

CHARLOTTE-MECKLENBURG SCHOOLS

Organizing to Institutionalize Proactive IAQ Management

For Charlotte-Mecklenburg Schools (CMS), IAQ troubles began with parent concern about possible mold in one school. An investigation concluded that mold was not an issue, but skeptical parents took their concerns to the media, inciting a whirlwind of bad publicity and community mistrust. Although CMS weathered the immediate crisis, this event spurred a new commitment — CMS set out to ensure that proactive IAQ management became a way of life in the district. CMS followed the *IAQ Tools for Schools* Program guidance to establish a district-wide facility assessment program, assign departmental responsibilities to address environmental risks, partner with community groups to implement the management approach, and train everyone across the school community on IAQ management. The result is a sustainable and successful program, a sense of ownership among the staff for facility and occupant health, and improved trust and openness with the community.

Organize for Success — Empower an IAQ Leader: For CMS, a sustainable IAQ program required a strong advocate with the power to make big decisions. Senior management created a new position, Manager of Environmental Health and Safety, and hired an IAQ expert with extensive experience managing environmental health in large, institutional buildings.

Assess Your Environments Continuously — Walk the Grounds: CMS implemented a two-track system for continuous assessments. Track one is a proactive inspection system consisting of routine monthly walkthroughs. Track two is a reactive system for responding to all reported occupant concerns within 24 hours to assess the conditions and initiate a response plan. *“We’re proactively looking for problems. By finding and cleaning up problems early, we make the classrooms healthier and save maintenance funds in the long run.”* — Brian Kasher, Manager of Environmental Health and Safety

Plan Your Short and Long-Term Activities — Work in Stages: The Executive Director of Building Services, Phil Berman, understood that he couldn’t sustain an effective IAQ program alone; successful management requires a team approach. CMS worked with the University of Tulsa to plan a district-wide assessment program for all 150+ school facilities. To ensure adequate time, budget and thoroughness of inspections, they conducted the baseline assessments, including surveying occupants, inspecting HVAC equipment, conducting walkthroughs and collecting monitoring data over two years.

“The Framework is really just a natural progression for an IAQ management program. Our program’s approach has always been the Framework, before we even knew what that was.”

— Brian Kasher, Manager of Environmental Health and Safety

Communicate with Everyone, All the Time — Share Your Goals: A written mission and vision that aligns with the district’s strategic plan helps keep the Building Services Department on track and acts as an anthem for their efforts. The mission resonates with everyone: “to provide excellent educational facilities for all stakeholders that are safe, clean, well-maintained and environmentally secure.” *“The less time teachers and school-based administrators spend worrying about facilities-related issues and instead focus on their primary mission of educating children, the better.”* — Phil Berman, Executive Director, Building Services

Act to Address Structural, Institutional and Behavioral Issues — Educate Staff About IAQ to Change Behavior: By conducting training for all school groups about how everyone can help maintain healthy IAQ, Building Services demonstrated

that every department and function has value. The result was a visible shift in CMS culture: a change in perceptions, behavior, and ultimately, the mindset of the school community. One of the first signs of this change was a new appreciation for the facilities staff — the unseen champions of any IAQ program. *“Now...we understand IAQ issues are not an agenda item, they are a way of doing business. We have received so many thank you letters from staff — and for a usually thankless job.”* — Chip Irby, Director of Maintenance

Evaluate Your Results for Continuous Improvement — Solicit Feedback: CMS noticed a sharp spike in their mold work orders during the summer months — not surprising considering the humid North Carolina climate — but the facilities staff noticed many were repeat calls. By talking to people experiencing repeat problems, they discovered they could address the repeats by revising the summer energy management program. The results: a 54-percent reduction in mold work orders from repeat calls during the summer.

PROGRAM RESULTS

CMS tracks IAQ work orders and monitors costs saved by their proactive approach.

- ▲ Summer-time program emphasizing IAQ fundamentals cut mold work orders by 54 percent.
- ▲ One hundred percent of IAQ complaints investigated within 24 hours.
- ▲ Early identification and prompt response to IAQ concerns have reduced response costs: items costing \$150,000+ in the past are safely handled for less than \$10,000 today.
- ▲ Change in school culture: Greater awareness and responsiveness and a new commitment of fiscal resources to address IAQ issues district-wide.