

# Review of Environmental & Related Facility Condition Assessment, Testing & Remediation Activities (2023- 2025)

Bucks County Community College – Newtown Campus

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PHASE I REPORT

BOARD OF TRUSTEES

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**To:** Thomas J. Jennings, Esq., Board Chair  
Dr. Patrick M. Jones, President & CEO,  
Bucks County Community College  
**CC:** Michael Harris, Chief Operating Officer  
**From:** Jerry Roseman, MSc.IH, President, Occupational Health and Consulting Services  
**RE:** Bucks County Community College *Facility Actions (2023-25) Review Report*  
**Date:** August 21, 2025

## I. Executive Summary

This report provides an overview of the work done by Occupational Health and Consulting Services (OHCS). OHCS is engaged as an independent professional evaluator (See Appendix A for Qualifications). The work scope in Phase I includes completing a review and assessment of a set documents related to environmental and facilities condition concerns, issues, evaluation, assessment, testing, and remediation work conducted by BCCC facilities staff and by environmental consultants and contractors in many of the Newtown Campus buildings and spaces from the period starting in the spring of 2023 to the current date, and for supporting the implementation of action steps in Phase II for the Scope of Work). Phase II will include support for best-practice program buildout: procedures/policies, EHS function design, data tools and public dashboard, and advisory support to leadership and the development of more systematic and comprehensive BCCC facility and environmental health and safety committee structure. Phase II will also track the scheduled HVAC inspection, cleaning, and operational testing (CET) beginning mid-September 2025 (See Appendix B for Phase I & II work scope details).

OHCS representatives have reviewed extensive documentation, including reports, summaries, health and safety committee meeting notes, sampling and testing data/results, recommendations from contractors/vendors, remediation work summary information, and expenditures related to assessment, testing and response, as provided by BCCC staff. We have met with Controlled Environmental Technologies (CET), the HVAC contractor scheduled to start work in mid-September, and conducted a brief, initial visit in order to provide our best professional judgment about whether the assessment, evaluation and remediation actions conducted by BCCC have been adequate and reasonable in response to identified issues and potential concerns raised by employees. (see Appendix C for a complete list of documents provided by BCCC to OHCS).

Our review evaluated whether the work and information presented in the provided documents reflects adequate assessment and evaluation efforts, and effectively addressed conditions and issues raised as potential areas of concern in meetings and discussions regarding environmental and facility issues. Our major charge was to provide our best professional judgment about whether the actions taken by BCCC to assess and remediate adverse environmental and facility conditions, especially beginning in spring, 2023, have been adequate and reasonable in response to potential health and safety issues and concerns related to the as-built conditions that had been raised and identified by BCCC employees and facility representatives, as well as actions undertaken in response to BCCC assessment efforts and findings, and to draw preliminary conclusions about the actions taken to support the current health and safety status of buildings and spaces on the BCCC Newtown campus.

## II. Primary Findings

**Extent of Issues:** Findings related to adverse environmental conditions were determined to be primarily **localized, not campus-wide**, and most of the IAQ-related measurements obtained from sampled/inspected locations were found to be within expected ranges for non-industrial buildings of this age, type, and use.

**Confirmed Hazards Addressed:** Where visible mold or dampness was identified, sources were corrected and impacted materials cleaned or replaced; where radon exceeded the EPA action level in select basement offices at Grupp Hall, in Cottages 1-4 and in a few other locations, mitigation was implemented with follow-up post-remediation testing completed confirming condition improvement. Water quality issues were addressed with BCCC switching to the Newtown public water system (from well water) and by adding point of use filtration and filtered hydration stations. Facility and building system deficiencies with roofing, flooring, and water intrusion were also addressed through a series of capital and maintenance upgrades and responses.

**Ventilation & Comfort:** Aging HVAC systems and components likely contributed to intermittent ventilation/thermal control issues in some areas. These are being addressed through maintenance and the planned CET HVAC program work (scheduled to begin mid-Sept 2025), and they will be further evaluated, and improvements recommended as part of Phase II activities.

**Verification:** Pre-/post-remediation test (sometimes referred to as “reassurance” testing) results, data sets and clearance checks showed **improvement** in treated areas. Additional seasonal confirmation (ongoing and as-needed evaluation and testing) and follow-up evaluation is planned where appropriate (e.g., for mold and radon).

**Evaluation/Remediation Expenditures** – significant financial expenditures have been made (2023-date) and will continue to (moving forward) effectively address facility and related environmental condition issues demonstrating the BCCC commitment to sustainable and long-term improvement and protection of the health, safety, welfare, and comfort of all BCCC employees and students.

**Stakeholder Engagement:** Based on our review of dozens of health and safety and building safety committee notes and meeting documentation, it is obvious that communication between BCCC management and leadership and, college staff/employees and union representatives has been robust, active, and engaged. Continued transparency (posting results, timelines, and completion status) remains essential to sustain trust. Communication, coordination, and stakeholder engagement, including data and information sharing will be a specific focus of Phase II activities.

### III. Preliminary Observations

**Communication** - Over the past two (2) + years (April 2023 – August 2025), the BCCC has engaged in conducting extensive and effective data collection and information gathering, assessment and evaluation of facility, building system and environmental conditions, pre-remediation testing and sampling by 3<sup>rd</sup> party engineering and environmental firms, extensive remediation and upgrade work, and post-remediation testing to confirm the effectiveness of solution implementation. These assessments included both visual and environmental testing, including mold, moisture, and dampness, IAQ parameters, ventilation performance, water quality, and radon.

There has been extensive communication with faculty and staff throughout the mid-2023 – current date period, to ensure that issues were able to be raised by employees, that the concerns raised by stakeholders were given proper consideration and that ongoing progress, testing results and information about proposed action steps have been shared.

- In an AFT-union published (12/11/2023) article titled “Union spurs clean-up of dangerously toxic buildings” in which union representatives described what had been long-standing issues and concerns related to building conditions (**present prior to the summer of 2023**) as “now” (i.e. in the article) being addressed, starting in around July, 2023 in a more robust and serious manner by the College with significant assessment, evaluation, testing, remediation, and financial investment being implemented with the result being improved facility and environmental conditions by the end of 2023 and with specific plans for ongoing assessment and remediation in 2024.
- The 2023-2024 faculty-led end of year report (dated April. 2024) confirmed what had been published several months earlier (above) by stating: “Reflecting on the past year’s progress with the Building Related Illness Committee, we extend our heartfelt gratitude to the Physical Plan department. Special acknowledgements go to Eric Siddell, the Project Manager, and Eric Andrews, the Director. Their leadership and the entire team’s unwavering commitment have been crucial in navigating our campus’s complex building safety challenges. Their expertise and dedication have significantly contributed to enhancing our environment’s safety.”
- The report also included expressions of appreciation for college leadership and Board support and guidance with respect to facility stewardship and stating that the college’s “dedication, insights, and collaborative spirit” as being the “cornerstone of our progress” and by specifically acknowledging the BCCC leaders and Board’s “collective effort and shared vision for a safer, healthier campus environment that have driven us forward.”
- Finally, comments received from faculty/staff representatives about the information included in the college’s June 2025 *Campus Update: Environmental Health & Safety Projects* document highlighting and detailing the extensive and ongoing facility and environmental improvement work that had occurred since July 2023, affirmed support for BCCC efforts and actions taken to date.

The above summary (as provided by faculty/staff representatives) is provided to help support our independently arrived at conclusion that activities conducted by BCCC starting in July, 2023, and continuing into, and throughout 2025, were considered to represent robust and positive action, and to reflect the notion that major upgraded improvement efforts had occurred, and were planned moving forward, compared to what had been previously in place.

1. **Remediation/Response:** Where specific hazards were identified and where elevated sample results were documented (e.g., for visible mold, elevated radon levels, physical condition or building system deficiencies) faculty/staff were relocated, areas and conditions were addressed by cleaning, repair, replacement, upgrades, and remediation. This was, and continues to be, a major and ongoing effort.
2. **Testing:** Extensive pre- and post-remediation testing has been conducted starting with the 2023 engagement and efforts undertaken by RVE (site visits and testing beginning in April 2023 – report in July 2023) and involving other contactors and consultants. Visual assessment, baseline and screening testing, and follow-up (including “reassurance”) testing efforts have been conducted with post remediation testing supporting conclusions of environmental and facility condition improvement or else, requiring further remediation and testing be performed.
3. **Resources:** The college has demonstrated that it has, and will continue to be providing significant and substantial resources to BCCC building health and safety assessment, evaluation, and remediation improvement and upgrade work – the general work scope, dollars spent to date, and planned for the upcoming fiscal year were well summarized and detailed in the June, 2025 *Campus Update: Environmental Health & Safety Projects* referenced above.

Current evidence does **not** indicate imminent environmental hazards in occupied spaces.

In summary and based on provided document and material review, discussions with management and staff representatives, and the preliminary field walkthrough, it my professional judgment and opinion, that the work undertaken by BCCC (for the period from early spring 2023 to the present time) has been both responsive to the concerns identified and has also been appropriate and consistent with best practices approaches for the non-industrial, as-built environment in addressing the scope and scale of the facility and environmental issues and concerns at the BCCC Newtown campus.

The following pages provide a more detailed review and some further analysis as well as recommendations moving forward.

## IV. Detailed Review of Facility Health and Safety Activity (2023-25)

### Introduction / Context

As described in the Executive Summary above, Occupational Health and Consulting Services (OHCS) was engaged in July, 2025 for the purposes of an independent review and assessment of a set of documents and reports related to facility concerns dating from July 2023 to present, conditions, including potential problem conditions, remediation and work activities by both facilities staff and vendors, and testing results from sampling performed at specific Bucks County Community College (BCCC) facilities.

### Summary of OHCS Work Performed

OHCS participated in meetings with key staff, reviewed extensive meetings notes, reports, results and other documents provided by the BCCC Facilities staff and conducted a brief site visit to observe key locations identified in the materials.

### Meetings

OHCS participated in several meetings and discussions with designated staff, who provided a detailed overview and context, including regarding how potential issues were identified and reported; information about meetings and processes; remediation and maintenance work performed by both BCCC Facilities and vendors; test results and planned remediation, maintenance, and upgrades.

### Document Review

OHCS has been able to complete a *preliminary* review of documents including all test results provided to us dated from July 2023 to the present, to assess the appropriateness and responsiveness of the actions taken in addressing potential issues and identified concerns.

We would note here that our assessment is preliminary and is based only on the documents we have been provided. If additional documents are provided, or our further review of existing documents suggests any material differences to our report, we will make updates to our findings as warranted.

The list of materials provided (*see APPENDIX C for documents list*) is summarized below:

- Meeting notes reflecting both concerns and commensurate activities undertaken by the College to address potential issues.
- Summaries of assessment and evaluation activities (dates, scope, testing, results), associated remediation work conducted, expenditures (completed and planned), and ongoing needs and actions.
- Third-party IAQ reports and reassurance testing results.
- Third-party radon testing reports and results.
- Third-party lead in water testing results.
- Review of additional remediation, maintenance, and repair projects and interventions, conducted by either in-house staff or outside contractors.



Our scope of work was to provide an independent review of the information provided, to assess whether the efforts by BCCC have been appropriate, which in this case means that they followed reasonable and industry-standard steps to address the identified concerns. OHCS did not conduct independent testing.

Determining and formally assessing specific and quantitative health and safety risks and being able to determine association and causation between symptoms, illnesses and exposure risks is a challenging effort, and often the science needed to make these associations simply is not there. At the same time, we are not in the business – none of us – of ignoring or downplaying potential health risks whether it is discomfort or frank disease.

In any given situation where potential concerns are raised, we would expect to see that:

- Concerns are investigated.
- Information is gathered (i.e., detailed information documenting the cause for concern, system information, maintenance practices and schedule) and that targeted testing is done.
- Where tests indicate a problem exist, reasonable remediation steps are taken.
- A re-assessment is done following maintenance or remediation.
- Appropriate maintenance, inspection/assessments, and future testing are scheduled.

## V. Timeline and Activities: Assessment, Evaluation, Testing, & Remediation

Starting in early 2023, staff had identified a set of concerns which were discussed in a facilities meeting. This led to the first large scale assessment and evaluation study contracted by the BCCC, which engaged an independent firm, Remington & Vernick Engineers (RVE), to conduct a major systematic evaluation, assessment, testing, and remediation program of the facility, building systems, and environmental conditions across the Newton campus building infrastructure, starting with Grupp and Founder's Halls.

The more detailed summary provided below in this report is not intended to reflect a comprehensive description (in covering every issue and every test result in all spaces and buildings between 2023-2025) nor are we presenting a description of the full scope of testing done in individual locations.

Because we are looking to highlight major issues and concerns, we have mixed a few topic types together, starting with a description of one specific project and report (from RVE) because it represents the starting point for our scope of work and review.

We then cover several of what we understood to be the most major specific environmental and related issues: e.g., mold; radon; indoor air quality; water quality; facility and maintenance issues (focused on assessment and remediation/replacement/upgrade work that is related to and impacts environmental conditions).

Finally, we have a dedicated section addressing a significant and persistent set of concerns related to reports of occupant health, symptom and illness related issues and the relationship to building conditions.



## A. RVE Report – Grupp & Founders Halls (April – August 2023) Initial Physical & Environmental Evaluation & Testing Effort – Founders & Grupp Halls

The firm, Remington & Vernick Engineers (RVE) was engaged to conduct on-site evaluation and testing to determine as-built condition status, and to provide recommendations for remediation and related activities (reflected in their July 2023 report and in their follow-up presentation to the BCCC-BOT in August of 2023). RVE conducted visual inspections and collected samples for a large range of environmental chemicals and conditions in April and May of 2023. A total of more than two hundred air and surface samples were collected for radon, mold, bacteria, volatile organic compounds, and number of indoor air quality (IAQ) metrics including, but not limited to, carbon dioxide, carbon monoxide, trichloroethylene, “PFAS.” Samples were collected from water and air, and from wall surfaces, carpet glue and other surfaces.

RVE investigators also used hand-held, direct reading instrumentation and, “continuously screened all accessible rooms for CO<sub>2</sub>, CO, temperature, humidity, H<sub>2</sub>S, NO<sub>2</sub>, volatile organic compounds (VOCs), and trichloroethylene (TCE) in air samples that are representative samples/readings of the indoor air quality throughout the above-listed facility.” (pages 2 & 3 of the RVE “Indoor Environmental Sampling Report – Founders Hall & Grupp Hall, July 2023).

RVE’s physical inspection of “various accessible areas” in both Founders and Grupp Halls concluded that both were in generally good condition, “exhibiting little to no damage to floors and walls in the select areas of the building observed” although they noted past evidence of condensation and other physical condition issues.

According to the RVE report, very few elevated levels of any sampling type were measured during their survey, except for the following:

- Of the thirty-six total (36) water quality samples (for lead) collected only six (6) – two (2) in Founders Hall and four (4) in Grupp Hall were above EPA levels and only one was in a drinking water fountain. Only 2 (of 20) samples (collected from Grupp Hall) showed any legionella (this is a somewhat common finding in many large drinking water systems).
- IAQ (air) sampling results for most chemical and biological agents (e.g., mold) sampled were either negative or found at levels expected in typical air.
- Mold-specific sampling was also conducted which according to the RVE report section 6.2.2 Mold in Air Sampling Conclusions, stated that “detectable levels” of mold spores were found in all indoor samples at both Grupp and Founders – this is an always the case result because mold spores are present everywhere in the environmental and at all times.

In their report, RVE did not conclude anything other than mold was detectable in air and their conclusions were basic commonsense general cleaning measures to be taken, as well recommending that should mold remediation be necessary, it should be conducted in compliance with established standards, practices, and regulations.

**Radon testing** – a total of seventy-five (75) initial short-term air samples were collected from Grupp Hall (47 air samples) and Founders Hall (28 air samples). Of these, only seven (7) samples – 10% - showed radon levels above the EPA’s Radon Action Level of four picocuries per liter (pCi). All elevated samples were in Grupp Hall basement level offices (rooms 117, 119, 123, 129, 131, 135, & 139) and while justifying remedial action (which was quickly implemented in 2023) these results, although more elevated than we’d like to see, were unlikely to have presented substantially increased long-term risks of lung cancer related to the measured radon exposure, for a variety of reasons, including time-exposure-risk related issues

In response to the initial RVE testing in 2023, and the reporting and discussion of findings, quick and extensive remedial actions, follow-up evaluation and testing were conducted documenting that radon exposure conditions in all occupied areas were below the EPA's 4 pCi/L standard.

On August 17, 2023, the BCCC Board of Trustees were presented with the report from RVE as well as a plan of action to address concerns from BCCC Operations Staff. BCCC's activities to establish and maintain robust, ongoing facility assessment, testing, and remediation protocols and practices include, but are not limited to:

- Establishing regularly scheduled environmental health and facility condition assessments, using both internal resources and qualified third-party experts.
- Creating clear, standardized practices for documenting problems as they are reported or observed, ensuring that no concern goes unaddressed.
- Performing timely investigation of reported issues, followed by the implementation of evidence-based remediation actions.
- Regular and routine communication and information sharing as well as ongoing planning efforts with staff.

The Building Safety Committee (BSC) was started in August 2023, with bi-monthly and monthly meetings, comprised of both Faculty members, Deans, and Operations staff. Between August of 2023 and June 13, 2024, Eric Siddell provided updates and reports at seven (7) BOT meetings (9/14/2023, 10/12/2023, 11/9/2023, 12/14/2023, 2/8/2023, 3/14/2023, and 6/13/2024).

Based on my review of the RVE report findings, the scale and scope of the test results, and the conclusions and recommendations provided, it is my professional opinion that:

- a) BCCC engaged a contractor to provide an assessment.
- b) The contractor/consultant conducted an effective, professional, and high-quality evaluation and assessment of Grupp and Founders Halls
- c) The BCCC facilities staff took appropriate and effective measures in compliance with reported findings and recommendations to address and remediate the adverse conditions found.

It is also my opinion that BCCC provided robust information and data to its staff and worked in a closely coordinated and collaborative – and ongoing - manner to continue to evaluate, assess and control environmental and building condition issues and problems as they are identified,

## VI. Specific Concerns:

### A. MOLD

As part of our scope, we reviewed hundreds of mold surface and air sample results from 2023 - 2025 (in reports from RVE and USA Environmental) and reviewed summaries, meeting minutes and notes from building health and safety committee meetings and discussions and determined the following:

- Most areas tested and inspected showed little or no specific concern related to hazardous conditions because while many samples had “detectable” levels of mold (airborne and on surfaces) in very few instances where the levels elevated nor was the visible mold growth extensive - it is noted that mold is part of our everyday environment and that mold and bacteria are a natural part of indoor and outdoor air; the mere presence of detectable mold in air or on surfaces does not mean that health hazards exist.
- Finding some mold spores indoors, even at occasionally “elevated” levels is expected. What matters is the pattern and magnitude of the airborne and visible condition situation — consistent, widespread elevated levels, across many rooms and spaces suggest a building problem; a small number, and somewhat isolated, small elevations do not. In the BCCC data, only a handful of locations showed any indoor elevation versus outdoors or demonstrated extremely elevated sample results.
- The limited visible mold growth documented in reports was commonly found on HVAC vents, grilles and diffusers, often with dust/dirt/particulate build-up - a common maintenance issue needing attention for sure, but not a building-wide contamination issue; the same was true for mold growth on other surfaces which was very limited and associated with moisture and dampness from condensation and leaks (moisture, humidity and dampness “drives” the growth of indoor mold - no moisture, no growth). When mold was found on these surfaces’ remediation measures were implemented.
- When issues were found, prompt remedial action was taken. Affected rooms were taken out of service (staff and students kept out of spaces until work and retesting completed), moisture, dampness and leak sources were addressed, impacted surfaces were cleaned or replaced, and post-remediation sampling was routinely conducted that confirmed levels were lower than before cleaning.
- Indoor mold growth should always be taken seriously and promptly addressed with special attention focused on eliminating underlying root causes and sources; however, the prevalence of health symptoms is not automatic. Mold presence - especially at low levels - does not automatically, or even frequently cause illness. Some people (those with asthma, allergies, specific sensitivity to mold, or other pre-existing health conditions) may notice upper respiratory or other effects with dampness and visible mold growth but many other people will not.

### Some Key Takeaways

- Mold and bacteria are part of normal air; their presence alone is not a hazard.
- A large number of samples were collected in more than ten different buildings and in dozens of

specific locations with very few samples or observations indicating elevated mold levels and related concerns.

- Based on our review of documents, and an understanding of the IAQ related health risks posed by mold exposure in the BCCC building environment, staff and student health risk should be very minor for most people.
- The scope and scale of mold throughout were small. With the vast majority of samples and inspections negative for elevated airborne mold or extensive surface growth, overall exposure potential is low.
- Issues were promptly addressed. Removing people from affected areas, isolating impacting rooms and spaces, fixing moisture sources, cleaning/replacing materials, confirming improvements with post- remediation testing, and improving routine maintenance.
- Long-term effects are unlikely from short-term, low-level exposure in spaces like the ones identified and corrected here. (If you have a specific medical condition or concerns, speak with your healthcare provider).

## B. Radon

- As part of our scope, we reviewed the College’s radon program initiated in **July 2023**, including physical inspections for soil-gas entry pathways (e.g., slab cracks, penetrations, joints) and approximately **250** pre- and post-remediation tests in **Grupp Hall, Founders Hall, Cottages 1–4**, and select additional ground-contact spaces (in the “Orangery”, Cooper Homestead, Boiler House, Physical Plant building, M&M Building, Allied Health, and ELC).
- Based on our review we determined the following: BCCC implemented a radon assessment effort starting in July 2023 using RVE and USA Environmental.
- Evaluations typically involved physical assessment as well as the collection of air samples for radon.
- Physical assessment documented conditions that could increase radon infiltration into spaces (such as cracks and openings in floors)
- Approximately 250 pre-and-post-remediation radon tests were performed in Grupp Hall, Founders Hall, Cottages 1-4, and spaces from the other buildings listed above.
- Initial pre-remediation testing, as conducted by RVE in Grupp and Founder’s Halls, documented a total of only seven (7) elevated sample results all within offices located in the basement of the Grupp Hall facility (elevated levels ranged from 4.1 pCi/L – 17.5 pCi/L). As reported by RVE, “no exceedances of radon were detected in the lowest level classrooms, offices, kitchenettes, or custodial areas of the Founder’s Hall facility.
- USA radon test results, as well as retesting, also documented slight elevations in a few locations and on a very small percentage of samples facility (elevated levels ranged from 4.1 pCi/L – <10 pCi/L except in the “Orangery” basement and tunnel where levels of about 18 pCi/L – 26 pCi/L were found).
- Based on results and findings reported, BCCC implemented radon remediation efforts and post remediation testing conducted and documented compliance with the EPA standard of 4 pCi/L in almost all tested locations.
- Specific remediation measures included: ventilation, repair of cracks; retesting as necessary

### Some Key Takeaways

- **Elevations documented by RVE and USA Environmental were localized** to a **small number of basement offices in Grupp Hall**; no exceedances occurred in lowest-level classrooms or other routine-use areas of Founders Hall and to only a few other buildings and specific locations.
- **Mitigation worked:** post-remediation tests in treated rooms were **below 4 pCi/L**, in almost every space and building.
- **Risk context matters:** EPA’s risk tables assume **continuous lifetime exposure**; **part-time office use** (e.g., a few hours/week) yields **proportionally lower** incremental lifetime risk under the same linear model. This means that actual health risk posed to staff and students was likely very low and has now been further and significantly reduced.
- **Testing-Remediation-Testing Approach:** BCCC followed an effective testing and remediation strategy - identify → mitigate → verify → re-check, with **transparent updates** to stakeholders.
- **Ongoing QA:** include ongoing assessment and radon checks as appropriate in building specific, and BCCC Newtown campus-wide **IAQ Management Plans**, to stay on top of the situation and, for example, to trigger re-testing after **HVAC/envelope changes** or **room reassignments**.

## C. Indoor Air Quality (IAQ)

Beginning in April 2023 and continuing through 2025, BCCC commissioned extensive IAQ screening across more than ten buildings and hundreds of rooms during both occupied and unoccupied periods.

Remington & Vernick Engineers (RVE) performed short-term screening in April–May 2023 using handheld instruments for the general ventilation parameters (e.g., CO, CO<sub>2</sub>, temperature, RH) and surveyed a broader set of volatile organic compounds (VOCs), including trichloroethylene (TCE), phthalates, and PFASs.

- Standard industry screening methods were used to flag ventilation or performance problems and identify unusual contaminant patterns; longer-term integrated sampling is reserved for buildings where screening suggests a persistent concern. RVE did not include recommendations even for the need for ongoing/follow-up sampling in most cases.

USA Environmental conducted multi-season, direct-reading monitoring of temperature, relative humidity (RH), carbon dioxide (CO<sub>2</sub>), and carbon monoxide (CO), with concentrated campus-wide campaigns in October 2024 and February 2025. The sampling and testing performed by USA Environmental encompassed at least 10 buildings on the BCCC Newton Campus and dozens of locations; hundreds of individual samples and readings were also obtained during their evaluation.

The combined screening results point to a campus IAQ profile that is generally acceptable for non-industrial academic buildings of this vintage. CO measurements were not elevated in any of the tested spaces. Temperature and RH readings were, in most cases, well within expected comfort ranges, with only intermittent hot/cool zones or humidity drift typical of aging HVAC equipment and variable room loads.

CO<sub>2</sub> levels—used as a proxy for ventilation sufficiency during occupancy—were typically within normal ranges, with occasional peaks. The isolated CO<sub>2</sub> elevations were likely associated with local ventilation balancing needs, occupancy density, door-closed conditions, and operational issues, rather than a building-wide deficiency.

VOC screening by RVE largely resulted in non-detectable or very low measured levels in air, with sporadic measurable readings but no space-to-space or time-series patterns that would indicate an ongoing source or would present health and safety hazards to the general population.

The reported data supports the conclusion that there were no acute IAQ hazards based on the parameters assessed and reported (again, separate from radon and mold). The primary concerns that might be expected are likely comfort and performance related, rather than seriously health impactful — i.e., periodic stuffy air or thermal/RH deviations—rather than toxic exposures. Brief CO<sub>2</sub> elevations (around 1,100–1,300 ppm during full occupancy) are common in older systems and are best addressed through air-balancing, controls tuning, and simple operational steps (e.g., keeping supply/return paths clear, adjusting room use or headcount in small spaces).

Overall, the risk to occupants from non-radon/non-mold IAQ parameters is low, recognizing that



comfort-related symptoms may occur episodically in rooms experiencing ventilation shortfalls or setpoint drift.

There are inherent limitations to snapshot screening: short-term, handheld measurements are excellent for finding issues but not designed to characterize long-term exposure. BCCC mitigated this limitation by testing across seasons (fall/winter), sampling a large number of rooms, and re-checking spaces that showed anomalies. Because the VOC screen did not reveal a repeatable pattern of a specific compound in any room or building zone, there was no analytic trigger for more intensive integrated sampling. Temporal variability in IAQ (driven by weather, occupancy, and system operation) remains a reality; the dual-season campaigns and follow-up checks provide reasonable confidence in the current conclusions.

BCCC has already set in motion several effective and appropriate measures. A campus HVAC inspection/cleaning/operational-testing program (CET) is scheduled to begin in mid-September 2025, focusing on coil and drain pan hygiene, filter performance, outside-air delivery, damper function, and controls verification. The Facilities Department has been addressing dirty grilles/diffusers where noted and reinforced filter-change schedules where gaps were found. Seasonal re-checks are planned for rooms that showed CO<sub>2</sub> or comfort deviations, to verify improvement during peak-use periods.

Over the next 6–12 months, priorities should be to complete the HVAC program and verify outcomes (confirm outdoor-air setpoints and economizer/damper operation; balance problem rooms under occupied conditions; standardize filter MERV levels and change intervals aligned with system capacity); to codify an IAQ operating playbook (clear temperature/RH targets—e.g., aiming ~30–60% RH—plus a practical CO<sub>2</sub> investigative threshold for sustained occupied periods, and a rapid response checklist for comfort complaints); to communicate simply and routinely (a centralized dashboard posting test plans, summaries, and outcomes with plain-language explanations); and to tie IAQ findings to preventive maintenance and capital planning (prioritizing control upgrades, terminal unit refurbishment, and sensor/controls reliability so improvements persist).

## Key Takeaways

- Campus wide -screening did not document widespread and/or acute airborne (IAQ) related -hazard and risk. Across 10+ buildings and hundreds of rooms (2023–2025), direct-reading campaigns by RVE and USA Environmental found CO to be non-detectable or well within an acceptable range, CO<sub>2</sub> levels were generally normal with occasional peaks, and temperature/RH mostly within expected comfort ranges for buildings of this vintage.
- CO<sub>2</sub> peaks were localized and operational. Brief occupied-period elevations (often ~1,100–1,300 ppm) were room-specific and tied to balancing/controls, occupancy density, and door-closed conditions, not a campus-wide deficiency.
- VOCs were non-detected or very low with no repeating source pattern. Screening for compounds (e.g., TCE, phthalates, PFAS) showed ND/very low readings and no space-to-space/time-series pattern to indicate any ongoing source or population-level hazard.
- Primary concerns to the extent present should be primarily comfort/performance, not toxic exposure related to Intermittent stuffy air or thermal/RH drift can occur in older systems during peak use, but the risk posture from non-radon/non-mold IAQ parameters was documented to be low.



## D. Water Quality

### Findings covering 2023–2025.

- Both RVE and USA Environmental conducted multi-round water testing across several campus buildings between 2023 and 2025, with primary attention to **lead** in potable drinking water outlets (fountains and sinks used for drinking). RVE also conducted some supplemental screening for **Legionella**, **PFAS**, **TCE**, and other contaminants in the water.
- Results for drinking water outlets were, in almost all cases and locations, **within acceptable limits**.
- A small number of **lead exceedances** were identified; importantly, those exceedances were mostly **from sinks/outlets not intended for drinking** (e.g., kitchen or bathroom sinks or similar fixtures).
- No pattern of systemic campus-wide contamination emerged.

In response to test results, and as a best practice approach (and as documented in the 2023–2024 End-of-Year report) the College **migrated to Bucks County Municipal Water Authority supply**, as a first step in reducing variability and improving water quality. BCCC has also **installed point-of-use filtered water hydration stations** and implemented related controls (identifying drinking water outlets from potable but non-drinking water use, targeted fixture maintenance/replacement, and flushing where appropriate). Taken together, the testing profile and mitigation steps indicate a **low risk to campus users from potable water consumption**. The program now emphasizes **filter change schedules** for stations and fixture maintenance. These measures keep exposure potential low, sustain compliance with relevant standards, and provide ongoing assurance to students and staff.

### Key Takeaways

- Documented results were overwhelmingly within acceptable limits.
- No systematic patterns were detected related to the small number of elevated levels measured – data did not show any evidence of a campus-wide contamination trend.
- Significant and substantive mitigation has been done with BCCC migrating to the Bucks County Municipal Water Authority supply and installing point-of-use (POU) filtered hydration stations. Additional maintenance and facility measures will continue to be implemented moving forward.

## VII. Summary of Maintenance and Remediation Actions

In addition to the review of IAQ and related environmental issues conducted we were also provided with, and reviewed information, data and reports associated with assessment, repair, improvement, and upgrades to building systems, components and facility response in general. We were also informed that BCCC will be implementing a new, upgraded maintenance work order system before the end of the 2025 calendar year.

**The work performed to date can be characterized as falling into two broad categories:**

### Facility/System Improvements

- Roof replacement - to protect building systems, furniture, fixtures, and finishes and to minimize/eliminate a source of mold, moisture, and dampness.
- Flooring replacement – to address damaged and environmentally impacted flooring.
- Interior renovation - to address damaged, deteriorated and environmentally impacted walls, ceilings, and other interior surface materials.
- Upgraded roof repair and maintenance to reduce water, moisture and dampness which can result in mold growth.
- Water filtration - to control lead and other contaminants in drinking water.

### Environmental Assessment, Testing and Remediation

- Water quality testing, remediation, and related control recommendation activities
- Mold testing, remediation, and related control recommendation activities
- Indoor Air Quality testing, remediation, and related control recommendation activities
- Professional cleaning activities – to help reduce and control particulate materials and contaminants on surfaces.

### List of Buildings/Spaces: Assessment Activities

- Founders Hall
- Grupp Hall
- Cottages -1-4
- Gateway building
- Library
- Early Learning Center (ELC)
- Intermediate Unit (IU)
- Hicks Art Center
- Allied Health
- Music Building
- Rollins/Linksz Pavillion
- Pemberton
- Tyler Hall
- Science building
- Farmhouse
- Facilities (Shipping/Receiving)

**Records show that during Summer 2023/Spring 2024, the following actions were taken by BCCC:**

- Grupp Hall – building environmental cleaning.
- Grupp Hall – IAQ re-assurance testing
- Grupp Hall – flooring replacement (phase A)
- Grupp Hall – installed new fountains and water filtration systems.
- Grupp Hall – radon mitigation system installed.
- Founders Hall – building environmental cleaning.
- Founders Hall – IAQ re-assurance testing
- Founders Hall – installed new water fountains and water filtration systems.
- Newtown Campus – HVAC operations to leave blowers running for IAQ.
- Newtown Campus – regular PM for water intrusion, roof maintenance, HVAC
- Newtown Campus – ongoing IAQ environmental testing

**Records show that during Summer 2024/Summer 2025, the following actions were taken by BCC:**

- Grupp Hall – flooring replacement (Phase B)
- Grupp Hall – cleaning of all office and classroom uni-vent systems
- Grupp Hall – cleaning entire building facility
- Founders Hall – carpet replacement
- Founders Hall – roof replacement
- Founders Hall – 3<sup>rd</sup> floor Dormer renovations
- Founders Hall – cleaning of all office and classroom uni-vent systems
- Founders Hall – cleaning of all 3<sup>rd</sup> floor classrooms
- Tyler Hall – installed new water filtration.
- Hicks Arts Building – new HVAC system and cleaning in Woodshop
- ELC – roof replacement & structural repairs
- ELC – hygienic improvements
- IU – roof replacement & structural repairs
- Library – Room 301 roof replacement
- Newtown Campus – Newtown Public Water Switchover
- Newtown Campus – flooring replacement in multiple, common areas
- Newtown Campus – campus-wide radon testing and mitigation.
- Newtown Campus – ongoing IAQ re-assurance testing

**Discussions and records indicate that BCC plans the following projects for FY2026:**

- Founders Hall – testing, assessment, and cleaning of air handling system
- Library – testing, assessment, and cleaning of first floor air system
- Grupp Hall – testing, assessment, and cleaning of air handling system
- ELC – mechanical system upgrade
- IU – mechanical system upgrade
- Boiler House Facility – mechanical system upgrade and improvements
- Shipping and receiving – facility improvements and upgrades.
- Rollins – Mechanical Room 05 – remediation and renovation
- Upper and Lower Bucks Campuses – radon and IAQ testing.

## VIII. Association between Reported Health Symptoms & Illness & the As-Built Building Environment - Determining Causation.

This section does not deal with any specific environmental or facility/building system conditions but with a very common and very challenging set of concerns related to answering questions regarding making reasoned and supported, data-driven, evidence-based conclusions and determinations related to potential associations between reported occupant health symptoms and illnesses and the as-built environment. We have tried to provide context and background that will help in developing a better and deeper understanding about such relationships, and how we can, and should, proceed, in order to reach conclusions.

The as-built environmental and facility conditions in non-industrial buildings can certainly have an impact on human health, well-being, and comfort. Institutions are well served to take seriously the potential impacts of the built environment, the maintenance and management processes, the need to allocate adequate resources to facilities, and to the inclusion of employees/staff as key stakeholders in the data gathering, problem identification, and solution finding process.

There are challenges associated with directly linking facility issues to specific health effects in general, and to specific cases in particular, without extensive data and rigorous methodology. It is challenging even with extensive data and rigorous methodology. And it must be highlighted that in many cases, it may be impossible to make connections either because the specific case relationships are absent or, sometimes, we simply don't have good enough information, or scientific knowledge, to identify and confirm the association.

It is important to distinguish between facility issues and health issues. A confirmation of one does not confirm the other. For example, a building could show evidence of mold, and a person who works there could have headaches whenever they are at work. Both things could be 100% true and still should not be **assumed** to be related. (*Headaches can obviously have multiple causes having nothing to do with mold exposure at all, even if mold is present – e.g. headache or other health symptoms could be caused by seasonal or other allergies, vehicle exhaust exposure or even an actual building issue - other than mold - such as exposure to a cleaning product or other chemical. At the same time, mold growth can cause some occupants to experience other adverse health effects, such as respiratory or other symptoms, without ever causing headaches at all*)

### Methodological & Practical Limits in Linking Symptoms & Illnesses to Buildings & Conditions

1. **Temporal misalignment:** Symptoms with long latency (e.g., cancers) cannot generally be linked to recent building conditions; even for acute symptoms, timing must align with verified exposure windows.
2. **Agent specificity:** Without an identified **agent** (e.g., formaldehyde, specific molds/mycotoxins at measured levels, Legionella) and pathway, attribution is speculative.
3. **Dose and exposure variability:** Intermittent low-level detections or normal variability in CO<sub>2</sub>/RH/temperature are **not** evidence of hazardous exposure. Controls target comfort and ventilation adequacy, not disease causation per se.
4. **Illness diagnosis verification:** reported illness without medical confirmation, ICD codes, or clinician assessments are not sufficient to effectively determine relationships with building conditions. Symptom reporting is even more challenging to establish connections to building conditions. In both cases, systematic,

documented, and detailed information and data reporting is critical.

5. **Denominator and comparison group:** When trying to link building illness and symptoms to conditions, especially where there are claims about disease “clusters” the assessment requires denominators (who are at risk), numerators and, sometimes comparison groups (other departments, campuses, regional rates) – in any event, quantitative analysis is typically needed for this level of investigation.
6. **Multiple outcomes, single cause fallacy:** Attempting to explain diverse outcomes with a single environmental cause violates basic environmental epidemiologic understanding and approaches.

Some of what would need to be looked at when evaluating the relationship between building conditions and occupant/staff health and safety symptoms and illnesses includes considering:

### 1. Heterogeneous, non-specific symptom sets.

In situations where the complaints range from transient mucosal irritation (e.g., burning eyes) to infectious illnesses (bronchitis/pneumonia), cognitive concerns (“brain fog”), GI issues, and multiple cancer types (“estrogen-related cancers”), such heterogeneity points to multiple possible etiologies, not a single environmental cause. Public health guidance warns against inferring building causation from broad, non-specific symptom clusters without exposure data and appropriate epidemiological study design.

### 2. Lack of exposure characterization and dose–response

Causation requires evidence of exposure (what agent, at what concentration, over what duration) and, ideally, a dose–response relationship. The College’s testing to date has not identified persistent, elevated exposures for a specific agent across affected spaces. Where localized hazards were identified (e.g., radon hot spots, dampness with mold growth), controls were implemented. Without clearly defined exposures and plausible dose–response, causal inference is not supportable.

### 3. Cancer allegations require stringent criteria.

Cancer is not a single disease; different cancers have different causes, risk factors, and latency periods. CDC/ATSDR guidance defines a “cancer cluster” as a greater-than-expected number of the same or etiologically related cancers in a defined population, place, and time. Meeting this definition requires validated case ascertainment, appropriate denominators, comparable time windows, and statistical methods that account for chance. Claims such as “a lot of people with cancer across all ages and genders” do not meet the definitional or analytic threshold for cluster evaluation.

### 4. Confounding, bias, base-rate, and multiple-comparison problems

In any population of ~8,000 people (1,500 staff + 6,500 students), a baseline number of illnesses—including cancers—will occur due to background risk. Without careful control for confounders (age, smoking, prior medical history, occupational/non-occupational exposures, family history), and without validated diagnoses and time–place linkage, observed cases can easily be attributed to buildings in error (base-rate fallacy). Claims relying on anonymous anecdotes compound reporting bias and hinder

responsible evaluation.

**What we *can* say with confidence (this is not intended to be a comprehensive list)**

- **Dampness and mold:** There is sufficient evidence of association between **damp indoor environments** and certain **upper respiratory symptoms** and **wheeze/asthma symptoms** in sensitive people. Where dampness/mold has been found, remediation is prudent (and has been undertaken).
- **Ventilation/thermal comfort:** Inadequate ventilation and humidity control can contribute to discomfort and some building-related symptoms; adherence to **ASHRAE 62.1** ventilation targets and EPA's IAQ management practices are the correct control strategy.
- **Radon:** Where elevated levels occur, remediation is indicated and effective; follow-up confirmation is standard.

These, and other building-related exposure conditions can be considered potentially evidence-aligned with occupant symptoms and illness depending on the associations derived from an evaluation approach as described in this section; however at this time, and based on the currently available information in conclusions linking widespread and multiple disease problems with as-built conditions in BCCC Newtown campus buildings has not been established.

## IX. Conclusions: Phase I Scope

Based on our review of the multiple documents and records we have had the opportunity to read and analyze to date and based also on the steps that we understand are planned, scheduled and are expected to be taken by BCCC moving forward, we have reached the following general conclusions.

The conclusions provided below should be understood to be somewhat preliminary: additional time, data collection, discussion, and evaluation are still required. We will be conducting additional review, and this is a clearly evolving and ongoing process; nonetheless we are offering the following conclusions with a high degree of confidence:

- Extensive assessment, testing, and evaluation work has been done by multiple professional consultants and contractors looking at radon, lead in water, IAQ, including mold, moisture and dampness and many other parameters.
- Significant, long-needed facility condition and building system improvements – roofing, flooring, HVAC, have been done, and are slated to continue.
- A major HVAC evaluation, repair, cleaning and system upgrade is scheduled to start in mid-September (CET is the contractor)
- At least since August of 2023, BCCC staff and faculty have engaged in, and maintained, a consistent and active schedule of building health and safety committee meetings, discussions and communications, resulting in joint planning, data sharing, and routine status updates designed to help move forward together to address ongoing issues, additional concerns, and improvement initiatives.
- Based on the level of collaboration and on the extent of facility and environmental condition assessment, evaluation and remediation activities conducted over the past 24-30 months, work building spaces are considerably safer and healthier now than they have been at almost any time in recent years; more work is needed, as is always the case with large, building facility infrastructure housing large numbers of occupants (faculty, staff and students) but a roadmap for moving forward seems to be in place.
- The large number of air samples collected for multiple IAQ parameters across almost every campus building, with a major focus on Founders Hall, Grupp Hall and a few other heavily occupied buildings and spaces, combined with the fact that an overwhelming percentage of the measured results were in the non-detectable to low range, support the conclusion that BCCC building locations are considered to be acceptably safe for normal and routine occupancy even while improvements in general air quality, and facility condition upgrade activities continue.

I would like to commend both the Administration and the staff for supporting ongoing communication about facility issues and potential concerns. Institutions are often reluctant to take concerns seriously or dedicate resources to address both real and perceived issues.

Based on meetings with BCCC managers and leaders and review of a large number of documents, reports, test results, and related materials associated with the assessment, testing, remediation, and collaboration between staff and college leadership covering the past 2+ years, in my professional judgment, the efforts made by BCCC leadership and management to evaluate and improve the as-built conditions across the Bucks County Community College (BCCC) Newtown campus buildings in order to ensure the health and safety of all BCCC students in the period from July, 2024 to the present, faculty has been reasonable and appropriate.

Staff should be acknowledged for their role in creating dialogue and generally constructive stakeholder participation, as well as advocating for their institution to take steps to both address concerns and maintain



facilities at the appropriate level. Similarly, the college and its facilities managers and staff, have been both very responsive and proactive in accepting staff input to implement widespread, comprehensive and ongoing assessment, evaluation, testing and remediation over the past 2+ years (the time period of our review).

Many significant and sustainable improvements have been made and have been acknowledged by faculty, staff, and representatives who have been engaged in planning, priority setting and regularly receiving and reviewing data and information.

Broadly, test results have not shown critical concerns, and current evidence does not indicate imminent hazards.

Based on my professional assessment and review of provided data and information, the evaluation, assessment, testing, remediation, and response trajectory of conducted work has been both appropriate, reasonable, and effective.

Additionally, additional, and ongoing assessment, testing, and remediation (as necessary) is planned and funded through 2026.

I wish to be very clear here – facility conditions are important and can indeed have an impact on both human health and experience. It is important that concerns be taken seriously, that investigations occur and that resources are allocated so that necessary maintenance is conducted on timely basis to prevent problems and that remediation is conducted early.

## X. Recommendations

Based on my review of the past 2+ years of BCCC assessment, evaluation, testing, and remediation work conducted, and on the information and data sharing initiatives it is my conclusion that the current acute environmental-IAQ “risk posture” at BCCC’s Newtown campus is low with many issues localized – not campus wide – and with only minor environmental and facility condition issues present in most cases and of the type expected with a mostly 50-60 year as-built infrastructure.

The right work is, largely, underway and the initial set of recommendations provided here are focused on standardizing, upgrading, systematizing, verifying, and communicating in a consistent way.

- Establish and confirm a single Environmental and Health & Safety Working Group as the clearinghouse and point of contact for facility condition and related environmental information and decisions with a major objective of maintaining transparent, outward-facing communication.
- Develop, provide and share updates about plans and activity as well as status updates about ongoing facility and environmental issues and concerns.
- Finish the HVAC project work scheduled to start in mid-September (CET) and continue to implement systematic HVAC assessment, maintenance and operations actions campus wide.
- Develop Indoor Air Quality Management Plans for the BCCC Newtown campus buildings that include site/location specific assessment, and prioritized concerns and needs – short to long term.
- Continue a targeted and focused set of evaluation, testing (as needed) and remediation efforts related to mold/moisture/dampness mitigation, radon assessment and remediation, and drinking water quality assurance.
- Establish standardized and systematic problem, information and data reporting pathways, platforms and tools to improve assessment related to establishing relationships between staff/occupant illness, symptom and disease reporting and building and environmental conditions.
- Develop, create and use consistent and standardized reporting tools and systems to collect information.
- Follow accepted approaches and guidelines to investigate the relationships between illness and environmental conditions.
- Establish and implement an upgraded work order/preventive maintenance, “Comprehensive Maintenance Management System” (CMMS)

## Selected References

1. **CDC/ATSDR.** *Guidelines for Examining Unusual Patterns of Cancer and Environmental Concerns* (2022/2024 updates). Defines “cancer cluster,” outlines limitations and process. [CDC+2CDC+2Federal Register Public InspectionRegulations.gov](#)
2. **NIOSH Health Hazard Evaluation (HHE) Program.** Independent workplace hazard evaluations (how to request, what to expect). [CDC+1NCBI](#)
3. **ASHRAE Standard 62.1.** Ventilation for Acceptable Indoor Air Quality (minimum ventilation, IAQ procedures, addenda). [ASHRAE+2ASHRAE+2](#)
4. **EPA.** IAQ Tools for Schools—framework and resources for IAQ management programs and communication. [US EPA+1GovDeliveryEnvironmental Law Institute+1](#)
5. **Institute of Medicine (National Academies).** *Damp Indoor Spaces and Health*—evidence of association between dampness and certain respiratory outcomes. [NCBI+1National Academies Press](#)
6. **Public Health Notes on Dampness/Mold.** CDC/State summaries emphasizing associations with upper airway symptoms and asthma in sensitized individuals. [Mass.gov](#)

## Appendix A:

# Occupational Health Consulting Services Inc (OHCS)

## Jerry Roseman

Occupational Health Consulting Services Inc,  
President Jerry Roseman, MSc.IH

**Occupational Health Consulting Services Inc (OHCS)** is a small consulting firm providing technical and advisory services to clients on occupational and workplace safety, with a special focus on school facilities and the as-built environment. The firm has provided testing, assessment, evaluation, data services, developed tools for clients to support tracking and best practices.

### Jerry Roseman, MSc.IH

- 44 years of professional practice in occupational and environmental health, safety and science; building science; data science.
- Industrial Hygienist – NJ Dept. of Health, Division of Epidemiology and Disease Control (1981 - 1985)
- President OHCS – Building Science, Data Science, Environmental Science (1985 – current)
- Health and Science Advisor, Philadelphia Federation of Teachers Health and Welfare Fund
- Major work focuses on the facility conditions, building systems and indoor environmental and air quality adequacy of the built environment, in pre-k-12 school buildings, post-secondary education buildings, & public buildings
- Memberships in the American Public Health Association (APHA); American Industrial Hygiene Association (AIHA); and International Society of Indoor Air Quality & Climate (ISIAQ)
- Some relevant client/work summary details and projects:
  - Adjunct faculty instructor at Glassboro State College, Penn State, Drexel University and the Medical College of PA/Drexel/Hahneman Med Schools teaching occupational health and safety and environmental science.
  - Worked for Philadelphia City Council to assess environmental hazards/impacts on the Reading Train Shed and Reading Terminal Market associated with possible asbestos and chemical contamination.
  - Technical Advisor to the City of Philadelphia participating in the writing and development of the Philadelphia Asbestos Control Regulations (ACR)
  - Certified instructor for OSHA and EPA teaching occupational health and safety courses on asbestos (assessment, control, and remediation), OSHA regulations, chemical hazards and related occupational health and safety issues
  - Research Partner to the CDC/NIOSH – study of IAQ-mold, moisture, and dampness conditions in relationship to staff illness in fifty (50) elementary schools.
  - Board Member -- Technical Advisor to the 21<sup>st</sup> CSF, a Washington DC-based advocacy organization working for improved school conditions.
  - Partner- advisor to the National Center on School Infrastructure (NCSI) – a collaboration between UC Berkeley/Urban & Regional Development, 21<sup>st</sup> CSF, National Council on School Facilities, & Child Trends funded by the US Dept of Education
  - Partner/Advisor – conducting “translational science” research, writing, communication, and

outreach-related activities for the NIEHS-funded Philadelphia Research Center for Children's Environmental Health (PRCCEH)

- Technical Advisor/Expert for the NAACP's LDF (Legal Defense Fund) assessing school building environmental, facility and building system conditions in relationship to student and staff health in the context of race, social and economic justice legal matters.
- Started the Healthy Buildings initiative (2015) to assess and improve the adequacy of building conditions.
- My work is framed by the recognition that collaborative and cooperative initiatives between institutional and organizational leaders and managers, and the people who work, learn, and spend significant time in the managed buildings is the most successful approach to ensuring sustainable improvement

## Appendix B. OHCS Scope of Work

- The specific and Phase 1 work scope *July 18, 2025*, from BCCC included the following major elements:
  - Review of reported building-related health, safety, facility, and environmental issues in BCCC buildings and spaces at the Newtown campus that could and were impacting occupant health, safety, comfort, and welfare.
  - Review and evaluation of BCCC assessment and testing approaches employed to help document specific conditions.
  - To summarize collected data and information to determine representative conditions and findings in relationship to reported problems and health impacts.
  - To consider the types of communication, outreach, and information sharing and interactions between staff, occupants, etc.
  - To develop recommendations and approaches as part of ongoing efforts and Next Steps.

**Phase II:** Best-practice program buildout: procedures/policies, EHS function design, data tools and public dashboard, and advisory support to leadership and the development of more systematic and comprehensive BCCC – Facility & Environmental Health and Safety Committee structure. Phase 2 will also track the scheduled HVAC inspection, cleaning, and operational testing (CET) beginning mid-September 2025.

### Phase II: Recommended Program Priorities (2025–2026)

- **HVAC Performance & Moisture Control:** Provide independent oversight of the CET program; verify ventilation/fresh-air rates, humidity control, coil/drain pan hygiene, and filtration; implement a seasonal re-testing protocol for previously affected areas.
- **EHS Function & Policy:** **Environmental Health & Safety** office/function with clear roles, escalation pathways, and standard operating procedures for IAQ events, water intrusion, and occupant reports.
- **Data Platform & Transparency:** Launch a **centralized dashboard** that posts testing plans, results, and remediation status with plain-language summaries; maintain document archives for staff access.
- **Governance & Stakeholder Engagement:** Formalize a **joint oversight committee** (administration, facilities, faculty, and outside advisors) with quarterly public updates and metrics.
- **Preventive Maintenance & Capital Alignment:** Lock in filter/coil/condensate schedules, roof, and envelope leak prevention, and integrate findings into capital planning for targeted replacements/upgrades.
- **Education & Reporting:** Provide simple reporting tools and “translational explainers” so non-technical audiences can interpret results; maintain confidential health-concern reporting pathways.

## Appendix C. BCCC Facilities Documents Reviewed

Date	Folder Origin	Doc Name
9/21/23	Water Improvements	Art Taylor BCCC POU Filters.pdf
9/27/23	Water Improvements	FW_ Culligan Filter Quotation 9.27.2023.pdf
11/30/23	Accurate Radon Control	275 Swamp Road Newtown PA 18940 BCCC 4 Cottages.pdf
12/8/23	Water Improvements	FW_ Culligan Filter Quotation 12.8.2023.pdf
12/15/23	Accurate Radon Control	PO-10005904 2023-12-15 10_33_05-0800.pdf
12/19/23	Water Improvements	BCCC POU Filters B.pdf
1/12/24	Bldg. Safety Committee Reports	Report 1.8.2024 to 1.12.2024.pdf
1/19/24	Bldg Safety Committee Reports	Report 1.15.2024 to 1.19.2024.pdf
1/26/24	Bldg Safety Committee Reports	Report 1.22.2024 to 1.26.2024.pdf
1/26/24	Water Improvements	Culligan PO-6758.pdf
2/2/24	Bldg Safety Committee Reports	Report 1.29.2024 to 2.2.2024.pdf
2/9/24	Bldg Safety Committee Reports	Report 2.5.2024 to 2.9.2024.pdf
2/15/24	Water Improvements	BCCC POU Filters C.pdf
2/16/24	Bldg Safety Committee Reports	Report 2.12.2024 to 2.16.2024.pdf
2/21/24	Water Improvements	<a href="#">20609762.pdf</a>
2/23/24	Bldg Safety Committee Reports	Report 2.19.2024 to 2.23.2024.pdf
3/1/24	Bldg Safety Committee Reports	Report 2.26.2024 to 3.1.2024.pdf
3/8/24	Bldg Safety Committee Reports	Report 3.4.2024 to 3.8.2024.pdf
3/11/24	Accurate Radon Control	COSTARS CERTIFICATE.pdf
3/14/24	USA Environmental	Proposal - Mold Inspection and Testing, Rollins Mech 05 & Student Services_REV2_3-14-24.pdf
3/15/24	Bldg Safety Committee Reports	Report 3.11.2024 to 3.15.2024.pdf
3/26/24	USA Environmental	BCCC Indoor Air Quality Assessment Report, Rollins Center, 3-26-24 REV 2.pdf
3/26/24	USA Environmental	25071 - BCCC, Rollins Center, Pemberton Hall Mold Inspection, 3-24.pdf
4/5/24	Bldg Safety Committee Reports	Building Safety Check-in Report 3.15.2024 to 4.5.2024.pdf



4/9/24	Water Improvements	PO-10006758 2025-03-21 11_45_57-0700.pdf
4/12/24	Bldg Safety Committee Reports	Building Safety Check-in Report 4.8.2024 to 4.12.2024.pdf
4/15/24	Water Improvements	<a href="#">20611213.pdf</a>
4/19/24	Bldg Safety Committee Reports	Building Safety Check-in Report 4.15.2024 to 4.19.2024.pdf
4/26/24	Bldg Safety Committee Reports	Building Safety Check-in Report 4.22.2024 to 4.26.2024.pdf
5/3/24	Bldg Safety Committee Reports	Building Safety Check-in Report 4.29.2024 to 5.3.2024.pdf
5/10/24	Bldg Safety Committee Reports	Building Safety Check-in Report 5.6.2024 to 5.10.2024.pdf
5/10/24	Bldg Safety Committee Reports	BSC Report 5.6.2024 to 5.10.2024 & Appendix 9.11.2023 to 5.10.2024.pdf
5/16/24	Bldg Safety Committee Reports	Building Safety Check-in Report 5.13.2024 to 5.16.2024.pdf
5/22/24	USA Environmental	Proposal - Mold Inspection and Testing Tyler Accounting 5-22-24.pdf
5/23/24	USA Environmental	BCCC Indoor Air Quality Assessment Report, Rollins Center Room 59 and 60, 5-23-24.pdf
5/29/24	USA Environmental	BCCC Indoor Air Quality Assessment Report, Tyler Hall, 5-29-24.pdf
5/30/24	Bldg Safety Committee Reports	Building Safety Check in Report 5.20.2024 to 5.30.2024.pdf
6/5/24	Accurate Radon Control	275 Swamp Road Newtown PA 18940 Early Learning Center.pdf
6/5/24	Accurate Radon Control	275 Swamp Road Newtown PA 18940 Intermediate Unit.pdf
6/7/24	USA Environmental	25177 - BCCC, Rollins Center Mold Inspection, 6-24.pdf
6/7/24	USA Environmental	25178 - BCCC, Tyler Hall, Mold Inspection, 6-24.pdf
6/10/24	Bldg Safety Committee Reports	Building Safety Check in Report 5.31.2024 to 6.10.2024.pdf
7/5/24	Bldg Safety Committee Reports	Building Safety Check-in Report 6.10.2024 to 7.5.2024.pdf
7/18/24	Bldg Safety Committee Reports	Building Safety Check in Report 7.5.2024 to 7.18.2024.pdf
8/16/24	Bldg Safety Committee Reports	Building Safety Check in Report 7.18.2024 to 8.16.2024.pdf
8/21/24	Bldg Safety Committee Reports	Radon Building Safety Check In 8.21.2024.pdf
9/5/24	USA Environmental	Proposal - Mold Inspection and Water Testing Early Learning 9-5-24.pdf
9/5/24	USA Environmental	Proposal - Mold Inspection and Water Testing Various Campus Buildings 9-5-24.pdf
9/5/24	USA Environmental	Proposal - Post Remedial Testing Founders Grupp 9-5-24.pdf

9/13/24	Bldg Safety Committee Reports	Building Safety Check in Report 8.16.2024 to 9.13.2024.pdf
9/17/24	USA Environmental	25353 - BCCC, Tyler Hall, Mold Inspection, 9-24.pdf
9/18/24	USA Environmental	BCCC Indoor Air Quality Assessment Report, Tyler Hall, 9-18-24.pdf
10/11/24	Bldg Safety Committee Reports	Building Safety Check in Report 9.13.2024 to 10.11.2024.pdf
10/15/24	USA Environmental	BCCC, Allied Health Indoor Air Quality Assessment and Testing, 10-15-24.pdf
10/15/24	USA Environmental	BCCC, Founders Hall, Indoor Air Quality Assessment and Testing, 10-15-24.pdf
10/15/24	USA Environmental	BCCC, Gateway Center, Indoor Air Quality Assessment and Testing, 10-15-24.pdf
10/15/24	USA Environmental	BCCC, Hicks Hall, Indoor Air Quality Assessment and Testing, 10-15-24.pdf
10/15/24	USA Environmental	BCCC, Library, Indoor Air Quality Assessment and Testing, 10-15-24.pdf
10/15/24	USA Environmental	BCCC, Music and Multimedia Center, Indoor Air Quality Assessment and Testing, 10-15-24.pdf
10/15/24	USA Environmental	BCCC, Rollins Student Center, Indoor Air Quality Assessment and Testing, 10-15-24.pdf
10/25/24	Bldg Safety Committee Reports	Building Safety Check in Report 10.11.2024 to 10.25.2024.pdf
10/31/24	USA Environmental	BCCC Indoor Air Quality Assessment Report, Boiler House Electrician Office, 10-31-24.pdf
11/4/24	USA Environmental	25409 - BCCC, Boiler House, Mold Inspection, 11-24.pdf
11/8/24	Bldg Safety Committee Reports	Building Safety Check in Report 10.25.2024 to 11.8.2024.pdf
11/8/24	USA Environmental	Library Room 122. 11.8.2024.pdf
11/14/24	USA Environmental	Letter Report - BCCC Library, Recommendations, 11-14-24.pdf
11/15/24	USA Environmental	BCCC, Rollins SC, Lead in Drinking Water, Summary Report, 11-24.pdf
11/15/24	USA Environmental	Bucks County Community College, Founders Lead in Drinking Water, Summary Report, 12-12-24.pdf
11/15/24	USA Environmental	Bucks County Community College, Rollins SC, Lead in Drinking Water, Summary Report, 11-24.pdf
11/29/24	Accurate Radon Control	275 Swamp Road Newtown PA 18940 Cooper Homestead.pdf
11/29/24	Accurate Radon Control	275 Swamp Road Newtown PA 18940 Farm House.pdf
12/12/24	USA Environmental	BCCC, Founders Lead in Drinking Water, Summary Report, 12-12-24.pdf
1/10/25	Bldg Safety Committee Reports	Meeting Minutes 12.13.2024 to 1.10.2025.pdf

1/22/25	USA Environmental	BCCC Testing Location Information 1.22.2025.docx
2/7/25	Bldg Safety Committee Reports	Building Safety Committee Check In Report 1.10.2025 to 2.7.2025.pdf
2/14/25	Bldg Safety Committee Reports	Building Safety Committee Check In Report 1.10.2025 to 2.14.2025.pdf
2/17/25	USA Environmental	BCCC, Early Learning Center, Indoor Air Quality Assessment and Testing, 2-18-25.pdf
2/17/25	USA Environmental	BCCC, Founders, Indoor Air Quality Assessment and Testing, 2-18-25.pdf
2/17/25	USA Environmental	BCCC, Grupp, Indoor Air Quality Assessment and Testing, 2-18-25.pdf
2/17/25	USA Environmental	BCCC, IU, Indoor Air Quality Assessment and Testing, 2-18-25.pdf
2/28/25	Bldg Safety Committee Reports	Building Safety Committee Check In Report 2.14.2025 to 2.28.2025.pdf
3/14/25	Bldg Safety Committee Reports	BS Committee Agenda 03_14_25.docx
3/16/25	Water Improvements	Water Filtration 3.19.2025.docx
3/18/25	USA Environmental	BCCC, Allied Health Lead in Drinking Water, Summary Report, 3-18-25.pdf
3/18/25	USA Environmental	BCCC, ELC, Lead in Drinking Water, Summary Report, 3-18-25.pdf
3/18/25	USA Environmental	BCCC, Gateway Center, Lead in Drinking Water, Summary Report, 3-18-25.pdf
3/18/25	USA Environmental	BCCC, Grupp, Lead in Drinking Water, Summary Report, 3-18-25.pdf
3/18/25	USA Environmental	BCCC, Hicks, Lead in Drinking Water, Summary Report, 3-18-25.pdf
3/18/25	USA Environmental	BCCC, IU, Lead in Drinking Water, Summary Report, 3-18-25.pdf
3/18/25	USA Environmental	BCCC, Library, Lead in Drinking Water, Summary Report, 3-18-25.pdf
3/18/25	USA Environmental	BCCC, Music and Multimedia, Lead in Drinking Water, Summary Report, 3-18-25.pdf
3/18/25	USA Environmental	BCCC, Rollins Student Center, Lead in Drinking Water, Summary Report, 3-18-25.pdf
3/18/25	Water Improvements	BCCC, Grupp, Lead in Drinking Water, Summary Report, 3-18-25.pdf
3/19/25	USA Environmental	25578 - BCCC, IAQ and Water Testing, Mold Inspection, 3-25.pdf
3/19/25	USA Environmental	25579 - BCCC, IAQ and Water Testing, Grupp and Founders, 3-25.pdf
3/19/25	USA Environmental	25580 - BCCC, IAQ and Water Testing, IU and ELC, 3-25.pdf
3/19/25	USA Environmental	25592 - BCCC, IAQ and Water Testing, Supplemental, 3-25.pdf
4/11/25	Internal Communication	BSC Radon Recap 4.11.2025.pdf
4/25/25	Bldg Safety Committee Reports	Building Safety Committee Meeting Minutes 4.25.2025.pdf

5/6/25	Accurate Radon Control	Business Letterhead BCCC Orangery Facility.pdf
5/23/25	Bldg Safety Committee Reports	Building Safety Committee 5.23.2025 & Teams Link.pdf
7/10/25	Bldg Safety Committee Reports	Building Safety Committee Meeting July 10, 2025.pdf
7/22/25	Accurate Radon Control	275 Swamp Road Newtown Orangery Tunnel Tyler Hall.pdf
8/16/25	Bldg Safety Committee Reports	Building Safety Check in Report 7.18.2024 to 8.16.2024 Correspondence.pdf
NEED TO ADD 8 more rows	USA Environmental	Invoices
	Water Improvements	Culligan Documents.zip
	Water Improvements	SP-CC1-Series-Specs-V3 Lead and PFAS.pdf
	Planning Docs	Remediation Budget Tracking 2024-2025.xlsx
4/24/24	Aug 14 25 Update	Radon Testing Systems 1/2
4/24/24	Aug 14 25 Update	Radon Testing Systems 2/2
	Aug 14 25 Update	Grupp Radon Map
	Aug 14 25 Update	Grupp Hall Summary Report
7/18/24	Bldg Safety Committee Reports	Building Safety Check in
	Other	Botanical Decon Disinfectant
8/13/25	Internal Communication	Building Action Plan w/ costs, see Tab