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DELAWARE VALLEY
ENVIRONMENTAL

Remediation Protocol

1140 Wendover Court, Media PA 19063

Inspection Date: July 16, 2026

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Date: October 16, 2026

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Scope of Work

This remediation protocol addresses fungal growth and moisture-damaged materials at 1140 Wendover Court, Media, PA 19063, resulting from overflow of the attic air handler's secondary condensate pan. The water source was assessed as inactive at the time of inspection on July 16, 2026; onset and total duration of wetting could not be established. Condensate migrated from the secondary pan NE corner through the CDX plywood platform decking, SPF ceiling joists and top plate, and blown cellulose insulation, then into the second-floor ceiling assembly serving Bedroom 3 and the adjacent hallway, and down through the Bedroom 3 west partition wall cavity to the bottom plate and carpet pad.

Five affected zones are scheduled across three areas: the attic equipment platform and joist bays 2–4 (approximately 55 sq ft, Condition 3); the Bedroom 3 ceiling west portion below the platform (approximately 40 sq ft, Condition 3); the Bedroom 3 west partition wall lower 2 ft over full length (approximately 22 sq ft, Condition 3); the Bedroom 3 carpet and pad strip at the west wall base (approximately 33 sq ft, Condition 3); and the hallway ceiling at the ceiling–wall junction adjacent to Bedroom 3 (approximately 10 sq ft, condition not determined). Total scheduled affected area is 160 sq ft.

Attic air samples (S-205) returned Aspergillus/Penicillium-like at 23.14x the same-day outdoor control, with Chaetomium and Stachybotrys absent outdoors. The tape lift from attic-side ceiling drywall paper (S-206) returned Chaetomium and Aspergillus/Penicillium-like both at heavy density, and Stachybotrys chartarum at moderate density (Chestnut Ridge Analytical, Inc., CRA-26-31882). Bedroom 3 air (S-204) returned Aspergillus/Penicillium-like at 6.82x outdoor with Chaetomium absent outdoors. Platform decking at the NE corner measured 26.4% MC (saturated); the ceiling joist in bay 3 beneath the platform measured 19.6% MC (elevated); the top plate at the hallway/Bedroom 3 partition measured 17.1% MC (elevated); the west wall bottom plate post-opening measured 22.8% MC (elevated). The north gable rafter tie, used as the dry standard, measured 9.8% MC.

The HVAC contractor (Brandywine Heating & Air, LLC, invoice BHA-40912, June 30, 2026) cleared the blocked primary condensate drain. The secondary pan drain stub remains capped with no active termination, and no water-level shutoff device has been installed. A pre-purchase inspection by Fenwick Property Inspections, LLC (Report FPI-24-2207, June 11, 2024) identified the capped auxiliary drain line and absence of a shutoff device as a deficiency and recommended correction. Those items remain open at this time. Remediation must not begin until a licensed HVAC contractor corrects the secondary pan drainage and installs a water-level shutoff device, and that work is documented.

Affected Areas

Area	Condition	Sq Ft	Materials
Attic — Equipment platform, decking and joist bays 2–4	Condition 3	55	CDX plywood platform decking, SPF ceiling joists and top plate, Blown cellulose insulation, Attic-side ceiling drywall paper facing
Bedroom 3 — Ceiling, west portion below the attic platform	Condition 3	40	Painted gypsum ceiling board
Bedroom 3 — West partition wall, lower 2 ft over full length	Condition 3	22	Gypsum board both faces, SPF framing and bottom plate, Fiberglass batt insulation, Baseboard
Bedroom 3 — Carpet and pad, strip at west wall base	Condition 3	33	Carpet, Carpet pad
Hallway — Ceiling at the ceiling–wall junction adjacent to Bedroom 3	Not determined	10	Painted gypsum ceiling board

Underlying moisture source: The moisture source is overflow from the secondary (auxiliary) condensate drain pan of the attic-installed air handler. The primary condensate drain was cleared by Brandywine Heating & Air, LLC on June 30, 2026 (invoice BHA-40912). Two deficiencies identified in the 2024 pre-purchase inspection remain uncorrected: the auxiliary pan drain stub is capped with no active termination point, and no water-level shutoff device is installed on the unit. Both items must be corrected by a licensed HVAC contractor and documented with an invoice before remediation begins. The correction must be verified under a full cooling cycle prior to clearance sampling, as described in the clearance criteria. Until the secondary pan drainage is functional and a shutoff device is in place, the conditions that produced this loss remain present.

Containment Requirements

Type: full

Full containment is required for the attic work area and for the Bedroom 3 work area. Each area requires floor-to-ceiling polyethylene sheeting with sealed seams, a decontamination chamber at containment entry, and HEPA-filtered negative air machines maintaining a minimum differential of negative 5 Pascals relative to adjacent unaffected spaces. The hallway work area, whose condition is not determined, is to be addressed under limited isolation using polyethylene sheeting and HEPA filtration, precautionary pending the investigative step described below. The two full-containment zones are physically separated by the floor-ceiling assembly; each requires its own negative air unit and pressure monitoring.

Justification: The attic and Bedroom 3 areas are each classified Condition 3 under IICRC S520-2024, based on confirmed fungal growth on the platform decking, attic-side ceiling drywall paper, ceiling joists, and within the Bedroom 3 west wall cavity. The tape lift S-206 returned heavy Chaetomium and Aspergillus/Penicillium-like and moderate Stachybotrys chartarum on the attic-side drywall paper. Attic air S-205 ran 2.11x the same-day outdoor total with Aspergillus/Penicillium-like at 23.14x outdoor. Bedroom 3 air S-204 returned Aspergillus/Penicillium-like at 6.82x outdoor with Chaetomium absent outdoors. The combined Condition 3 scope is approximately 150 sq ft across two physically separated areas. The attic is an enclosed overhead space; disturbance of colonized decking, joists, and insulation will release significant spore loads. Full containment with negative air pressure prevents migration of disturbed material into adjacent occupied rooms, the hallway, and through the ceiling assembly to the living room below. A lesser containment would not control cross-contamination from the attic to the second floor or from Bedroom 3 to adjoining spaces. The hallway receives limited isolation with HEPA filtration because its condition is not yet established; full containment is not justified by an unconfirmed condition, but precautionary controls are appropriate given the confirmed migration path passing through that ceiling assembly.

Barriers

- 6-mil polyethylene sheeting, floor to ceiling with taped seams, at all openings into the attic work area including the access hatch
- 6-mil polyethylene sheeting, floor to ceiling with taped seams, enclosing the Bedroom 3 work area and isolating it from the hallway and primary bedroom
- Decontamination chamber (air lock, minimum two chambers) at the entry to each full-containment zone
- Limited isolation polyethylene sheeting at the hallway ceiling junction, with HEPA air filtration unit exhausting to the exterior, precautionary pending condition determination

- Critical barriers over HVAC supply and return registers within containment to prevent cross-contamination via ductwork
- Polyethylene floor protection within containment and in the decontamination chamber egress path

Negative Air: Minimum negative 5 Pascals differential relative to adjacent occupied or unaffected spaces, verified by continuous pressure monitoring throughout active work. HEPA-filtered negative air machines sized to provide a minimum of 4 air changes per hour within each containment zone, exhausting to the building exterior. Attic containment: the work zone measures approximately 55 sq ft; size the negative air unit accordingly and confirm ACH against the actual attic air volume. Bedroom 3 containment: the work zone covers approximately 95 sq ft of combined ceiling, wall, and carpet scope; size the unit to the room volume and confirm ACH prior to work. Pressure differential must be logged at the start of each work shift and any time containment is breached for material egress. Negative air machines remain running throughout active work but must be shut down before post-remediation clearance samples are collected, as specified in the clearance criteria.

PPE Requirements

Equipment	Specification
Respirator	Half-face air-purifying respirator with P-100 cartridges for all Condition 3 work in the attic and Bedroom 3. Same respirator for the hallway investigative step. N-95 minimum during decontamination chamber passage and waste staging outside active containment.
Suit	Tyvek disposable coveralls with hood and boot covers for all work inside containment. Coveralls are doffed in the decontamination chamber and bagged before exiting.
Gloves	Nitrile gloves, minimum 6-mil, changed between decontamination chamber passes. A second pair of gloves worn over the nitrile gloves when handling materials with visible growth.
Eye Protection	Safety glasses or goggles inside containment. Full-face APR may be substituted for the combination of half-face APR plus goggles where the remediator's employer requires it for attic overhead work.

Additional PPE

- Boot covers changed in the decontamination chamber at each exit
- Hard hat or bump cap for attic work where headroom is limited and overhead framing presents a strike hazard
- Knee pads for work on the attic decking and Bedroom 3 floor-level wall base
- Attic entry: assess confined-space conditions per OSHA 29 CFR 1926 Subpart AA prior to entry; if the attic meets confined-space criteria under that subpart, implement the required entry procedures including atmospheric monitoring, attendant, and rescue plan before any worker enters

Remediation: Attic — Equipment platform, decking and joist bays 2–4

1. Confirm with the project owner or property manager that a licensed HVAC contractor has corrected the secondary pan drain termination and installed a water-level shutoff device, and that the correction is documented by invoice, before any remediation work begins in this area.

2. Photograph all affected surfaces before disturbing any material. Record pin-type moisture meter readings on the CDX plywood platform decking, the SPF ceiling joists in bays 2–4, and the top plate at the hallway/Bedroom 3 partition, using a calibrated pin meter per ASTM D7438. Log all readings with location, substrate, and timestamp.

3. Install full containment: 6-mil polyethylene sheeting floor to ceiling at the attic access hatch and at all openings connecting the work zone to unaffected attic space, with all seams taped. Establish the decontamination chamber at the access hatch. Install critical barriers over any HVAC supply or return registers within or immediately adjacent to containment.

4. Establish HEPA-filtered negative air pressure. Size the negative air machine to provide a minimum of 4 air changes per hour in the contained attic volume, exhausting to the exterior. Verify minimum negative 5 Pascals differential before work begins and log the reading.

5. Don PPE: Tyvek coveralls with hood and boot covers, half-face APR with P-100 cartridges, 6-mil nitrile gloves with outer gloves, safety glasses. Assess attic confined-space conditions per OSHA 29 CFR 1926 Subpart AA before entry; implement required entry procedures if the space meets confined-space criteria.

6. Remove all blown cellulose insulation from the platform decking area and joist bays 2–4. Use a HEPA-equipped vacuum or hand-removal with immediate double-bagging into 6-mil polyethylene bags. Do not use a conventional shop vacuum. Bag and seal all insulation within containment before removal through the decontamination chamber.

7. Clean structurally sound CDX plywood platform decking in joist bays 2–4 in place. Remove and replace any decking that is delaminated, structurally compromised, or still shows growth after cleaning; score and remove it in manageable sections. Bag all debris within containment.

8. Remove the attic-side ceiling drywall paper facing in the affected zone. If the underlying gypsum board shows growth or retains moisture, remove the full thickness of the board from the attic side. Bag all debris within containment.

9. HEPA vacuum all exposed SPF ceiling joists, top plate, and adjacent structural members in the work zone to remove loose spore-bearing material and debris. Physically remove remaining surface

growth from retained framing by HEPA-sanding or wire-brushing, then HEPA vacuum and damp-wipe. Work from the perimeter toward the center to avoid redistributing settled contamination.

10. Apply an EPA-registered antimicrobial solution approved for porous and semi-porous wood substrates to all exposed framing, top plate, and remaining decking surfaces in the work zone. Allow contact time per manufacturer's label. Do not encapsulate any surface until clearance is achieved.

11. Re-measure moisture content on all retained structural members using a calibrated pin meter. All retained framing and decking must reach the drying goal of 15% MC (derived from the 9.8% MC dry standard recorded at the north gable rafter tie, plus a 5-percentage-point field tolerance) before clearance sampling is scheduled. Place desiccant dehumidification or direct-airflow drying equipment within containment if readings remain above the drying goal after initial cleaning.

12. Maintain negative air and containment integrity throughout drying. Log pressure differential and moisture readings daily until the drying goal is reached.

13. Once the drying goal is met on all retained members, perform a final HEPA vacuum of all surfaces within containment, including the attic floor and any surfaces within the settled-spore migration path.

14. Do not remove containment or shut down negative air until the independent assessor has performed post-remediation verification and issued clearance.

Material Disposal: All removed materials — cellulose insulation, CDX plywood decking, attic-side drywall paper and gypsum board, and any debris — are to be double-bagged in 6-mil polyethylene bags, sealed with duct tape, and labeled as mold-contaminated demolition waste. Bags are staged inside containment, wiped down on the exterior with a damp cloth before passing through the decontamination chamber, and transported directly to the waste staging area. All waste is disposed of at a licensed solid waste facility accepting construction and demolition debris per applicable Pennsylvania solid waste regulations. Document bag count, estimated weight, and disposal destination.

Special Considerations: The attic air handler remains in the space throughout remediation. The unit and its refrigerant lines must not be disturbed. Coordinate with the licensed HVAC contractor to confirm the unit is shut down or isolated during work that could deposit debris into the plenum or ductwork. The secondary pan and its drain must be inspected and confirmed corrected before work begins. The attic access hatch serves as the sole worker entry and waste egress point; size the decontamination chamber to accommodate material removal without compromising the barrier. If the attic volume and configuration meet OSHA 29 CFR 1926 Subpart AA criteria for a permit-required confined space, all entry must proceed under a written permit, with an attendant stationed at the hatch and a rescue plan in place before the first worker enters.



Attic platform decking, area near the affected zone — dark grayish-brown discoloration with white surface growth along board edges, consistent with fungal colonization on the wood substrate.



CDX plywood platform decking, NE corner of secondary pan — pin meter reading of 26.4% MC, saturated status, with dark staining on the wood substrate visible at the probe insertion point.



Secondary condensate drip pan beneath the attic air handler — tide line along the interior perimeter indicating prior standing water, active corrosion on the pan rim and interior surface, and debris accumulation on the pan floor.

Remediation: Bedroom 3 — Ceiling, west portion below the attic platform

1. Confirm moisture source correction is documented before beginning work in Bedroom 3.
2. Photograph the ceiling stain area before any disturbance. Record the pinless meter reading at the center of the stain and at the dry reference point (4 ft east of the stain on the same ceiling plane) and log both with location and timestamp.
3. Install full containment enclosing the Bedroom 3 work zone: 6-mil polyethylene sheeting floor to ceiling at all doorways and openings, taped seams. Establish the decontamination chamber at the room entry. Install critical barriers over supply and return registers.
4. Establish HEPA-filtered negative air pressure providing a minimum of 4 air changes per hour in the Bedroom 3 contained volume, exhausting to the exterior. Verify minimum negative 5 Pascals differential and log before work begins.
5. Don PPE: Tyvek coveralls with hood and boot covers, half-face APR with P-100 cartridges, 6-mil nitrile gloves with outer gloves, safety glasses.
6. Remove the painted gypsum ceiling board in the west portion of the Bedroom 3 ceiling below the attic platform, encompassing the approximately 40 sq ft affected area recorded for this zone. Cut to the nearest structural boundary (joist or wall framing line) beyond the visible stain margin. Score the board and remove in manageable sections to minimize airborne debris. Bag all debris in 6-mil polyethylene bags within containment.
7. After board removal, HEPA vacuum the exposed joist bays and any insulation surface visible from below. If the insulation in the joist bays shows wetting, discoloration, or growth, remove it and bag it within containment.
8. Inspect the exposed ceiling framing for visible growth or elevated moisture. Record pin-type moisture meter readings on any SPF joist faces or blocking exposed by ceiling removal. Retained framing must reach the drying goal before clearance.
9. HEPA vacuum all containment surfaces, including floor protection and any remaining ceiling perimeter, following debris removal.
10. Do not remove containment or shut down negative air until the independent assessor has performed post-remediation verification and issued clearance.

Material Disposal: All removed painted gypsum ceiling board and insulation are double-bagged in 6-mil polyethylene bags, sealed, and labeled as mold-contaminated demolition waste. Bags are wiped down on

the exterior before passing through the decontamination chamber. Waste is disposed of at a licensed facility per applicable Pennsylvania solid waste regulations. Document bag count and disposal destination.

Special Considerations: The ceiling removal in this area will expose the underside of the attic platform joist bays. Coordinate sequencing with the attic scope so that attic-side debris removal precedes or runs concurrently under the same containment controls. Any insulation dislodged from above during ceiling removal must be bagged immediately. If the gypsum board removal reveals growth extending beyond the 40 sq ft planned removal area, stop work, notify the assessor, and expand the removal boundary after reassessment.



Bedroom 3 ceiling, west portion — concentric-ring water stain with tan-to-brown tide line banding, indicating recurring moisture intrusion from the attic platform above.



Bedroom 3 ceiling overview — yellowish-brown water staining visible in the upper field of the ceiling, with air sampling equipment deployed in the room at the time of inspection.

Remediation: Bedroom 3 — West partition wall, lower 2 ft over full length

1. Confirm moisture source correction is documented before beginning wall work.
2. Photograph the full length of the west partition wall at the lower 2 ft before any disturbance. Record the pinless meter readings at 12 in AFF and 48 in AFF and log with location and timestamp. Record the pin-type meter reading on the bottom plate (22.8% MC at time of inspection) and note current reading.
3. Install full containment as described for Bedroom 3 above. This scope may be executed under the same containment established for the ceiling scope if the work is performed concurrently.
4. Don PPE as specified: Tyvek coveralls with hood and boot covers, half-face APR with P-100 cartridges, 6-mil nitrile gloves with outer gloves, safety glasses.
5. Remove the gypsum board on both faces of the west partition wall from the floor to 24 in AFF (lower 2 ft) over the full wall length. Score and remove in sections. Bag all debris within containment.
6. Remove the fiberglass batt insulation from the exposed wall cavity. Bag immediately within containment.
7. Remove the baseboard along the full length of the west wall. Bag with demolition debris.
8. Inspect the exposed SPF framing and bottom plate for visible growth. HEPA vacuum all exposed framing, including both faces of each stud and the full length of the bottom plate. Physically remove any surface growth by HEPA-sanding or wire-brushing before the antimicrobial step.
9. Apply an EPA-registered antimicrobial solution to all exposed framing, studs, and bottom plate surfaces. Allow label-specified contact time. Do not encapsulate before clearance.
10. Record pin-type moisture meter readings on the bottom plate and at least two stud faces after cleaning. All retained framing must reach the drying goal of 15% MC before clearance sampling is scheduled. Deploy drying equipment within containment as needed.
11. Log moisture readings and pressure differential daily until the drying goal is met on all retained framing.
12. Perform a final HEPA vacuum of all containment surfaces before notifying the assessor for post-remediation verification.

13. Do not remove containment or shut down negative air until clearance is issued.

Material Disposal: All removed gypsum board (both faces), fiberglass batt insulation, and baseboard are double-bagged in 6-mil polyethylene bags, sealed, and labeled as mold-contaminated demolition waste. Bags are wiped on the exterior before exiting through the decontamination chamber. Waste is disposed of per applicable Pennsylvania solid waste regulations. Document bag count and disposal destination.

Special Considerations: The wall cavity opening post-demolition revealed visible fungal growth on the insulation, framing, and the cavity-side face of the gypsum board. If growth is observed above the 24-in removal line on the stud faces or on the top plate when accessed from below, stop work and notify the assessor before extending the cut line. The bottom plate measured 22.8% MC (elevated) at inspection; if the plate is structurally compromised or shows full-thickness growth, discuss replacement with the assessor before reinstating the wall assembly.



Bedroom 3 west partition wall cavity, exposed during investigative demolition — fungal colonization visible on fiberglass batt insulation, wood stud faces, and the cavity-side face of the gypsum board, concentrated in the lower third of the cavity consistent with moisture accumulation at the floor level.



Bedroom 3 west wall, lower section — tide line staining and paint delamination on the drywall surface approximately 6–8 inches above the baseboard, with buckling and bubbling at the wall base consistent with prolonged moisture exposure.

Remediation: Bedroom 3 — Carpet and pad, strip at west wall base

1. Photograph the carpet and pad at the west wall base before removal. Note the extent of visible staining on the carpet backing and pad.
2. Install full containment as described for Bedroom 3 above. This scope is to be executed under the same containment as the wall and ceiling scopes.
3. Don PPE as specified: Tyvek coveralls with hood and boot covers, half-face APR with P-100 cartridges, 6-mil nitrile gloves with outer gloves, safety glasses.
4. Remove the carpet strip at the west wall base. The recorded extent runs the full 11-ft length of the west wall (approximately 33 sq ft). Score and detach the carpet from the tack strip. Roll the carpet away from the wall, limiting disturbance to the affected strip.
5. Remove the carpet pad from the same zone immediately after carpet removal. Bag carpet and pad separately in 6-mil polyethylene bags within containment.
6. Inspect the subfloor in the exposed strip for discoloration, staining, or elevated moisture. Record pin-type moisture meter readings on the subfloor at the wall base and at a point 12 in from the wall. If subfloor moisture is elevated or growth is present on the subfloor surface, notify the assessor before proceeding.
7. HEPA vacuum the exposed subfloor surface and the tack strip area.
8. If the subfloor is dry and shows no visible growth, apply an EPA-registered antimicrobial solution to the exposed subfloor surface. Allow label-specified contact time.
9. Do not remove containment or shut down negative air until clearance is issued.

Material Disposal: Carpet and pad are double-bagged in 6-mil polyethylene bags, sealed, and labeled as mold-contaminated demolition waste. Bags are wiped on the exterior before exiting containment. Dispose of per applicable Pennsylvania solid waste regulations. Document bag count and disposal destination.

Special Considerations: The carpet pad was recorded as wet (non-numeric, pinless meter) at inspection. If removal reveals standing water or saturated subfloor material, stop work and notify the assessor. Tack strips are to be removed and disposed of with the demolition waste if they show staining or growth.



Bedroom 3 west wall base — carpet being peeled back at the baseboard, revealing dark brown to black staining on the underside of the carpet and carpet pad consistent with moisture damage and microbial growth.

Remediation: Hallway — Ceiling at ceiling–wall junction adjacent to Bedroom 3

1. This area's condition was not established by the assessment. The following procedures are precautionary pending an investigative step to determine whether fungal growth is present.
2. Photograph the ceiling–wall junction staining before any disturbance. Note the extent of tide line staining and any paint delamination observed.
3. Install limited isolation using 6-mil polyethylene sheeting to separate the hallway work zone from adjacent occupied spaces. Deploy a HEPA air filtration unit with exterior exhaust in the isolated zone. These controls are precautionary pending condition determination; they are not predicated on a confirmed Condition 3.
4. Don PPE: half-face APR with P-100 cartridges, Tyvek coveralls with hood and boot covers, 6-mil nitrile gloves, safety glasses.
5. Record pinless meter readings at the ceiling–wall junction staining area and at a dry reference point at least 4 ft away on the same ceiling plane. Log both readings.
6. Investigative step: Using a probe or small-section cut, open the ceiling board at the stain margin to access the cavity above. Document what is found. Notify the assessor of findings before proceeding.
7. Outcome — if fungal growth is confirmed in the hallway ceiling cavity: treat this area as Condition 3. Upgrade isolation to full containment with negative air and minimum negative 5 Pascals differential, connected to or coordinated with the adjacent Bedroom 3 containment. Execute removal and cleaning procedures consistent with those specified for the Bedroom 3 ceiling scope above. Notify the assessor that the scope has expanded.
8. Outcome — if no fungal growth is found: remove and replace only the sections of ceiling board that are wet or visibly damaged. HEPA vacuum exposed framing. Wipe non-porous surfaces with an EPA-registered antimicrobial solution. Confirm structural members are dry before reinstating the assembly.
9. In either outcome, do not remove isolation or shut down air filtration until the assessor has verified the area and issued clearance.

Material Disposal: Any removed painted gypsum ceiling board is double-bagged in 6-mil polyethylene bags, sealed, and labeled. If growth is confirmed and the area is reclassified Condition 3, all removed materials are handled as mold-contaminated demolition waste and disposed of per applicable Pennsylvania solid waste regulations. Document bag count and disposal destination.

Special Considerations: The hallway ceiling staining lies on the same condensate migration path as Bedroom 3 and the attic platform. The staining exhibits tide lines and localized paint delamination at the ceiling–wall junction per the inspection record. Sequencing this investigative step concurrently with the Bedroom 3 work is efficient and allows the assessor to review findings from both areas together before clearance. If growth is confirmed, the hallway containment should be physically connected to or coordinated with the Bedroom 3 containment where the layout permits.



Hallway ceiling–wall junction adjacent to Bedroom 3 — yellow-brown staining extending bilaterally along both ceiling planes at the corner, with tide lines and localized paint delamination and bubbling near the apex.

Occupant Notification

The inspection record indicates the property is owner-occupied. The owner's son relocated from Bedroom 3 to the guest room approximately three weeks before the July 16, 2026 inspection. The owner has reported a musty odor on the second floor since late spring and ceiling discoloration first noticed mid-May.

Before work begins, notify the occupant in writing of the remediation start date, the areas under containment, and the estimated duration. Provide at least 24 hours' advance notice.

Post written notice at each containment entry point and at the second-floor hallway entrance identifying the area as a restricted work zone and prohibiting re-entry by occupants until clearance is issued.

Occupants must not enter any containment zone during active remediation or during the post-remediation verification period while containment remains in place.

Given that active work will disturb confirmed fungal growth in the attic and Bedroom 3 simultaneously, and that the second floor is a residential space with a documented condensate migration path to adjoining rooms, the occupant should remain out of the second floor entirely during active work. Advise the occupant in writing to consult their physician before returning to the second floor, particularly if any household member has asthma, a respiratory condition, or a compromised immune system. This is a precautionary recommendation, not a medical determination.

The living room and primary bedroom air samples returned results within the same-day outdoor baseline. Those areas are not under remediation scope. The occupant may use the living room during remediation provided the containment barriers are intact and negative air is maintaining the required pressure differential.

Temporary relocation from the second floor for the duration of active remediation is strongly advisable. The final decision rests with the occupant and, where health conditions are a consideration, with their physician.

Waste Disposal

Classification: Non-hazardous mold-contaminated construction and demolition debris. No asbestos-containing materials were identified in the assessment record. If materials of unknown age or composition are encountered during demolition that may contain asbestos, stop work and arrange for sampling and analysis before proceeding; NESHAP requirements at 40 CFR Part 61, Subpart M apply if regulated asbestos-containing material is present.

Procedures

1. Double-bag all removed materials in 6-mil polyethylene bags. Fill each bag no more than two-thirds full to allow secure sealing.
2. Seal each bag with duct tape and label: 'Mold-Contaminated Demolition Waste — 1140 Wendover Court, Media, PA 19063'.
3. Wipe the exterior of each sealed bag with a damp cloth before moving it through the decontamination chamber.
4. Stage sealed bags in the decontamination chamber exit zone only; do not transport unsealed bags through occupied areas.
5. Move sealed and labeled bags directly to a designated waste staging area at the exterior of the building, with no passage through unaffected occupied rooms.
6. Transport waste directly to a licensed solid waste disposal facility accepting construction and demolition debris.
7. Document the number of bags, estimated total weight, disposal facility name and address, and manifest or receipt for each load.

Applicable Regulations

- Pennsylvania Solid Waste Management Act (Act 97 of 1980) and implementing regulations at 25 Pa. Code Chapter 271
- 40 CFR Part 61, Subpart M (NESHAP for Asbestos) — applicable if asbestos-containing material is encountered
- EPA Mold Remediation in Schools and Commercial Buildings (EPA 402-K-01-001) waste handling guidance

Clearance Criteria

Visual Inspection: All materials scheduled for removal must be removed. No visible fungal growth, staining attributable to active or prior fungal colonization, or mold-contaminated debris may remain on any surface within the remediated areas. All surfaces must be dry, clean, and free of visible dust and debris. Exposed framing and structural members must show no visible growth. The assessor performs the visual inspection as the first clearance step; if the visual inspection fails, sampling does not proceed until deficiencies are corrected.

Air Sampling: Post-remediation air sampling is performed by the independent assessor while containment is in place and negative air machines are shut down, after the required settling period. A minimum of one post-remediation air sample is collected inside each remediated area (attic, Bedroom 3). A concurrent outdoor control sample is collected on the same day under the same conditions. Samples are analyzed by spore-trap method per ASTM D7391 at an accredited laboratory. The clearance criterion is that indoor spore counts for all genera return to levels at or below the same-day outdoor control. Chaetomium and Stachybotrys, both absent outdoors on the sampling day, must return to non-detected or at or below the outdoor level.

Moisture Readings: The dry standard is 9.8% MC, recorded by pin meter on the north gable rafter tie (SPF) in the attic on July 16, 2026, per ASTM D7438. This is the reference reading for unaffected material in the same structure. The drying goal, the moisture content remediated materials must reach before clearance sampling is scheduled, is 15% MC. This goal was derived by applying a 5-percentage-point tolerance to the 9.8% MC dry standard. All retained SPF framing members, the bottom plate, and any retained decking within the remediated areas must measure at or below 15% MC by pin meter before post-remediation air sampling is scheduled. Readings are taken at a minimum of three points per structural member where practicable and documented with location, substrate, meter type, and date.

Verification Under Containment: Post-remediation verification is performed while containment is still in place. Containment is not removed until the assessor issues written clearance. Before clearance samples are collected, the HEPA-filtered negative air machines must be shut down and the contained area allowed to settle for a minimum of 3 hours with containment sealed and no personnel entering. Samples are collected after the settling period with the negative air machines off. Any sample collected while filtration was running is void and must be recollected after a new settling period. After sample collection, the negative air machines may be restarted if additional work is required pending results. Once the assessor issues written clearance, containment may be removed and reconstruction may proceed.

Underlying Cause Verification: The moisture source is overflow from the attic air handler's secondary condensate pan, resulting from a blocked primary drain and a capped auxiliary drain with no water-level shutoff device. Before remediation begins, a licensed HVAC contractor must correct the secondary pan drain termination, clear or confirm the primary drain is free-flowing, and install a water-level shutoff

device on the air handler. These corrections must be documented by a signed invoice identifying the work performed.

At clearance, the HVAC system must be operated through a full cooling cycle of at least one hour with the system running under normal load conditions. After the cooling cycle, the assessor or licensed HVAC contractor verifies that: (1) the primary condensate drain is flowing freely with no backup; (2) the secondary pan contains no standing water and shows no active dripping; (3) the water-level shutoff device, if wired to the system, is confirmed functional by test; and (4) pin-type moisture meter readings on the platform decking NE corner and ceiling joist bay 3 are at or below the drying goal of 15% MC. If any of these conditions is not met, clearance is not issued and the HVAC deficiency must be corrected before re-sampling.

Parameter	Threshold	Standard
Visual — no visible fungal growth or debris remaining	Zero visible growth or mold-contaminated debris on any surface in the remediated areas	IICRC S520-2024 Standard for Professional Mold Remediation, Post-Remediation Verification
Post-remediation indoor air — total spore count	At or below the same-day outdoor control total	Project clearance criterion (set by the assessor), consistent with the comparative approach described in AIHA Assessment, Remediation, and Post-Remediation Verification of Mold in Buildings, 2nd edition (2021)
Post-remediation indoor air — Aspergillus/ Penicillium-like	At or below the same-day outdoor control count for this genus group	Project clearance criterion (set by the assessor)
Post-remediation indoor air — Chaetomium	Non-detected or at or below the same-day outdoor level; was absent outdoors on the assessment sampling day	Project clearance criterion (set by the assessor)
Post-remediation indoor air — Stachybotrys	Non-detected or at or below the same-day outdoor level; was absent outdoors on the assessment sampling day	Project clearance criterion (set by the assessor)

Parameter	Threshold	Standard
Moisture content — retained SPF framing, bottom plate, and decking	At or below 15% MC by pin meter (drying goal derived from 9.8% MC dry standard plus 5-percentage-point field tolerance)	Project clearance criterion (set by the assessor); dry standard derived from IICRC S500 comparative method; no fixed numeric threshold is published by IICRC S500
HVAC secondary condensate system — functional verification	Primary drain free-flowing, secondary pan dry with no active drip, water-level shutoff device functional, all confirmed under a full cooling cycle	Project clearance criterion (set by the assessor)

Standards Referenced

- IICRC S520-2024 Standard for Professional Mold Remediation: Governs condition classification (Condition 1, 2, 3), containment requirements, remediation procedures, and post-remediation verification criteria for all affected areas in this protocol.
- IICRC S500 Standard for Professional Water Damage Restoration - Categories 1/2/3; Classes 1–4; Dry Standard (comparative method): Provides the framework for water damage classification and the comparative moisture dry standard methodology. The dry standard of 9.8% MC (north gable rafter tie, SPF) was established per the comparative method described in S500. S500 publishes no fixed numeric moisture threshold.
- ASTM D7391: Standard test method for spore-trap air sample analysis by optical microscopy. Applies to all air samples collected at this property (S-201 through S-205) and to post-remediation clearance samples.
- ASTM D7438: Standard practice for field calibration and application of hand-held moisture meters on solid wood substrates. Applies to all pin-type moisture meter readings on SPF framing, CDX plywood decking, and SPF sill plate recorded at this property.
- AIHA Assessment, Remediation, and Post-Remediation Verification of Mold in Buildings, 2nd edition (2021): Post-remediation verification approach. The comparative indoor-to-outdoor clearance criterion used in this protocol is consistent with the framework described in this publication. It publishes no numeric spore-count pass threshold.
- OSHA 29 CFR 1926 - Subpart E (PPE); Subpart AA (Confined Spaces in Construction): Worker protection requirements. Subpart E governs PPE selection and use. Subpart AA governs confined-space entry for the attic work area if that space meets confined-space criteria.
- EPA Mold Remediation in Schools and Commercial Buildings (EPA 402-K-01-001): EPA guidance on mold remediation practices, containment selection, and waste handling. Referenced as supplemental guidance consistent with this protocol.
- 40 CFR Part 61, Subpart M (NESHAP for Asbestos): Applicable if asbestos-containing materials are encountered during demolition. No asbestos was identified in the assessment record; this citation is included as a contingency for any materials of unknown composition discovered during work.
- 25 Pa. Code Chapter 271 (Pennsylvania Solid Waste Management): Governs disposal of non-hazardous construction and demolition debris, including mold-contaminated building materials, at licensed solid waste facilities in Pennsylvania.

Limitations and Disclaimer

Scope of Inspection and Limitations. This report reflects the conditions observable at the property on the date of inspection within the visible and readily-accessible portions of the building. Except where this report expressly describes an invasive opening, lifted flooring or other destructive investigation, the inspector did not dismantle building systems, lift carpeting or padding, move stored items, perform destructive testing, or otherwise inspect concealed cavities. Conditions in areas not opened or otherwise accessed — including but not limited to wall, ceiling and floor cavities, areas behind built-in furniture, locked spaces, and locations otherwise not visible at the time of inspection — are excluded from the scope of this report.

Hidden and Future Conditions. Mold growth, moisture intrusion, or other conditions hidden behind finishes or otherwise not visible at the time of inspection are not within the scope of this assessment. The inspector makes no representation regarding conditions that may exist outside the inspected areas, may have existed prior to the inspection and since changed, or may develop after the inspection date. Findings reflect a point-in-time snapshot only; environmental conditions can change rapidly with changes in moisture, ventilation, or occupancy.

Limitation of Liability. Liability arising from any error, omission, or claim related to this report is limited to the fee paid for the inspection and analytical work described herein. This limitation applies to the inspector, the inspecting firm, and any affiliated parties, regardless of the legal theory under which the claim is brought. Acceptance of this report constitutes acknowledgement of this limitation. Nothing in this paragraph waives any non-waivable rights or duties under applicable state law.

Health Effects and Medical Opinion. The inspector is not a medical professional and this report does not constitute medical advice, diagnosis, or treatment. The presence, absence, or quantity of mold spores reported here cannot be used to predict whether any individual will or will not experience health effects from indoor mold exposure. Occupants with health concerns related to indoor air quality should consult a qualified medical provider. Recommendations in this report address building conditions, not human health outcomes.

Inspector Certification

I, **Daniel Marchetti**, hereby certify that this remediation protocol reflects my professional opinion based on the inspection conducted on July 16, 2026 and laboratory analysis dated July 21, 2026. The findings, conclusions, and recommendations herein are based on the data collected during the site visit and the laboratory reports referenced in this document.

Daniel Marchetti

Daniel Marchetti

IICRC AMRT #1176420 • IICRC WRT #1176419 • ACAC CIEC #8814

Date: October 16, 2026