

NV5 SCOPE OF WORK

5.0 WORK AREA ISOLATION

The DT/Remediation Contractor shall construct containments in a manner that allows for visual inspection and post-DT cleaning. The intent is to isolate sections of the building into manageable areas. The Contractor shall isolate the work areas from other areas of the building during DT activities as follows:

5.1 DT AFFECTING INDOOR LOCATIONS

For removal of 1 square feet (sqft) or less of SMG impacted material:

- **No containment provisions required.**
- Use dust suppression methods by spraying a mist on surfaces and keeping a HEPA vacuum at the point of removal to minimize dusts.

For DT removal of >1 sqft to <10 sqft of SMG impacted material:

- Place polyethylene sheeting on the ground in the work area to collect removed building debris and protect surrounding contents from dusts generated during removal activities.
- Use dust suppression methods by spraying a mist on surfaces and keeping a HEPA vacuum at the point of removal to minimize dusts.
- Ensure AFDs are operating in “scrub” mode within the work areas to assist in filtering particulates during work activities.

If 10 sqft or greater of mold impacted materials is expected to be removed as part of the DT investigation:

- • Construct sealed containments/isolation barriers surrounding the work area and floor with fire retardant polyethylene sheeting.
- • Keep adequate fire extinguishers in the work area.
- • Establish a negative air-pressure differential system equipped with HEPA filtration within the containment area(s) that is exhausted outdoors, if possible. Drop ceilings allow communication with the ceiling cavities and should also be sealed off.
- • Isolate the work area(s) from the other areas using fire-retardant polyethylene sheeting.
- • Isolate all HVAC supply and return registers within the containment work area.
- • Install a double-flap doorway at the entry of the Containment Area(s). A worker cleaning station shall also be installed at the entry/exit to the work area (i.e., decon chamber).
- • Additional AFDs operating in “scrub” mode may be used within the work areas to assist in filtering particulates during work activities.
- • After the removal of debris and the first HEPA-vacuums, the AFD shall be exhausted within the containment area to re-circulate and filter the air.
- • For areas of DT that are planned to be re-visited at a later date, seal the exposed cavities with fire-retardant polyethylene sheeting and tape, to control the dispersion of dusts and potential contamination from the open cavities.
- • Appropriately clean and sanitize all exposed non-porous materials such as metal framing, in and around removed materials.
- • **Leave sealed containments in place in areas where future remediation is anticipated.**
- • If future remediation is not anticipated (i.e, no visible SMG remains or no additional hidden mold growth is suspected) and if mold impacted materials were removed, post-remediation air testing should be conducted and acceptable results obtained, prior to removal of containments.
- Additionally, prior to removing containments:
 - Ensure all porous building materials such as gypsum drywall, insulation and moisture barrier paper that have become wet and have remained wet for greater than 24-48 hours have been removed. If visible suspect mold growth (SMG) is observed on removed building materials during the course of DT, these materials should be double-bagged, sealed and disposed of.
 - Ensure affected semi-porous and non-porous materials such as wood framing, plywood/OSB sheerwall and other metal and plastic components have been thoroughly cleaned and encapsulated, where appropriate.
 - Thoroughly clean (i.e. HEPA vacuum and damp wipe) all surfaces within containment and ensure no visible dust or debris remains.
 - Following final cleaning, allow HEPA filtered air machines to run in “scrub mode” for an additional 24-48 hrs prior to conducting post-remediation air sampling.

5.2 DT OF OUTDOOR LOCATIONS

For DT in outdoor spaces (that will not impact indoor areas), controls should include, at a minimum:

- • Construct containments/isolation barriers with fire-retardant polyethylene sheeting surrounding the work area. These barriers may be in the form of mobile “cubes” that can be moved from work area to work area whenever feasible and used with dust suppression methods (as opposed to establishing a negative air-pressure differential).

- • Another option is to “drape” the work area(s) with the fire-retardant polyethylene sheeting from top to bottom (floor to ceiling) while utilizing dust suppression methods during the work activities.
- • **Keep adequate fire extinguishers in the work area.**
- Following DT in the spaces, clean-up of the work areas should include the following:
 - Determine which area(s) will continue to undergo remediation and contain spaces as appropriate.
 - Removed porous building materials such as gypsum drywall and insulation that have become wet and have remained wet for greater than 24-48 hours are likely to support fungal growth and should be removed. If visible suspect mold growth (SMG) is observed on removed building materials during the course of DT, these materials should be double-bagged, sealed and disposed of.
 - For areas of DT that are planned to be re-visited at a later date, seal the exposed cavities with fire-retardant polyethylene sheeting and tape, to control the dispersion of dusts and potential contamination from the open cavities.
 - Appropriately clean and sanitize all exposed non-porous materials such as metal framing, in and around removed materials.
- Leave sealed containments in place in areas where future remediation is anticipated. Prior to removing containments, thoroughly clean (i.e. HEPA vacuum and damp wipe) all surfaces within containment and ensure no visible dust or debris remains.

If any storm events are predicted in the interim, it is recommended that staff protect the structure from any additional water intrusions.

6.0 SCOPE OF WORK

If remediation during DT is anticipated, ensure the source(s) of moisture intrusion have been identified and repaired (where feasible) prior to remediation, to prevent additional mold growth from developing. All work shall be completed in accordance with general industry guidelines for mold remediation. Removal of impacted porous building materials should extend at least 2 feet past any visible signs of staining or SMG, where possible. Appropriately clean and sanitize all exposed non-porous and semi-porous materials such as wood and metal framing, in the area of removed drywall and insulation.

6.1 VISUAL OBSERVATIONS DURING EXTERIOR STUCCO AND BUILDING MATERIAL REMOVAL

It is NV5’s understanding that DT activities will involve removal of exterior building materials during the “re-skinning” process of the buildings. During the course of material removal, NV5 will perform the following:

- • Provide onsite guidance on containment provisions required prior to material removal in each of the subject areas.
- • Conduct visual inspections in areas of removed building materials to identify locations of visible SMG and potential “hidden mold growth” and continue gathering information to develop a mold remediation scope of work (SOW).
- • **Collect representative tape lift samples of visible SMG for documentation purposes.**

6.2 ADDITIONAL AREAS OF DT/EXPLORATORY INSPECTION

Rooms Impacted by Known/Suspected Moisture Intrusion

Based on the history of reported water intrusion and information gathered on building envelope defects, destructive testing/exploratory inspections are recommended as follows:

- In rooms not yet identified during DT activities, remove at least three 1' x 1' sections of interior drywall from the base of each wall directly underneath areas of identified/suspected moisture intrusion sources or SMG, and inspect the wall cavities for evidence of moisture intrusion and/or SMG.
- If evidence of moisture intrusion and/or SMG are not observed or suspected, stop removal.
- If evidence of moisture intrusion and/or SMG are observed, stop work, erect containment and controls, and if remediation will be performed immediately then follow remediation protocols and continue drywall and insulation removal at least two feet past visible signs of water damage and/or mold growth.

Baseboards/Cove Bases in All Impacted Rooms

- Since moisture tends to settle the longest at the base of walls (i.e., providing conditions conducive to mold growth), and based on discussions with the District, it has been decided that baseboards/cove bases in all impacted rooms will be pulled back and inspected for visible SMG.
- In locations where SMG is observed, continue pulling back vinyl baseboards/cove bases where necessary, with the intent to understand the full scope of mold/moisture impact.
- If >1sqft of mold growth is encountered during the course of baseboard removal, implement work area isolation measures per Section 5 of this document to control contamination of surrounding areas.
- NV5 will document conditions and gather information to develop a mold remediation SOW.

6.3 FINAL CLEANING OF REMEDIATED AREAS

For areas that have undergone full remediation, the Remediation Contractor shall HEPA vacuum and damp-wipe all non-porous surfaces prior to final visual inspections.

- Porous materials such as exterior drywall that contain visible mold growth and will remain in place are to be damp-wiped and HEPA-vacuumed until no visible mold growth is observed.
- **Use only vacuum cleaners equipped with HEPA filtration.**
- Damp wiping shall be completed using only clean rags with an EPA registered and owner approved biocide or detergent. Wipe surfaces within the containment work area with clean rags that are changed frequently and wetted with an approved biocide or detergent.
- Building materials must be dried thoroughly prior to final inspection and encapsulant application. A dehumidifier may be necessary.
- **Do not use colored encapsulants until final visual inspection has been performed.**
- Ensure no visible dust or debris remains within the work area (including within the exposed wall cavities).
- Do not build-back until acceptable air sampling results have been obtained.