) are the clients' responsibility.

1.3 Managing Risk – Key Program Components

The following are important components of the Sunbelt Controls WRMPP:

WRMPP Components
A written WRMPP document
Assignment of responsible parties for job functions within the WRMPP
Proactive planning and management of projects and subcontractors
A preventive maintenance and inspection program
Established procedures to minimize potential moisture/water intrusions
Proper documentation of a moisture/water condition or mold growth
Guidelines for response to a moisture/water condition
Identification of mold growth and determination of the extent of damage
Guidelines for remediation of mold-containing building materials
Training objectives and goals for Sunbelt Controls personnel
Communication with interested parties during and following a moisture/water condition or mold growth

1.4 Constructions and the Indoor Environment

Changes in construction since the late 1960's, have led to decreased natural air infiltration and air exchange rates in buildings, to the point that air pollutants within buildings may no longer be diluted or removed as rapidly. Furthermore, these changes in building construction tend to increase average relative humidity indoors.

The indoor environment in any building is a result of the interaction between the site, climate, building system (original design and later modifications in the structure and mechanical systems), construction techniques, contaminant sources (building materials and furnishings, moisture content, processes and activities within the building, and outdoor sources), and building occupants. Indoor air contaminants (mold spores, etc.) can originate within the building or be drawn in from outdoors.

1.5 Fungi

Fungi are microorganisms that are found everywhere: indoors and outdoors. Fungal spores can almost always be found in the outdoor environment. In indoor environments, fungi can grow on numerous sites. In order to grow, fungi have two (2) key requirements: food and water. Fungi feed on carbon sources, such as starchy pastes used with wallpaper, cellulose in paper and numerous building materials, keratin from animal skin scales and human fingernails and toenails, human skin cells, and lignin in wood. In addition, they must have water to promote growth (reference Appendix 35-A for detailed information on fungi, including the health effects associated with their growth in buildings).

1.6 Fungal Growth in Buildings

The window of opportunity for most species of fungi to grow on dampened building materials is forty-eight (48) hours following the water event. If building materials are dried out in less than forty-eight (48) hours from the time they are first wetted, the probability of fungal growth decreases greatly. The following are parameters that promote fungal growth:

- **Moisture content of building materials greater than 12%**
- **Relative humidity within the building greater than 60%**
- **Temperature between 40°F and 100°F**

1.7 Prevention of Fungal Growth Within Buildings

The key to preventing fungal growth within buildings is to control moisture through reducing moisture/water from potential sources and rapidly responding to a moisture/water condition once it has been discovered. Once a moisture/water condition is observed or reported, immediate action should be taken to inspect the area to determine the source, quickly eliminate additional moisture/water, and dry dampened/wetted building materials (reference Appendix 35-D for additional resources of information regarding fungi, their growth within buildings, and remediation of fungal growth).

2.0 Roles and Responsibilities

In order for the WRMPP to be successfully implemented, it is important that management define roles and responsibilities for specific tasks and management authority for specific aspects of the WRMPP. Following is an outline of key roles and responsibilities under this program:

Senior Management is responsible for

- implementing an effective WRMPP
- budgeting for the WRMPP

Risk Manager is responsible for:

- overseeing and administering the WRMPP
- ensuring in conjunction with the Regional

Department Superintendent is responsible for:

- Ensuring a preventive maintenance (PM) program is in place to minimize the likelihood of a water loss associated with the equipment being installed or serviced/maintained by Sunbelt Controls employees.
- Ensuring that programmed inspections for mold contamination and moisture/water are being performed at project sites and maintaining inspection forms for each site for a minimum of one (1) year.
- Confirming water/moisture or mold growth conditions reported on incident report forms.
- Working with the risk manager to coordinate emergency water extraction, mold remediation, and/or mold inspection activities.
- Directing client complaints/concerns regarding a water/moisture or mold growth condition/response to the Risk Manager.
- Conducting or facilitating on-site inspections following client complaints/concerns of a possible moisture/water or mold growth condition under the Risk Manager's direction.
- Ensuring that when a water loss or mold growth is discovered that a "Water Loss and Mold Contaminated Building Materials Incident Report Form" is completed and submitted to the Risk Manager.

Mold and Water Response Team - Regional Safety Managers/Safety Supervisors/Select Department Heads is responsible for:

- Ensuring, in conjunction with the Risk Manager, that safety and health procedures are in place for personnel responding under the WRMPP.
- Monitor/manage water extraction, mold remediation and investigation Safety Managers, that safety and health procedures are in place for personnel responding under the WRMPP
- Communicating to senior management and clients any information regarding water losses or mold-contaminated building materials associated with equipment being monitored, serviced, and/or installed by Sunbelt Controls.
- Keeping senior management and clients updated on the status of any water extraction or mold remediation activities being conducted by Sunbelt Controls.
- Retaining and maintaining all documentation under the WRMPP.
- Periodically reviewing and updating the WRMPP to ensure that procedures are current and effective.
- Providing assistance in the development of Sunbelt Controls employee training and ensuring that the necessary training is provided to all Sunbelt Controls employees.
- Qualifying water extraction, mold remediation, and mold investigation subcontractors.
- Determining the level of response required following observation of a moisture/water or mold growth condition.
- Contracting/coordinating emergency water extraction, mold remediation, and site investigation subcontractors.

General Foreman & Service Technicians are responsible for:

- Performing periodic water loss and mold contaminated building materials inspections required under this program.
- Protecting all porous building materials to be installed by Sunbelt Controls employees or subcontractors from

subcontractors.

- Provide mold awareness training for Sunbelt Controls employees.
- Identify source of water and moisture.
- Determine if water/moisture is related to Sunbelt Controls work.
- Managing client concerns regarding water and mold.

precipitous weather exposure (e.g., morning dew, rain, sleet, snow, etc.) prior to and during installation within the building.

- Ensuring that any dampened/wetted building materials are dried thoroughly and inspected for signs of moisture, water damage, and mold growth, prior to installation.
- Ensuring that no mold contaminated or damp materials (especially porous materials, such as air filters, duct board, and insulation materials) are installed into an HVAC system.
- Reporting water losses or mold-contaminated building materials resulting from an HVAC system installation to the Department Superintendent and Risk Manager by submitting a completed "Water Loss and Mold Contaminated Building Materials Incident Report Form" (reference Appendix 35-B1)
- Maintaining relative humidity levels below 55% using dehumidification equipment in the event of long periods of downtime, such as facility shutdown and power outages
- Directing client complaints/concerns of a possible moisture/water or mold growth condition at a project site to the Risk Manager

3.0 Communication

Communication is a vital part of the WRMPP. Upon discovery of a moisture/water or mold growth condition associated with equipment being monitored, serviced, and/or installed by Sunbelt Controls, the Risk Manager and Department Superintendent are to be notified immediately and an incident response form submitted to the Risk Manager.

All client complaints/concerns regarding a water/moisture or mold growth condition/response are to be handled by the Risk Manager. The Risk Manager is also responsible for providing reports of moisture/water or mold growth conditions and follow-up response activities to Senior Management.

Coordination of water extraction, mold remediation, and/or mold investigation subcontractors will be handled by the Risk Manager or Department Superintendent. All written reports from such subcontractors will be provided to the Risk Manager.

4.0 Documentation and Recordkeeping

The following checklists/forms are to be used to document:

a) **inspections for potential water losses and mold-contaminated building materials to be carried out under this program**
b) **reports of moisture/water or mold growth conditions**
c) **water extraction and mold remediation activities.**

A description of each form's intended use and how long the document should be retained and by whom follows below:

Water Loss and Mold-Contaminated Building Materials Inspection Checklist (reference Appendix 35-B) – this checklist is to be used by a trained inspector to methodically evaluate equipment being monitored, serviced, and/or installed by Sunbelt Controls and surrounding building materials that may have been affected by the HVAC system(s) for signs of moisture, water damage and/or mold growth.

Completed inspection checklists are to be kept by the Department Superintendent and maintained for three (3) years following the completion of the installation project and/or service agreement.

Water Loss and Mold-Contaminated Building Materials Incident Report Form (reference Appendix 35-B1) – this form is to be completed once a moisture/water or mold growth condition associated with equipment being monitored, serviced, and/or installed by Sunbelt Controls is discovered/reported. It is to be used to investigate and document the extent and cause of the damage present. Whenever possible, photographs of affected building materials are to be attached to the form. The form will also be used to document any corrective or emergency actions necessary to remove water and/or damp/wet building materials.

Incident report forms are to be forwarded to the Department Superintendent and Risk Manager immediately upon completion. The Risk Manager is to receive the original report form and a copy is to be made for the Department Superintendent. The Risk Manager is to retain the report form and any associated photographs for a minimum of ten (10) years.

Water Loss and Mold Contaminated Building Materials Incident Report Log (reference Appendix 35-B1) – this log is to be used by the Risk Manager to track reports of moisture/water or mold growth conditions over time. The log is to be reviewed with and made readily available to Senior Management.

The Risk Manager is to retain report logs for the current year plus the previous three (3) years.

Water Loss and Mold Contaminated Building Materials Follow-up Tracking Form (reference Appendix 35-B1) – this form is to be used to document water extraction, mold remediation and/or mold inspection activities taken in response to a report of a moisture/water or mold growth condition. The form will also be used to document the outcomes of water extraction, mold remediation and/or mold inspection activities. All subcontractor reports are to be attached with the follow-up tracking form.

The Risk Manager is to retain the follow-up tracking form and all associated subcontractor report(s) for ten (10) years.

5.0 Competencies and Training

5.1 Sunbelt Controls Employees – WRMPP Training

All Sunbelt Controls employees will receive awareness training on:

- The objectives of the WRMPP
- Basic awareness of HVAC system design and installation issues that may lead to a moisture/water or mold growth condition
- Recognition of dampened or wetted building materials that can lead to potential mold growth
- Reporting requirements of moisture, water and mold related problems

Sunbelt Controls Water and Mold Response Team will receive 4 hours training covering the following topics:

- The objectives of the WRMPP;
- Their specific roles and responsibilities under the WRMPP
- Awareness of HVAC system design and installation problems that may lead to a moisture/water or mold growth condition
- Recognition of dampened or wetted building materials that can lead to potential mold growth
- Emergency dry out procedures
- Remediation contractors will be contacted in the event mold is discovered

An investigation subcontractor will be contracted to ensure mold has been remediated.

The person conducting the training will be knowledgeable in the subject matter. The necessary training must be updated when a change is made to the WRMPP. The Risk Manager is responsible for providing assistance in the development of this training, keeping proper training records, and ensuring that the necessary training is provided to all Sunbelt Controls employees.

5.2 Mold Remediation and Water Extraction Subcontractors

Under the WRMPP, only qualified water extraction and mold remediation contractors will be employed by Sunbelt Controls Mold remediation and water extraction contractors will be monitored by Sunbelt Controls Mold/Water Response Team to ensure the work is conducted properly. Water extraction and mold remediation contractors must provide all of the following to be qualified:

- References from past dry-out or mold remediation projects
- Documentation of completion of any water extraction or mold remediation training courses attended
- Documentation of any professional water extraction/restoration or mold remediation certifications/licenses held
- Documentation of liability insurance and contractor's license

Additionally, qualified mold remediation subcontractors will be familiar with and capable of competently adhering to the following mold remediation guidelines:

- US Environmental Protection Agency (EPA) "Mold Remediation in Schools and Commercial Buildings" EPA Document #402-K-01-001 phone number: **1(800) 490-9198** website: **http://www.epa.gov/iaq/molds/index.html**
- New York City Department of Health's "Guidelines on Assessment and Remediation of Fungi in Indoor Environments."
  website: **http://www.ci.nyc.ny.us/html/doh/html/epi/moldrpt1.html#exec**

Water extraction and mold remediation contractors are to be screened for proper qualifications by the Risk Manager. Once approved, the water extraction and mold remediation contractor will be informed of the objectives of the WRMPP and their roles and responsibilities under the WRMPP (reference sub-sections 2.0, 7.0 and 8.0 under this section [35] for further details).

5.3 Investigation Subcontractors

Under the WRMPP, a qualified consultant will be utilized by Sunbelt Controls for identifying mold and determining the extent of damage related to a moisture/water or mold growth condition when areas of greater than ten square feet (>10 ft2) are affected. From these assessments, the qualified consultant will be retained to generate a mold remediation plan (if one is needed), which will outline the corrective actions to be performed. Lastly, a qualified consultant will be used regardless of the size of the water loss or mold remediation activity, to verify the effectiveness of any dry out and/or mold remediation activities.

To be competent to perform an investigation of a moisture/water or mold growth condition, a qualified consultant must have documented experience performing investigations for water damage and mold growth within buildings be familiar with the following mold remediation guidelines:

- US Environmental Protection Agency (EPA) "Mold Remediation in Schools and Commercial Buildings" EPA Document #402-K-01-001 phone number: **1(800) 490-9198** website: **http://www.epa.gov/iaq/molds/index.html**
- New York City Department of Health's "Guidelines on Assessment and Remediation of Fungi in Indoor Environments."
  website: **http://www.ci.nyc.ny.us/html/doh/html/epi/moldrpt1.html#exec**

Investigation contractors are to be screened by the Risk Manager. Once approved, the investigation contractor will be informed of the objectives of the WRMPP and their roles and responsibilities under the WRMPP (reference sub-sections 2.0, 7.0 and 8.0 under this section [35] for further details).

6.0 Other Program Requirements

6.1 Preventive Maintenance

The Department Superintendent is responsible for ensuring that a preventive maintenance (PM) program is in place to minimize the likelihood of a water loss associated with the equipment being installed or serviced/maintained by Sunbelt Controls employees. The purpose of the PM program is to be proactive in minimizing potential causes of

moisture/water or mold growth conditions at both subcontract and service project sites in which Sunbelt Controls has been employed.

6.2 Programmed Maintenance

HVAC systems being installed, serviced, or maintained by Sunbelt Controls will be routinely inspected for signs of moisture, standing water, water-damaged building materials, and mold growth. In addition, building materials adjacent to components of the HVAC systems and inner building surfaces that could be affected by relative humidity and condensation issues resulting from the HVAC systems design and/or use shall be inspected. The purpose of these inspections is to detect obvious signs of moisture/water, water damage, or mold growth, prior to, during, and upon completion of HVAC system installations or service/maintenance agreements. The inspections will help provide early detection of moisture/water or mold growth conditions and reduce costs associated with such losses.

Inspections shall be fully documented using the "Water Loss and Mold-Contaminated Building Materials Inspection Checklist" (reference Appendix 35-B). It is the responsibility of the Risk Manager to maintain and update this checklist. The Department Superintendent is responsible for ensuring that the General Foreman and/or Service Technicians they supervise are completing routine water loss and mold-contaminated building materials inspections and maintaining records of these inspections for a period of three (3) years following on-site activities. At a minimum, such inspections will be conducted during the following:

- Prior to starting a HVAC system installation or service agreement (this measure will provide documentation of any existing issues prior to beginning work)
- Following severe weather (high winds or heavy rainstorms)
- Upon completion of an HVAC system installation or service agreement
- Monthly during the course of a long-term installation project or service agreement
- Following client/occupant reports of a moisture/water or mold growth condition resulting from equipment installed, serviced, or maintained by Sunbelt Controls.

Upon observation of a moisture/water, water damage, or mold growth condition, a **"Water Loss and Mold-Contaminated Building Materials Incident Report Form"** (reference Appendix 35-B) will be filled out by either the General Foreman or Service Technician, depending on the type of project site, and submitted to the Risk Manager to determine the response required following verification of the presence of moisture/water, water damage, or mold growth by the Department Superintendent overseeing the contract (reference sub-sections 2.0 and 7.0 under this section [35] for further details); reference Appendix 35-A1 for the **"Moisture/Water and/or Mold Growth Condition Inspections and Response Flowchart."**

6.3 Long Periods of Downtime

Should an HVAC system fail or be out of service for longer than forty-eight (48) hours, the Service Technician or General Foreman, depending on the job-site, shall monitor indoor relative humidity levels in the building. Should relative humidity levels within the building rise above 60% for prolonged periods of time, the Service Technician or General Foreman shall inform the Department Superintendent, who will in turn advise the client. The client will be ultimately responsible for any emergency actions to control relative humidity within their building(s), unless Sunbelt Controls is responsible for the HVAC system(s) outage. In

the latter case, Sunbelt Controls will continue to monitor relative humidity in the building and operate dehumidification equipment to maintain relative humidity levels below 60%.

At HVAC system installation job sites, the General Foreman is **only** responsible for monitoring relative humidity if: a) the contract has not been completed and the building has been sealed to the outdoor environment and relying on the HVAC system(s) for relative humidity control; or, b) Sunbelt Controls is responsible for the HVAC system(s) outage.

6.4 Weather Exposure

Precautionary measures should be taken so that porous building materials (i.e., air filters, duct board, insulation, etc.) are not exposed to moisture or water. To that end, the General Foreman or Service Technician, depending on the type of project site, must protect all porous building materials to be installed by Sunbelt Controls employees or subcontractors from precipitous weather exposure (e.g., morning dew, rain, sleet, snow, etc.) prior to and during installation within the building. If porous building materials cannot be protected from precipitous weather exposure, the General Foreman or Service Technician, depending on the type of project site, must ensure that all dampened/wetted building materials are dried thoroughly and are inspected for signs of moisture, water damage, and mold growth, prior to their installation within the building.

7.0 Procedures for Responding to Water Losses and/or Mold Contamination

Despite preventive measures taken to minimize the potential for moisture/water and mold growth conditions, these conditions may arise. In addition, client/tenant complaints or concerns over such conditions may arise. When this occurs, it is important to follow an established process to resolve each incident. This section describes Sunbelt Controls process for responding and investigating potential water losses and/or mold contamination allegedly resulting from HVAC systems installed and serviced/maintained by Sunbelt Controls.

All inspections carried out in the procedures below are to be documented on the Water Loss and Mold-Contaminated Building Materials Inspection Checklist (reference Appendix 35-A1). Any findings of moisture/water, water damage, or mold growth from such inspections are to be documented on the Water Loss and Mold-Contaminated Building Materials Incident Report Form (reference Appendix 35-B1). Finally, all subsequent actions to further evaluate or remediate the conditions reported on an incident report form are to be documented by the Risk Manager using the "Water Loss and Mold-Contaminated Building Materials Follow-up Tracking Form" (reference Appendix 35-B1); reference Appendix 35-A1 for the **"Moisture/Water and/or Mold Growth Condition Inspections and Response Flowchart".**

7.1 Management of a Client / Tenant Complaint or Concern

7.1.1 Once a client/tenant complaint or concern regarding potential water losses and/or mold contamination is received, a representative from the Water/Mold Response Team must be notified immediately.

7.1.2 The Water/Mold Response Team representative will then request that the Department Superintendent coordinate an investigation of the alleged moisture/water or mold growth conditions within twenty-four (24) hours for non-emergency situations (i.e., condensation is observed on a supply diffuser) or immediately in emergency

situations (i.e., water line rupture and standing water is present) to investigate the client/tenant report. **An incident report is required to be submitted to the Risk Manager within 72 hours**.

7.1.3 Any findings of moisture/water or mold growth will prompt:

7.1.3.1 The completion of a Water Loss and Mold-Contaminated Building Materials Incident Report Form (reference Appendix 35-B1), which will be immediately forwarded to the Risk Manager and Department Superintendent.

7.1.3.2 Notification to the client by the Water/Mold Response Team representative.

7.1.3.3 Follow-up water extraction, mold remediation and/or inspection activities (reference sub-sections 7.2 – 7.5 of Section 35).

7.1.4 The Water / Mold Response Team representative must also be notified if no obvious signs of moisture/water, water damage, or mold growth are found. The Water/Mold Response Team representative will then forward the results of Sunbelt Controls findings to the client. Should the client still be concerned, an on-site meeting, with the client and Department Superintendent and/or Water / Mold Response Team representative will be held to investigate the matter. If no resolution can be made, Sunbelt Controls will seek outside assistance (i.e. contracting a certified industrial hygienist to conduct an independent investigation) in resolving the matter.

7.2 Management of an Observed Moisture / Water Condition

7.2.1 All reports of a moisture/water condition will be documented on an incident report form. The incident report form is to be completed by the on-site General Foreman or Service Technician and forwarded to the Risk Manager and Department Superintendent immediately for prompt action.

7.2.2 Upon notification of a moisture/water condition, the Department Superintendent will verify the condition as soon as practical based on the report. The Department Superintendent may be requested to perform a site visit upon the Risk Manager's request to gather further information concerning the observed conditions at the client site.

7.2.3 The Risk Manager will consult with the Department Superintendent and determine which of the following responses to take:

7.2.3.1 If the reported moisture/water condition does not appear to be the result of the HVAC system or related components (e.g., cooling towers) installed by Sunbelt Controls or a condition covered by the service contract, the Risk Manager will notify Sunbelt Controls client of the observed condition. No further actions will be required by Sunbelt Controls.

7.2.3.2 If the reported moisture/water condition appears to be the result of an HVAC system or related components installed or serviced by Sunbelt Controls the Risk Manager will:

7.2.3.2.1 Instruct on-site personnel to control the source of moisture/water causing the condition to occur, if known and possible. If the source is unknown, Sunbelt Controls will seek internal or external resources to properly identify the cause of the moisture/water condition to ensure that it does not occur again.

7.2.3.2.2 If there is no risk of electrical shock, instruct on-site personnel to turn off the circuit breakers supplying electricity to wet areas and/or unplug and remove any small electrical devices currently located on the wet floor coverings or other wet surfaces.

7.2.3.2.3 Determine whether water extraction activities should take place. If the water loss was identified within forty-eight (48) hours of its initial occurrence, water extraction activities should be conducted. In addition, the Risk Manager is to determine whether an emergency water extraction contractor should be contracted.

1) In cases where the water source has affected greater than ten square feet (>10 ft2) of material or is suspected to be gray or black water (reference Appendix 35-E for definitions), a water extraction subcontractor will contracted to remove standing water and dry out dampened/wetted building materials.

2) If the water source is clean water (reference Appendix 35-E for definition) and only a small area [less than ten square feet (<10 ft2)] is affected, properly trained Sunbelt Controls employees may perform the dry-out procedures outlined in Table One below.

Table One: Small, "Clean" Water Dry-Out Procedures*

Affected Materials	Actions
Books and papers	For non-valuable items, discard books and papers. Photocopy valuable/important items, discard originals. Freeze (in frost-free freezer or meat locker) or freeze-dry.
Carpet and backing	Remove the water with a water extraction vacuum. Reduce ambient humidity levels with dehumidifier. In the event that the moisture exceeds 25%, the carpet and padding will be replaced.
Ceiling tiles	Discard and replace.
Concrete or cinder block surfaces	Remove the water with a water extraction vacuum. Accelerate the drying process with dehumidifiers, fans, and/or heaters.

Affected Materials	Actions
Hard surface, porous flooring (e.g., linoleum, ceramic tile, vinyl)	Vacuum or damp wipe with water and mild detergent and allow to dry; scrub if necessary. Dry sub-flooring if necessary.
Insulation	Discard and replace.
Non-porous, hard surfaces (e.g., plastics, metals)	Vacuum or damp wipe with water and mild detergent and allow to dry; scrub if necessary.
Upholstered furniture	Remove water with a water extraction vacuum. Accelerate the drying process with dehumidifiers, fans, and/or heaters. If the piece is valuable, you may wish to consult a restoration/water damage professional who specializes in furniture.
Wallboard (e.g., drywall and gypsum board)	May be dried in place if there is no obvious swelling and the seams are intact. If not, remove, discard, and replace. Ventilate the wall cavity by cutting small holes in the wallboard, if possible. In the event that the moisture exceeds 25%, the carpet and padding will be replaced.
Window drapes	Follow laundering or cleaning instructions recommended by the manufacturer.
Wood surfaces	Remove moisture immediately and use dehumidifiers, gentle heat, and fans for drying. Treated or finished wood surfaces may be cleaned with mild detergent and clean water and allowed to dry. Wet paneling should be pried away from the wall in order to all it to dry.

7.2.4 Table 1 was adopted and modified from U.S. Environmental Protection Agency's (EPA) "Mold Remediation in Schools and Commercial Buildings." Table 1: Water Damage – Cleanup and Mold Prevention. EPA Document # 402-K-01-001 website: **http://www.epa.gov/iaq/molds/index.html**

7.2.4.1 Determine whether the affected area should be managed as an observed/likely mold growth condition, in which case the procedures in Section 7.3 of this portion of the policy manual are to be followed. Porous building materials suspected of being wet for greater than forty-eight (48) hours should be treated as though microbial growth is present.

7.2.4.2 Notify the client of the moisture/water condition and any corrective actions that Sunbelt Controls is planning to take.

7.2.5 Following dry out procedures by Sunbelt Controls or an emergency water extraction subcontractor, the Department Superintendent will inspect the affected area(s) to determine if the dry-out procedures appear to be effective (that is building materials were dried out promptly and no apparent signs of mold growth are present).

7.2.5.1 If the dry-out procedures were believed to be successful, the Risk Manager will contract an investigation subcontractor to conduct a follow-up IAQ (Indoor Air Quality) inspection (reference sub-section 8.1 of section 35 for further details).

7.2.5.2 If the dry-out procedures are determined to be unsuccessful by the Department Superintendent or the investigation subcontractor during his/her follow-up assessment, the procedures outlined in sub-section 7.3 of section 35 are to be followed.

7.2.6 Upon successful completion of the water extraction or determination that mold remediation activities are necessary, the Risk Manager will inform the client what future activities, if any, will be taken.

7.3 Management of an Observed / Likely Mold Growth Condition

7.3.1 All reports of a mold growth condition will be documented on an incident report form. The incident report form is to be completed by the on-site General Foreman or Service Technician and forwarded to the Risk Manager and Department Superintendent immediately for prompt action.

7.3.1.1 An exception to this reporting requirement is made whenever mold growth has resulted after performing a water extraction. In this case, the preliminary reporting requirements would have already been made to the Risk Manager.

7.3.2 Upon notification of a mold growth condition, the Department Superintendent will verify the condition as soon as practical based on the report. The Department Superintendent may be requested to perform a site visit upon the Risk Manager's request to gather further information concerning the observed conditions at the client site.

7.3.3 The Risk Manager will consult with the Department Superintendent and determine which of the following responses to take:

7.3.3.1 If the reported mold growth condition does not appear to be the result of a moisture/water source associated with the HVAC system and related components installed by Sunbelt Controls or condition covered by the service contract, the Risk Manager will notify Sunbelt Controls client of the observed condition. No further actions will be required by Sunbelt Controls.

7.3.3.2 If the reported mold condition appears to be the result of an HVAC system or related components installed or serviced by Sunbelt Controls, the Risk Manager will:

7.3.3.2.1 Instruct on-site personnel to control the source of moisture/water (if it has not already) causing the condition to occur, if known and possible. If the source is unknown, Sunbelt Controls will seek internal or external resources to

properly identify the cause of the moisture/water event in order to ensure that it does not occur again following the completion of mold remediation activities.

7.3.3.2.2 Determine whether trained Sunbelt Controls employees will perform mold remediation. This is only a consideration when affected building materials are determined by the Department Superintendent, Risk Manager, or an investigation subcontractor to be less than ten square feet (<10 ft2).

7.3.4 If greater than ten square feet (>10 ft2) of building materials are determined to be affected by mold at any point during a remediation performed by Sunbelt Controls employees, an investigation subcontractor will be called in (see Section 8.1 of this portion of the policy manual for details).

7.3.4.1 Contract an investigation subcontractor to conduct an IAQ (Indoor Air Quality) investigation (see Section 8.1 for details) if greater than ten square feet (>10 ft2) of mold contamination is present. Following the investigation, a mold remediation subcontractor will be contracted to remove any affected materials (reference Section 8.2 of this portion of the policy manual for details).

7.3.4.2 Notify the client of the mold growth condition and any corrective actions that Sunbelt Controls is planning to take.

7.3.5 Following mold remediation activities by Sunbelt Controls or a mold remediation subcontractor, an investigation subcontractor will be contracted to conduct a follow-up IAQ (Indoor Air Quality) inspection (reference sub-section 8.1 of section 35 for further details) of the completed work. Based upon the results of the investigation, the following will occur:

7.3.5.1 If mold remediation activities were successful, the investigation subcontractor will be required to issue an approval for the work performed.

7.3.5.2 If further mold remediation activities are necessary, additional mold and follow-up IAQ (Indoor Air Quality) inspections will be conducted until an approval can be issued.

7.3.6 Upon receiving approval for the mold remediation activities, the Risk Manager will inform the client that the mold growth previously present has been remediated successfully.

8.0 Water Extraction, Mold Remediation and Investigation Subcontractors

It is important that Sunbelt Controls define clear objectives for the work being provided by water extraction, mold remediation, and investigation subcontractors required under the response management procedures in Sub-section Seven [7]. This section is intended to outline basic services and deliverables that these subcontractors are expected to provide. All findings and

reports generated by water extraction, mold remediation, and investigation subcontractors are to be provided to the Risk Manager.

A Note on Safety: All water extraction, mold remediation, and investigation subcontractors shall be aware of potential hazards they may encounter. Appropriate protective action and adherence to Sunbelt Controls safety policies shall be taken. Hazards to consider are: electrocution, physical hazards of moving mechanical equipment, burns, falls, structural integrity of building materials, microbiological exposure, chemical exposure, and asbestos exposure.

8.1 Water Extraction Subcontractors

The water extraction subcontractor is the first line of defense against mold growth when a moisture/water source is detected early (within 48 hours of its occurrence). The water extraction subcontractor will provide guidance and take actions to dry-out and/or remove building materials to prevent fungal growth from occurring. During the course of the dry-out process, the water extraction subcontractor is to document all dry-out activities performed. Upon completion of the dry-out, the water extraction subcontractor is to provide a brief written report to the Risk Manager assessing their perceived effectiveness in preventing mold growth from occurring and any findings made during the course of their on-site activities.

8.2 Remediation Subcontractors

Following an IAQ (Indoor Air Quality) investigation, if corrective actions are necessary for the removal of water-damaged and/or mold-containing materials, a qualified mold remediation subcontractor, who will be contracted by the Risk Manager on behalf of Sunbelt Controls will perform remediation activities. The mold remediation subcontractor will follow the scope of work as outlined in the remediation plan generated by the investigation subcontractor. This remediation plan will be in accordance with the following guidelines:

- US Environmental Protection Agency (EPA) "Mold Remediation in Schools and Commercial Buildings" EPA Document #402-K-01-001 phone number: **1(800) 490-9198** website: **http://www.epa.gov/iaq/molds/index.html**
- New York City Department of Health's "Guidelines on Assessment and Remediation of Fungi in Indoor Environments."
  website: **http://www.ci.nyc.ny.us/html/doh/html/epi/moldrpt1.html#exec**
  (reference Appendix 35-C of this portion of the policy manual for the **"Summary and Comparison Tables of EPA and NYC Department of Health Mold Remediation Guidelines"**)

The mold remediation subcontractor will document the remediation activities performed and supply that documentation to the Risk Manager.

8.3 IAQ (Indoor Air Quality) Investigation Subcontractors

IAQ (Indoor Air Quality) investigators are contracted to provide initial and follow-up assessments under the WRMPP. All investigation findings and results must be communicated directly to the Risk Manager. The assessments should result in one or more of the following:

- A written report identifying the apparent cause(s) of the condition(s) present.
- A remediation plan outlining any corrective actions necessary.

At a minimum, the following mold remediation guidelines are to be referenced and should be taken into account when developing the remediation plan:

- US Environmental Protection Agency (EPA) "Mold Remediation in Schools and Commercial Buildings" EPA Document #402-K-01-001 phone number: **1(800) 490-9198** website: **http://www.epa.gov/iaq/molds/index.html**
- New York City Department of Health's "Guidelines on Assessment and Remediation of Fungi in Indoor Environments."
  website: **http://www.ci.nyc.ny.us/html/doh/html/epi/moldrpt1.html#exec**

A clearance approval form, if no corrective actions are necessary, signifying that no signs of mold growth were found and that air quality was acceptable on the date of sampling.

9.0 References

EPA 402-K-01-001
EPA 402-K-02-003