



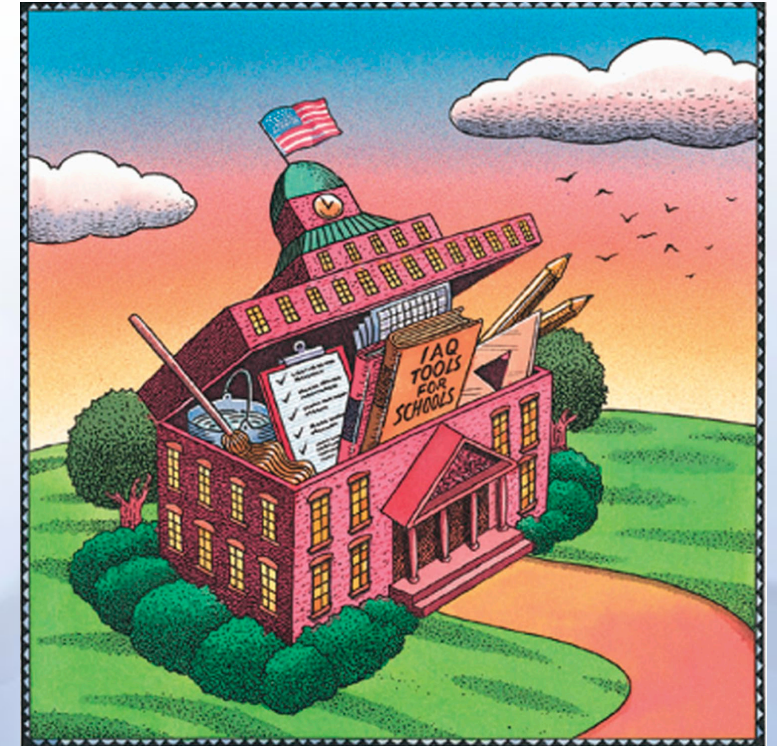
Collaborative Indoor Air Quality Management:

Transforming the Future of Education and Healthy Indoor School Environments

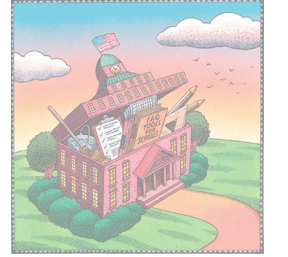
A4LE LearningScapes 2024, Portland, OR

U.S. Environmental Protection Agency

October 19, 2024



Speakers



Sheila Brown

- Indoor Environments Division, U.S. Environmental Protection Agency

Jessica Kroenert

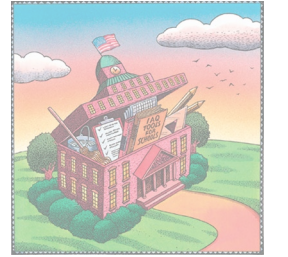
- Indoor Environments Division, U.S. Environmental Protection Agency

Mandy Larson, PE

- Director of Facilities, Weld County School District 6, Colorado

Session Participants

Getting to Know Each Other



Before we start today's session, we'd like to get to know you, our audience, a little better!

Where do you work?

School district

An outside organization that supports school districts

Other?

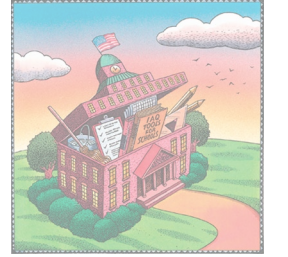
Where are you in your IAQ management journey?

Just getting started

Have developed an IAQ management plan or program

Have not developed an IAQ management plan, but have supported putting some IAQ management practices in place

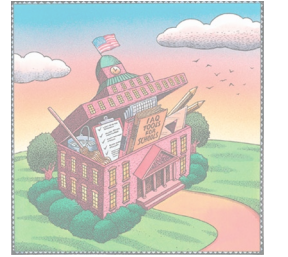
Agenda



- Welcome and Introductions
- EPA Indoor Environments Overview
- Indoor Air Quality (IAQ) Management Overview
 - Benefits of IAQ Management
- Developing and Implementing Comprehensive IAQ Management Plans and Programs
- Getting Started: School District IAQ Management, featuring **Mandy Larson**
- Action Learning: Build Your IAQ Management Plan
- How to Extend Your Collaborative Reach and Advance Your Commitment to Healthy Indoor School Environments
- Q&A Session
- Wrap-Up and Closing

Learning Objectives

What we hope you walk away with



Understand the importance of healthy learning environments in schools and how indoor air quality plays a role in student and staff health and safety.

Learn how to develop and implement comprehensive IAQ management plans and programs.

Identify tools and techniques to assess IAQ, energy efficiency and climate resiliency in your school and district facilities.

Gain strategies to collaborate with and learn from diverse school leaders and stakeholders to promote, maintain and advance your commitment to healthy learning environments.

Indoor Air Quality (IAQ)



- Top public health risks
 - Radon
 - Asthma
 - PM (indoors)
 - Biological Contaminants
 - IAQ in Homes & Schools
 - Emergency Preparedness, Response and Recovery
 - Household Energy/Cookstoves
- Non-regulatory program
 - Develop, synthesize and translate IAQ science to inform policy/programs
 - Technical guidance and assistance; public information and education
 - Partnerships with industry, NGOs, feds, states, tribes, communities
 - Grants to states, tribes and NGOs (e.g., State Indoor Radon Grants)

Poor indoor air quality is among the top 5 environmental public health risks; associated with significant economic burden.

Indoor Environments Program






Mission

EPA is protecting the public's health from indoor environmental concerns where they live, learn, work and play.

Authority

SARA Title IV – Radon and Indoor Air Quality Research Act; TSCA Title III – Indoor Radon Abatement Act; Inflation Reduction Act

- Only federal authority to specifically address indoor air quality
- Authorizes research on all aspects of indoor air quality and dissemination of information... HOWEVER, Specifically precluded from regulating IAQ

<p>IAQ Pollutants and Sources</p> 	<ul style="list-style-type: none">• Radon• Asthma• Household Energy/Cookstoves• Indoor Particulate Matter• Biological Contaminants• Secondhand Smoke/Aerosols
<p>Comprehensive Interventions</p> 	<ul style="list-style-type: none">• Homes• Schools• Metrics and Sensors• Emergency Preparedness, Response and Recovery
<p>Cross-Cutting Foundations</p> 	<ul style="list-style-type: none">• Science• Communications• Regions, States and Tribes

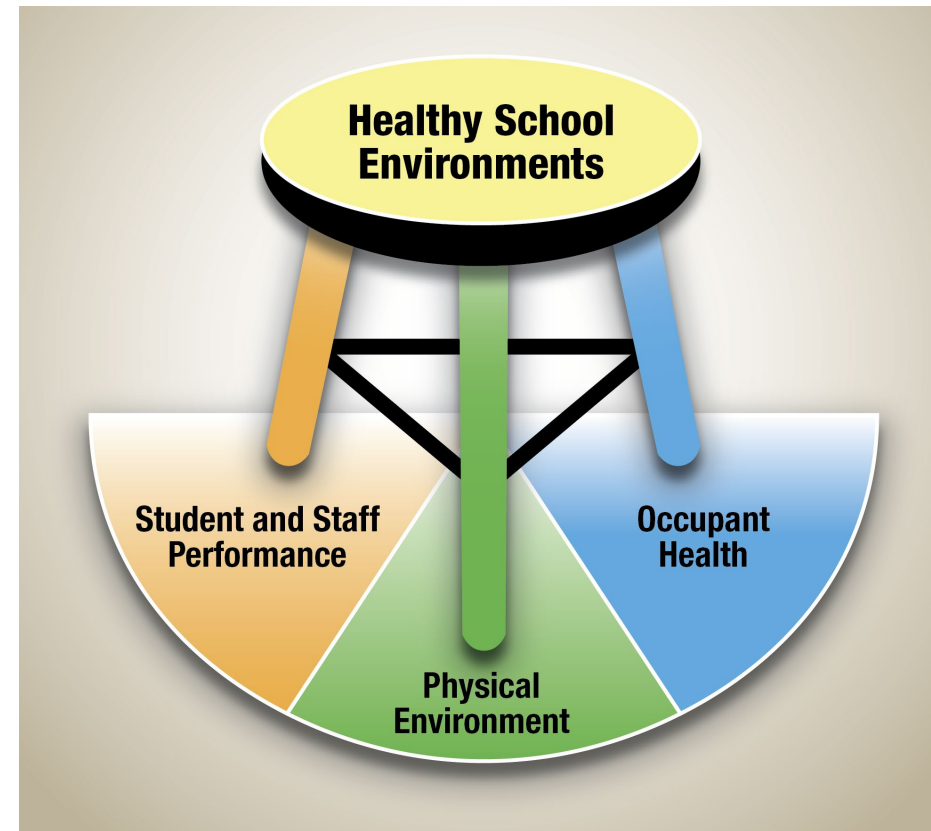
Children Learn Best and School Staff Work Best in Healthy Environments



Proactively managing the environmental health in schools will—

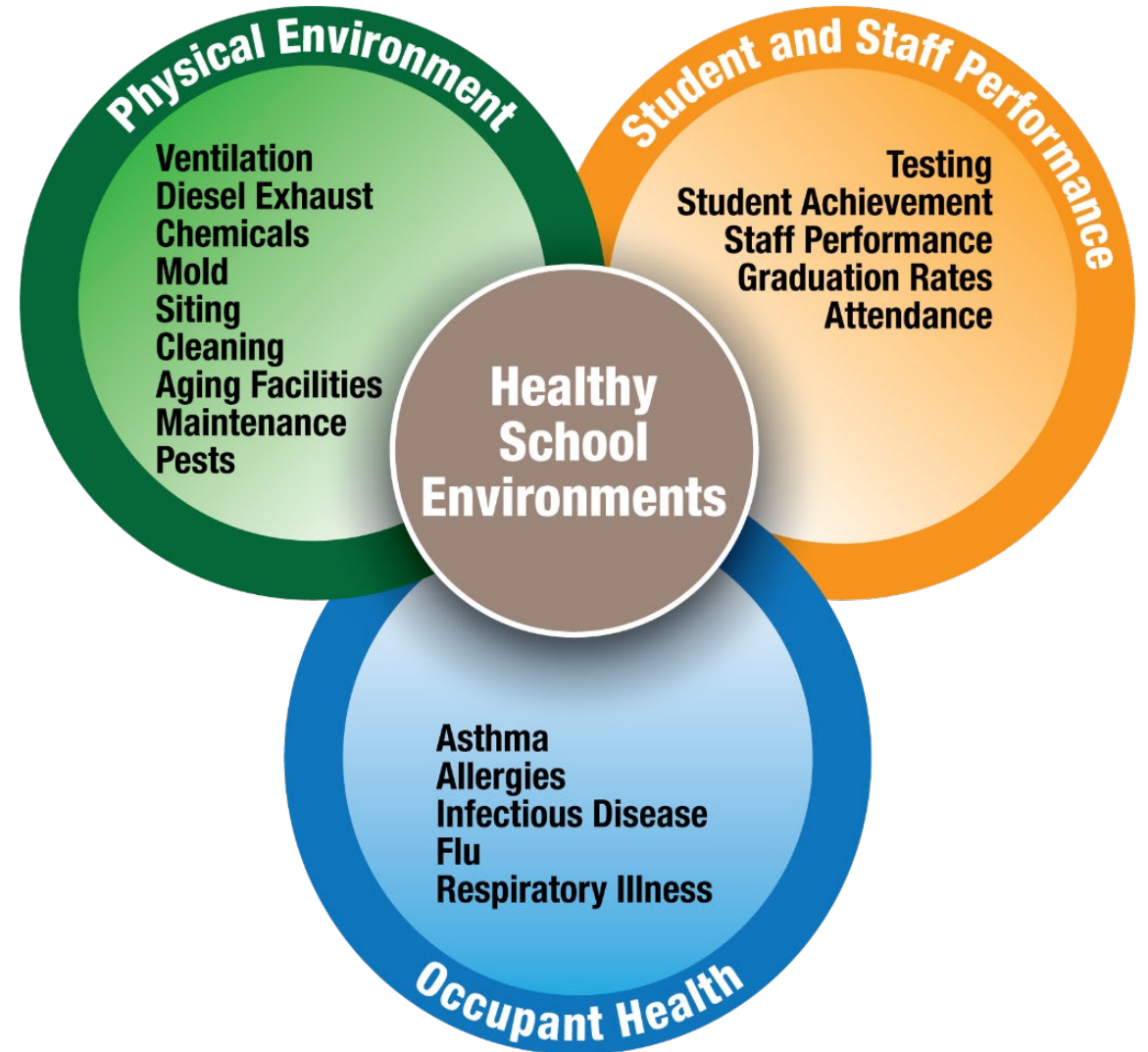
- Protect student and staff health.
- Improve academic performance as well as staff performance.
- Enhance the physical environment.

These three benefits will save your school district money!



Healthy School Environments Improve Occupant Health

- Poor indoor air quality can cause or exacerbate many health problems:
 - Coughing, sneezing and sinus congestion.
 - Irritation of the eyes, nose, throat and skin.
 - Headache, dizziness and nausea.
 - Allergies, shortness of breath and fatigue.
- Asthma is the leading cause of school absenteeism, accounting for **14 million** missed school days per year.



EPA's Role in Encouraging School IAQ Management



EPA is committed to providing schools and school districts with the tools and resources needed to ensure healthy learning environments for their students, faculty and staff.

www.epa.gov/iaq-schools

What are the resources EPA offers to help encourage school IAQ management?

- *IAQ Tools for Schools* Action Kit
- On-Demand Training Webinars
- Guidance and Videos
- In-Person Outreach at Meetings Nationwide
- And more!



The Value of IAQ Management

Saving Costs With Healthy Learning Environments



IAQ management goes hand-in-hand with preventive maintenance and energy efficiency.

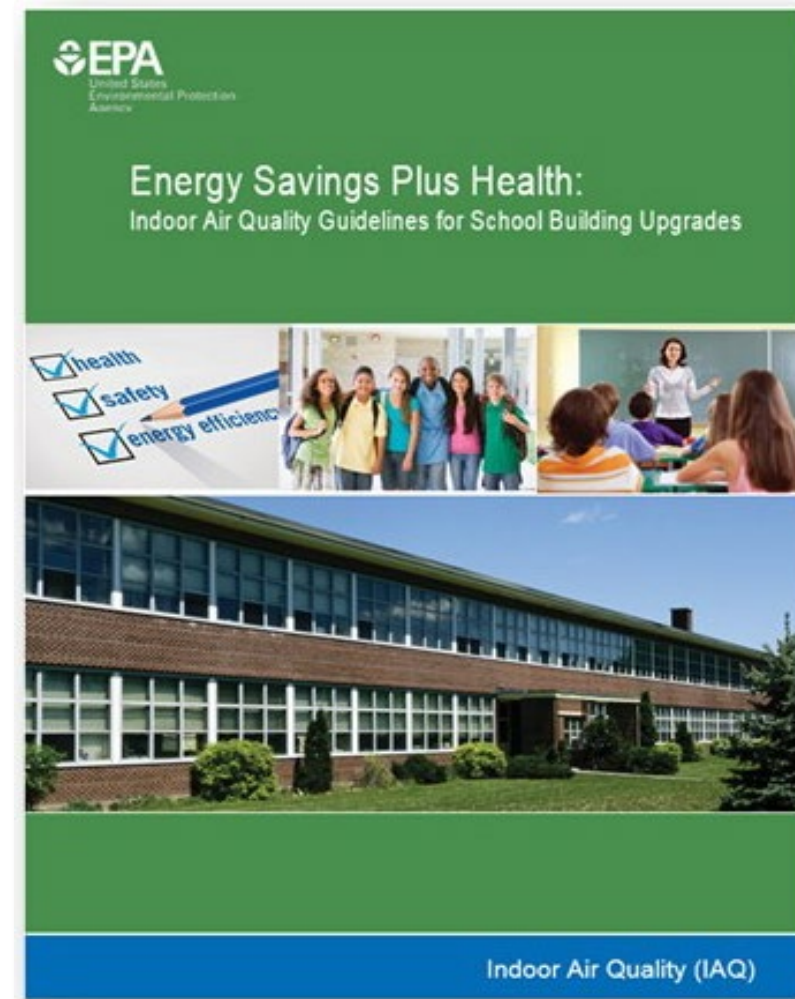


Integrating IAQ management, preventive maintenance and energy efficiency into your school and school district facility projects, building operations, facility designs, construction and renovation are critical components of **healthy, reliable and efficient school buildings**.

Integrated Energy Management Solutions



- Protect IAQ during energy efficiency upgrades and building renovations.
- Conduct regular HVAC maintenance and tune-ups.
- Install programmable thermostats.
- Consider performing post-construction commissioning for HVAC systems.
- Control moisture in building assemblies, mechanical systems and occupied spaces.



IAQ Preventive Maintenance: Guidance, Tools and Resources



EPA United States Environmental Protection Agency

EPA 402-K-18-001 | March 2019 | EPA Indoor Environments Division | www.epa.gov/iaq

Indoor Air Quality Tools for Schools: Preventive Maintenance Guidance

Indoor Air Quality (IAQ)

Preventive Maintenance Guidance

Indoor Air Quality (IAQ) Tools for Schools: Preventive Maintenance Guidance
Appendix B: IAQ Preventive Maintenance Model Plan

Model Plan¹

IAQ Preventive Maintenance Plan

[School District Name]

[Date]

[Italicized sections in this Model Plan are intended to be customized for your school. The footer could be replaced with your school's name.]

[This could be a standalone document or included as a section in your IAQ Management Plan.]

Table of Contents

1. [Mission and Goals](#)
2. [Checklists, Procedures, and Schedules](#)
3. [Walkthroughs and Inspections](#)
4. [Team and Staffing](#)
5. [Communication](#)
6. [Evaluation](#)

IAQ PREVENTIVE MAINTENANCE

Indoor Air Quality Preventive Maintenance Checklist
Preventive Maintenance Full

School Name: _____
Date: _____

This tool is designed to allow you to add your own checks or modify the existing checks to match your needs. You may want to add additional activities related to IAQ preventive maintenance, such as those in IAQ Tools for Schools Action Kit. Enable macros to use this checklist customizer. Refer to Help files to learn how to enable macros for your version of MS Excel.

Make a Copy of Checklist
Select and Customize a Checklist
Preventive Maintenance Full

Use Filters Below to Customize Checklist

Category	Category Details	Action	Priority	Y	N	Notes
Project Planning	Project Planning	Gathered feedback from the school's faculty and staff on IAQ issues and gained an understanding of the current building status.	AP	<input type="checkbox"/>	<input type="checkbox"/>	
Project Planning	Project Planning	Performed a periodic building walkthrough inspection to identify environment health issues and concerns (recommend monthly inspections).	AP	<input type="checkbox"/>	<input type="checkbox"/>	
Project Planning	Project Planning	Clearly defined all IAQ and energy efficiency goals.	MA	<input type="checkbox"/>	<input type="checkbox"/>	
Mold and Moisture	Mold and Moisture	Inspected the interior and exterior of the building and the building's mechanical systems for evidence of moisture problems, and documented the results.	AP	<input type="checkbox"/>	<input type="checkbox"/>	
Mold and Moisture	Mold and Moisture	Determined whether the project requires mold remediation or additional moisture control measures based on the findings of the moisture inspection.	AP	<input type="checkbox"/>	<input type="checkbox"/>	
Mold and Moisture	Mold and Moisture	Worked with a general contractor or other experienced building experts to define the scope of moisture improvements and repairs.	AP	<input type="checkbox"/>	<input type="checkbox"/>	
Mold and Moisture	Mold and Moisture	Assessed moisture or mold problems that could not be resolved under the project. Did not start construction projects that would reduce the school's air infiltration rate if there are unresolved moisture problems.	AP	<input type="checkbox"/>	<input type="checkbox"/>	
Mold and Moisture	Mold and Moisture	Repaired moisture problems identified during the assessment including plumbing leaks, rain leaks, and foundation leaks.	MA	<input type="checkbox"/>	<input type="checkbox"/>	

Creating an IAQ Management Plan or Program

Good IAQ management includes—

- Source control: Control of airborne pollutants.
- Improved ventilation: Introduction and distribution of adequate outdoor air.
- Enhanced filtration: Using the central HVAC system and/or in-room filtration devices.



Source Control



Ventilation



Filtration

IAQ Tools for Schools Action Kit



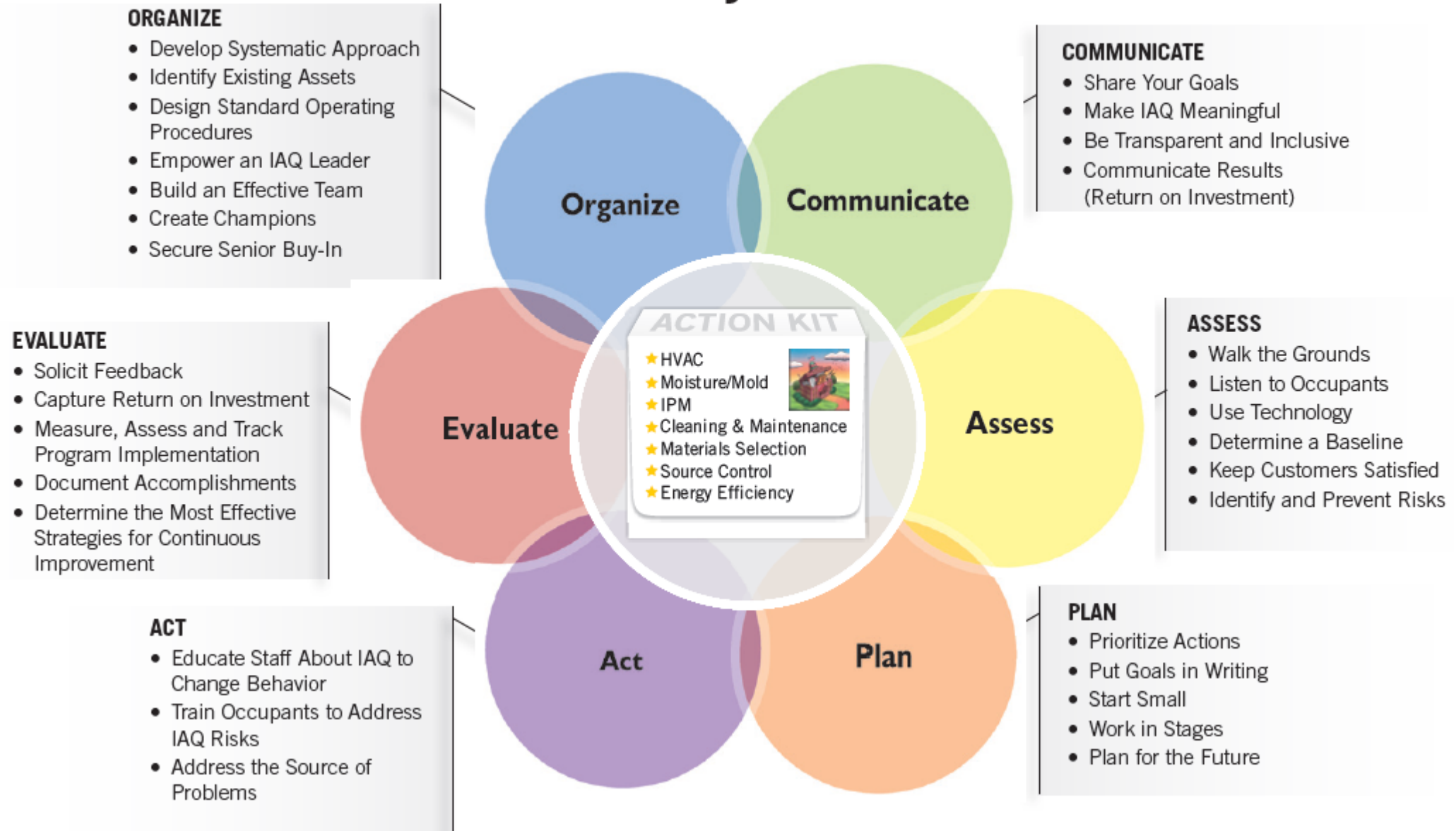
What is it? A practical plan for improving your IAQ knowledge using straightforward solutions and individuals already on staff.

The Action Kit includes—

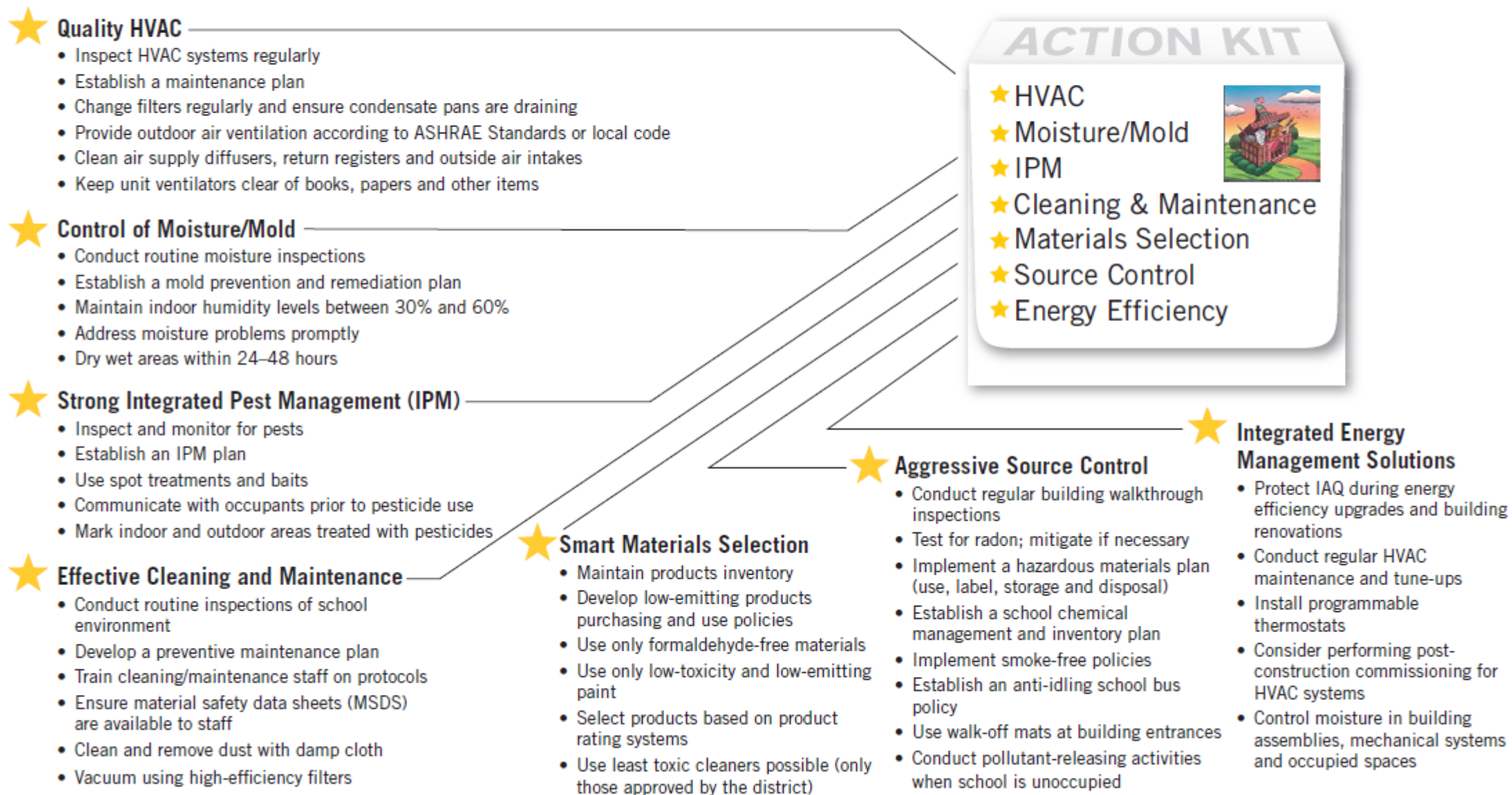
- Reference guides
- Checklists
- Fact sheets
- Sample policies
- Comprehensive IAQ management plans
- The Framework for Effective School IAQ Management
- The Seven Technical Solutions



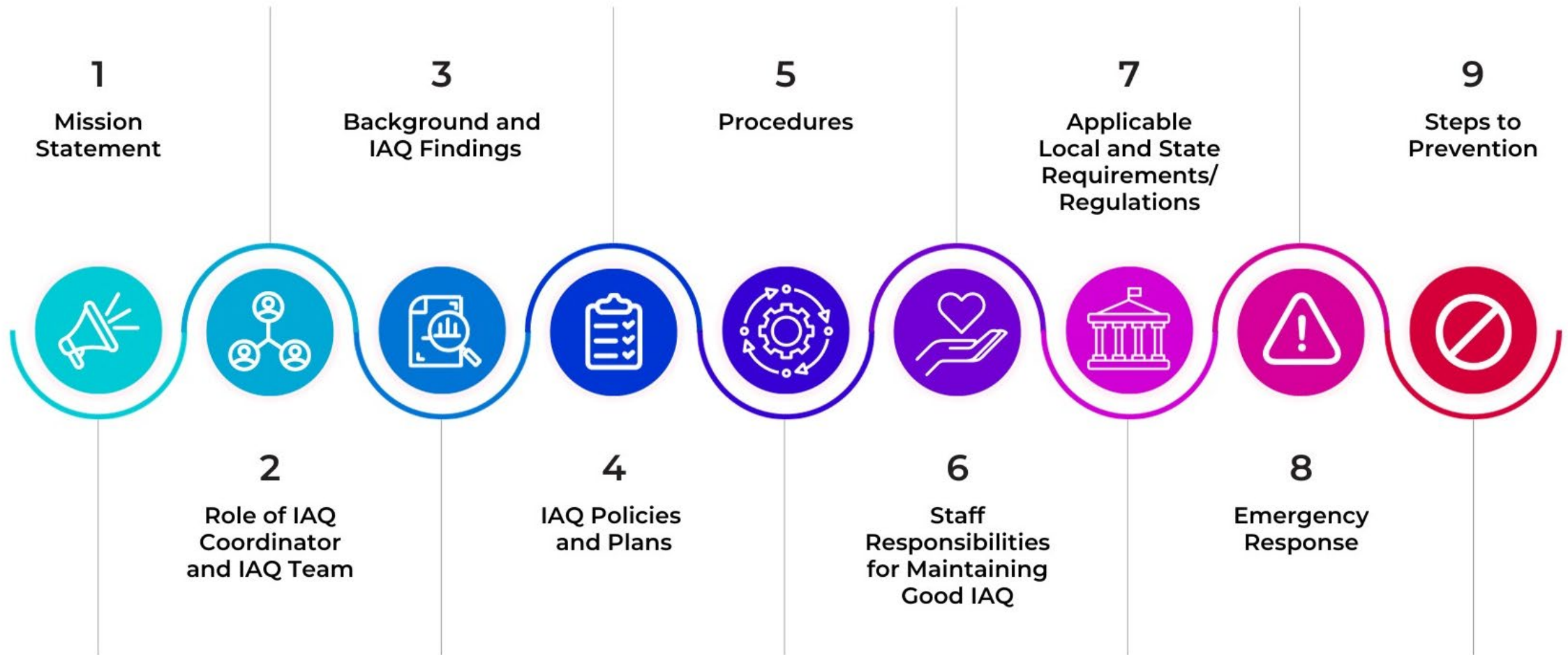
The Framework for Effective School IAQ Management: **Six Key Drivers**



The Framework for Effective School IAQ Management: Seven Technical Solutions



Key Components of an IAQ Management Plan





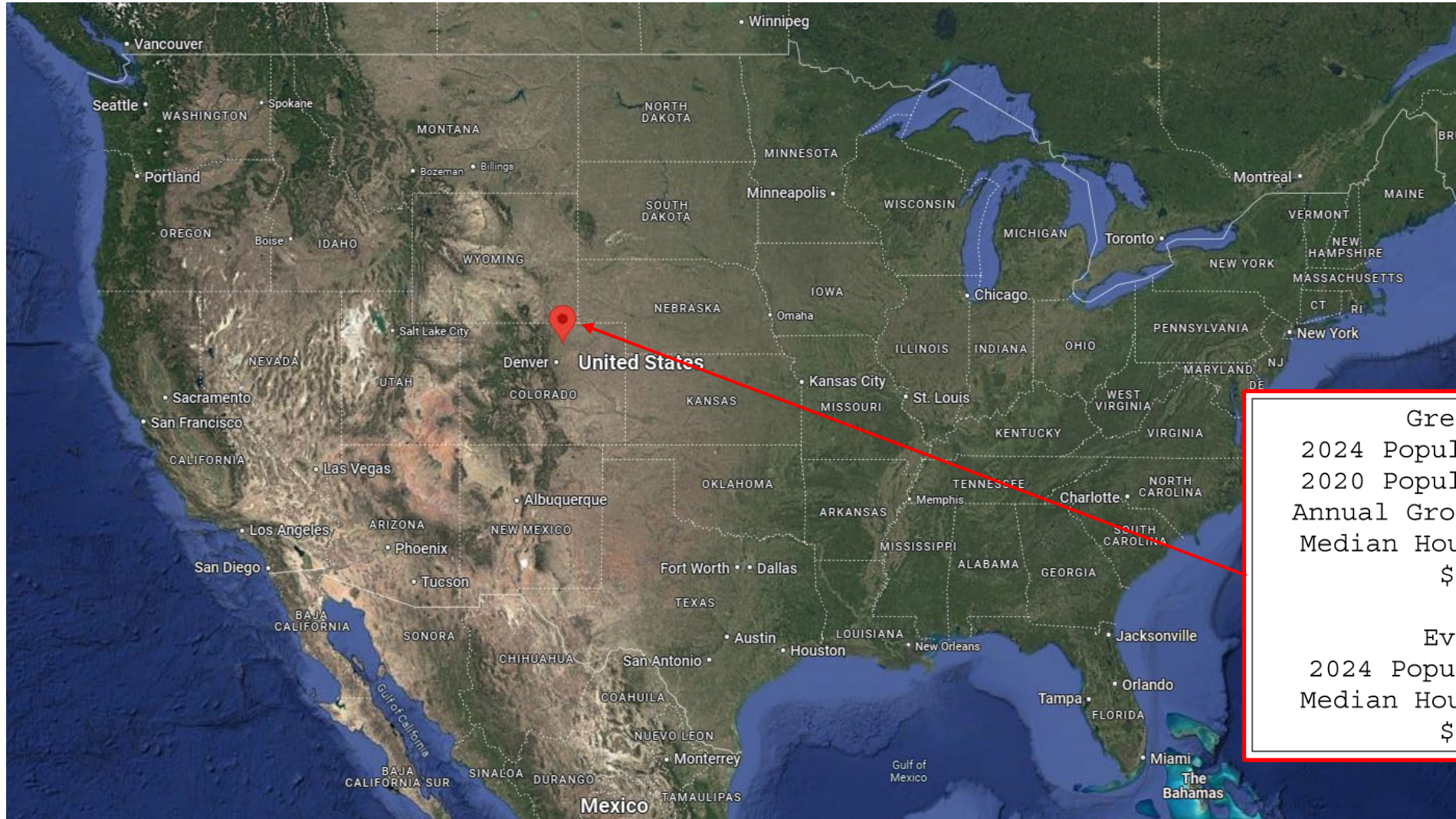
Getting Started – School District IAQ Management

Weld County School District 6, Greeley-Evans, CO

Mandy Larson, PE, Director of Facilities

Weld County School District 6

Greeley-Evans, Colorado



Greeley, CO
2024 Population: 113,721
2020 Population: 109,272
Annual Growth Rate: 0.99%
Median Household Income:
\$69,338

Evans, CO
2024 Population: 22,339
Median Household Income:
\$90,715

Weld County School District 6

Greeley-Evans, Colorado

- 29 Schools
- 1 Online Academy
- 13 Support Facilities
- 2,800,000 Square Feet
- 485 Acres
- 50 Facility Staff



MISSION

District 6 engages every student in a personalized, well-rounded and excellent education, preparing students to be college and career ready.

VISION

District 6 engages, empowers and inspires today's students in partnership with families and communities to succeed in tomorrow's world.

VALUES AND BELIEFS

- Our students come first.
- We know every child can achieve.
- We believe diversity is a strength.
- We ensure safe, secure and healthy schools.
- We build positive relationships with students, families and communities.
- We promote access, opportunity and choice.
- We commit to hiring and retaining quality staff.
- We commit to excellence, innovation and continuous improvement.

WHO WE ARE



22,648

TOTAL PK-12 STUDENT MEMBERSHIP AS OF OCTOBER 2023



15TH

LARGEST SCHOOL DISTRICT IN THE STATE OF COLORADO

3,080

EMPLOYEES WORK IN DISTRICT 6
One of the largest employers in Weld County



50+

DIFFERENT LANGUAGES ARE SPOKEN BY STUDENTS IN DISTRICT 6



83.7%

OF OUR STUDENTS GRADUATE ON TIME
Above the state average of 83.1 percent



130

STUDENTS EARNED THE PRESTIGIOUS AP SCHOLARS AWARD
for their outstanding performance on the 2023 Advanced Placement Exams

MORE THAN
1,000

Aims
COMMUNITY COLLEGE



District 6 students enrolled in courses at AIMS Community College, the University of Northern Colorado and other colleges, with tuition paid through the District 6 Mill Levy Override



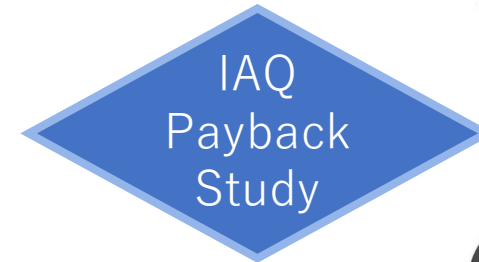
29

CAREER PATHWAYS ACROSS DISTRICT 6

Mechanical Engineer → Director of Facilities

My IAQ Journey

- 2008 – BS Mechanical Engineering, University of North Dakota (Grand Forks, ND)
- 2008-2010 – **HVAC/Plumbing Engineer** in Training (Minneapolis, MN)
- 2010-2014 – **Project Manager/Energy Analyst** (Minneapolis, MN to Denver, CO)
- 2014-2018 – **Assistant Practice Lead**, MEP Design (Denver, CO)
- 2018-2021 – **Bond Construction Project Manager** (Boulder Valley School District, CO)
- 2022 – **Owner's Representative**, District 6
- 2022-Present – **Director of Facilities**, District 6



Weld County School District 6

Taking Action

Successes

- ESSER funding used to replace HVAC equipment beyond useful life – many horizontal unit ventilators
- Bond-funded new schools have displacement ventilation, dedicated outdoor air systems and perimeter radiant heat
- Bond-funded renovations received new equipment, or had ductwork and equipment cleaned and serviced
- Air purifiers in every classroom and office

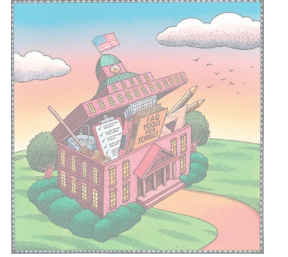
Plans (and Hopes)

- Energy Team implementation
- Filter change schedule + efficiency
- HVAC system type consistency
- IAQ Management Plan
 - IAQ Champion
 - Preventive Maintenance Plans - improve
 - Technical Guide and Educational Standards - keep up to date



Action Learning: Build a Comprehensive IAQ Management Plan

Steps to Develop and Implement a Plan



Let's work through an IAQ Management Plan together!

Action Learning Worksheet




School Staff:


Use this worksheet to get started on developing, or updating, your IAQ management plan.

Architects, Building Designers, etc.:

This worksheet is for you too! This worksheet is designed for you to work with your school district clients to help them achieve their IAQ management goals.



Collaborative Indoor Air Quality Management



Developing a Successful Indoor Air Quality (IAQ) Management Plan

1
Make the Case to Gain Buy-In

2
Develop Your Plan

3
Form a Committed Team and Communicate for Success

4
Evaluate for Continued Improvement

Step 1: Make the Case to Gain Buy-In

Develop a **value proposition**. Write a succinct statement (2-4 sentences) clearly describing tangible results, an offer, the basic reasoning for supporting your program, and a succinct success story that uses tangible results to draw interest.

Proactively addressing IAQ in your school facility can—

- Help save your school district money.
- Reduce missed school days by improving student and staff health.
- Improve academic and staff performance.
- Enhance the physical environment and improve energy efficiency.

My Value Proposition:
 The bold goals my program is focused on include [impacts/long-term outcomes] _____, _____, and _____.

For/By [inputs/investment] _____, **my program will** [achieve outcome/short-term and intermediate goal] _____ for [target population] _____ and will generate [benefits/cost savings] _____ over/within [time period] _____.

_____ plan outlines the goals of the plan, as well as the policies and procedures _____ respond to incidents that impact IAQ through operations and maintenance and compliance with local and federal regulations.

_____ to include in your IAQ management plan.

_____ ed to ensuring healthy, safe, and comfortable learning and working _____ staff. To provide high-quality learning environments in alignment with [school _____ goal], the following IAQ management plan was developed as a guide to _____ acts impacting air quality in school buildings with the following goals:

_____ pollutants to reduce the likelihood of occupant health problems, _____ act infections, and allergic reactions.

_____ ty and maintain adequate ventilation rates by repairing and maintaining _____ il promote a comfortable and productive learning and working _____

_____ ts and problems in a prompt and thorough manner, and effectively _____ vestigations and their resolution to all interested parties.

_____ such measures as preventative maintenance and regular building inspections _____ ize liability risks, and foster a positive relationship among parents, teachers, _____

_____ ng which practices, policies, or resources you would like to include in _____

_____ schedules: _____

_____ d ventilation: _____

_____ gement: _____

_____ maintenance: _____

_____ ent solutions: _____

_____ s, and new standard facility management policies designed to prevent IAQ _____ es when they occur.

_____ at a few below: _____

Team and Communicate for Success

_____ . Your committed team should—
 Plan creation and implementation.
 _____ that have been reported to the IAQ Coordinator.
 _____ es to resolve the reported concern.
 _____ biannually, or other timeframe as part of regularly scheduled health and _____ IAQ issues and projects.
 IAQ Management Plan.

_____ to your IAQ team?

Contact Information	Team Role/Responsibilities

Evaluating Improvement

_____ zone early and often and not just once a year. During your evaluation, be _____

_____ plementation.

_____ for continuous improvement.

_____ ent?



STEP 1

Make the Case to Gain Buy-In

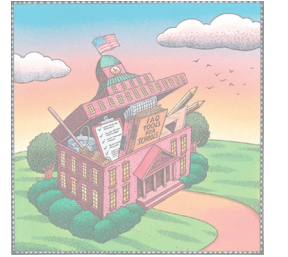


Strategize Together With Your Team

- ✓ Define your program goals.
- ✓ Identify existing assets and problem areas.
- ✓ Create a value proposition to secure buy-in.
- ✓ Use financing tools to make the business case.

Making the Case: What Is a Value Proposition?

An analysis and quantified review of the benefits, costs and value that an organization can deliver to customers/funders and other stakeholders.



A value proposition is—

- **A succinct statement** (i.e., 2–4 sentences) that clearly describes the tangible results a customer gets from your program.
- **An offer** to someone in which they get more than they give up.
- **The basic reasoning** for why people should support your program.
- **A succinct success story** that uses tangible results to draw interest.

Making the Case for Proactive IAQ Management Plans



Your Value Proposition:

The bold goals my program is focused on

[impacts/long-term outcomes] _____, _____ **and** _____.

For/By [inputs/investment] _____, **my program will** [achieve outcome/short-term and intermediate goal] _____ **for** [target population] _____ **and will generate** [benefits/cost savings] _____ **over/within** [time period] _____.

Example:

***The bold goal my program is focused on** is creating healthy learning environments for our students, protecting the health of custodial staff, and increasing the lifespan of the facilities through implementing green cleaning best practices as part of a comprehensive indoor air quality management program.*

*In addition, using green cleaning products is fiscally responsible. **By** changing to green cleaning products, **this program generated** \$175,000 in custodial cost savings for Columbia Public Schools **within** the first 2 years. **By** implementing a standardized cleaning process to ensure schools were clean and healthy, **this program generated** \$500,000 in cost savings, which was reinvested into the Custodial Department, **within** 1 year (2014–2015).*

Weld County School District 6: Taking Action

Creating Buy-In

Weld County School District Value Proposition:

The bold goals my program is focused on

[impacts/long-term outcomes] _____, _____ **and** _____.

For/By [inputs/investment] _____, **my program will** [achieve outcome/short-term and intermediate goal] _____ **for** [target population] _____ **and will generate** [benefits/cost savings] _____ **over/within** [time period] _____.

Value Proposition Worksheet



November 2017

Making the Case for Preventive Maintenance and Proactive Indoor Air Quality Management: Value Proposition Worksheet

The condition of the indoor environment in schools has a direct impact on health and performance outcomes for students and staff. Although most schools are working hard to provide a safe and healthy learning environment for all, there are times when a focused pitch is needed to help make the case for a specific action or program to an intended audience (e.g., superintendent, school board, teachers, facility director). Your value proposition statement is your "elevator pitch" for quickly describing the benefits of your program. The purpose of your statement is to demonstrate to your intended audience that your proposed activities are critical and worth funding/supporting.

This worksheet provides two tables to help you identify the key components of your value proposition. Once you have obtained your audience's attention, you can use the other components of your value proposition to secure their support.

Value Proposition Example:

The bold goal my program is focused on is creating healthy learning environments for our students, protecting the health of custodial staff, and increasing the lifespan of the facilities by implementing preventive maintenance best practices as part of a comprehensive indoor air quality management program.

In addition, implementing preventive maintenance practices keeps our facilities in good working order and helps extend the life of our equipment and assets, which will save money in the long run. By developing a preventive maintenance plan and implementing it, this program saved \$500,000 in reactive/emergency maintenance costs for Area School District within the first 2 years.

Get started by filling in Table 1 and Table 2 to determine the benefits of your proposed activities or program. Once those tables are complete, fill in the spaces below to complete your value proposition statement. Remember, every initiative or program is unique; you may have to tailor the template to fit your needs.

Your Value Proposition:

The bold goals my program is focused on include [impacts/long-term outcomes] _____, and _____.

For/By [inputs/investment] _____, my program will [achieve outcome/short-term and intermediate goal] _____ for [target population] _____ and will generate [benefits/cost savings] _____ over/within [time period] _____.

Filling In Your Value Proposition Statement:

- Table 1—Fill in Table 1 to determine your target population, inputs, activities, outputs, outcomes and impact. You might have several outcomes, so pick the one or two most likely to entice your identified audience. If you have multiple intended audiences, you may have to tailor your value proposition statement for each.
- Table 2—Fill in Table 2 to determine the potential benefits and cost savings or potential revenue lost as they relate to your specific outcomes.

June 2017

Table 1: Value Proposition Components

This table is intended to help you identify the necessary components of your value proposition. Program evaluation is essential to securing funding and buy-in for the future. As you move through the worksheet, think through the different metrics your program will employ to measure and track progress toward each component. Please fill in the "My Program" row. Depending on your goals, you could focus on any number of activities and outcomes. Examples are inserted for your reference.

Logic Model as a Tool for Developing Your Value Proposition

My Target Population: _____

What is the target population your program is committed to serving? How many individuals are in your target population?

Example:

My program will serve 72,000 students in Davis School District.

Inputs	Activities ¹	Outputs	Outcomes	Impact
Investment/Cost/Assets What resources (investment/cost/assets) do I need to put into my program or activities?	Tasks What activities will my program offer to achieve my desired outcomes?	Objectives What outputs can I measure to track my activities?	Short-term and Intermediate Goals What is my program committed to achieving for my target population? You could focus on outcomes from each category or focus on one category.	Long-term Mission What benefits will result for my population of focus?
My program...				
Example... Staff time: 1 FTE of \$60,000 Funding: \$15,000 grant Equipment and supplies: \$5,000 Total: \$80,000 ----- # of hours of staff time to train or develop materials # of available/relevant partners, who could offer training or technical assistance	Assess: Conduct school walkthrough assessments twice per year using the School IAQ Assessment Mobile App . Act: Train 20 teachers and 10 custodial staff to implement green cleaning best practices or to take other actions to improve IAQ. Organize: Develop and institute a new policy for green cleaning and/or proactive IAQ management based on the IAQ Tools for Schools guidance to sustain changes.	# of walkthroughs conducted in # of buildings. # of teachers successfully trained. # of custodial staff successfully trained. # of new policies approved. (EVALUATING YOUR PROGRAM: Where can you find the data you need to evaluate your program? With whom can you partner to get the data?)	Health: • % reduced school nurse visits. • # of IAQ-related health complaints reduced. • # of impacted students. • # of teacher sick days (and substitute teacher days) reduced. • # of custodial health complaints reduced. Academic and Staff Performance: • # of school days missed. • % improvement in teacher retention. • Instruction time increased. Facility/Environmental: • # of IAQ-related complaints reduced. • # of school closings and the need to relocate students reduced.	Health: • Healthier environment for students and staff. • Reduced asthma exacerbations from asthma triggers in schools. • \$ saved from reduced school nurse visits. • Reduced liability and lawsuits. Academic and Staff Performance: • Gained revenue based on increased attendance. • Improved state test scores. • Increased scholarships. • Improved teacher and staff performance. Facility/Environmental: • # of IAQ-related repairs and cost of those repairs reduced. • \$ saved in operating costs.

¹ Refer to the [Framework for Effective School IAQ Management](#) for activity ideas related to the Key Drivers of Success and Technical Solutions.

June 2017

Table 2: Benefits and Value/Potential Loss/Cost Savings

Use this table to estimate your benefits and cost savings for your specific outcome(s).

Benefits and Cost Savings	Example Benefits and Cost Savings	My Program
<i>Estimate the cost savings for your specific outcome(s).</i>	<p>Attendance Cost Savings: (# of children with asthma in NEISD schools: 8,361) X multiplied by (Avg. # of school days missed by students with asthma: 8) X multiplied by (Attendance daily rate by state: \$32) = equals (Potential revenue lost: \$2,140,416)</p> <p>Reducing avg. # of school days missed by those with asthma by 50% = \$1,070,208/year</p> <p>Improving attendance of all students with asthma by only 1 day = \$267,552/year</p> <p>Custodial Cost Savings: In 2 years, Columbia Public Schools, MO, saved \$175,000 alone by switching to green products:</p> <ul style="list-style-type: none"> EcoLogo-certified paper towels and tissue: 22% Green Seal-certified hand soap: 33% Environmentally sensitive cleaning chemicals: 20% Microfiber wipers and tools: 40% Green Seal-certified floor finish and application: 28% Trash can program: 30%, plus reduction of 40,000 bags into landfill In-house equipment repair and preventative maintenance: 35% 	
<i>Estimate the benefits for your specific outcome(s).</i>	<p>Increased Academic Instruction Time: Baseline: 176 PRN visits x 26 min. = 76 hours 4 months later: 28 PRN visits x 26 min. = 12 hours</p>	



STEP 2

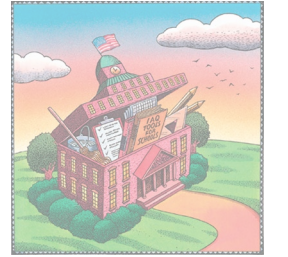
Develop Your Plan



Essential Elements of an IAQ Management Plan

- ✓ Annual review of the IAQ management plan.
- ✓ Checklists, procedures and schedules.
- ✓ Walkthroughs and assessments.
- ✓ Address IAQ technical solutions.
 - Quality HVAC, air filtration and ventilation
 - Control of mold and moisture
 - Strong integrated pest management
 - Effective green cleaning and maintenance
 - Smart materials selection
 - Aggressive source control
 - Integrated energy management solutions

Developing Your IAQ Plan



- Prioritize actions.
 - Prioritize what is most important for your school.
 - **What projects would most benefit your facilities?**
- Put goals in writing.
 - Keeping track will help ensure that your team stays accountable.
- Start small.
- Work in stages.
- **Plan for the future.**





STEP 3

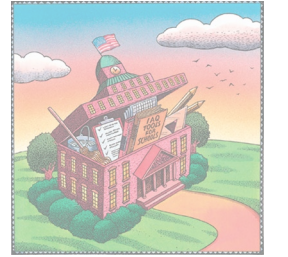
Form a Committed Team and Communicate for Success



The IAQ Team

- ✓ Contributes to the IAQ Management Plan creation and implementation.
- ✓ Evaluates non-routine IAQ concerns that have been reported to the IAQ Coordinator.
- ✓ Takes steps or recommends measures to resolve the reported concern.
- ✓ Meets regularly [*monthly, quarterly, biannually or other time-frame as part of regularly scheduled health and safety meetings*] to review ongoing IAQ issues and projects.
- ✓ Conducts an annual review of the IAQ Management Plan.

Why Is It Important to Communicate About IAQ?



3 Form a
Committed Team
and Communicate
for Success

Forming a committed team responsible for your IAQ management program not only keeps your IAQ goals on track, but also—

- Can lead to improved health and comfort.
- Help gain support from administrators and school boards.
- Strengthen community relations.
- Reassure school staff, parents and students.
- Encourage other schools to implement EPA's *IAQ Tools for Schools* resources.

Communication Is Key: Forming, Supporting and Developing IAQ Teams



- Mission Focus
- Recruitment and Retention
- Training and Professional Development
- Recognition and Awards
- Inclusion and Transparency
- Multi-Level Communications
- Cross-Team Collaboration
- Shared Accountability and Shared Credit
- Senior-Level Support and Commitment



STEP 4

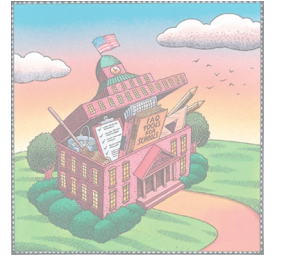
Evaluate for Continued Improvement



**Track, Measure, Analyze,
Document, Celebrate**

- ✓ Solicit feedback.
- ✓ Capture return on investment.
- ✓ Measure, assess and track program implementation.
- ✓ Document accomplishments.
- ✓ Determine the most effective strategies for continuous improvement.

Looking Ahead



Evaluating and monitoring the results of your IAQ management plan or program—

- Can keep your team accountable.
- Ensure responsible use of resources.
- Can help you refine your goals.
- Can help you redirect investments as needed to acquire resources.
- Confirms that your facility equipment are in good shape and help avoid costly IAQ issues.



Collaboration is Essential to Creating a Successful IAQ Management Plan



Teamwork makes the dream work!

EPA's tools and resources are the result of many great minds, experts and valuable experiences shared by diverse school districts.

We encourage you all to share your knowledge, reach out to others and build your own IAQ support network.

We hope that everyone here walks away with new potential partners in action.



Inflation Reduction Act Technical Assistance for IAQ in Schools




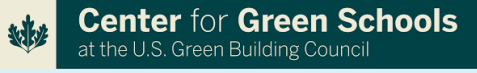



From 2025–2030, EPA anticipates using the technical assistance funds to—

- Provide technical assistance to schools (including recommended building construction, renovation and maintenance guidance as required by the Inflation Reduction Act statute).
- Execute a public IAQ/greenhouse gas reduction education campaign.
- Provide targeted staff IAQ implementation training to build a national learning cohort and community of practice.
- Fund research to address key IAQ topics and research and development gaps.
- Update older IAQ training, IAQ guidance and other IAQ content.
- Provide additional support to the 5 IAQ school grantees.

How Will the Inflation Reduction Act Funding Benefit the School Community?



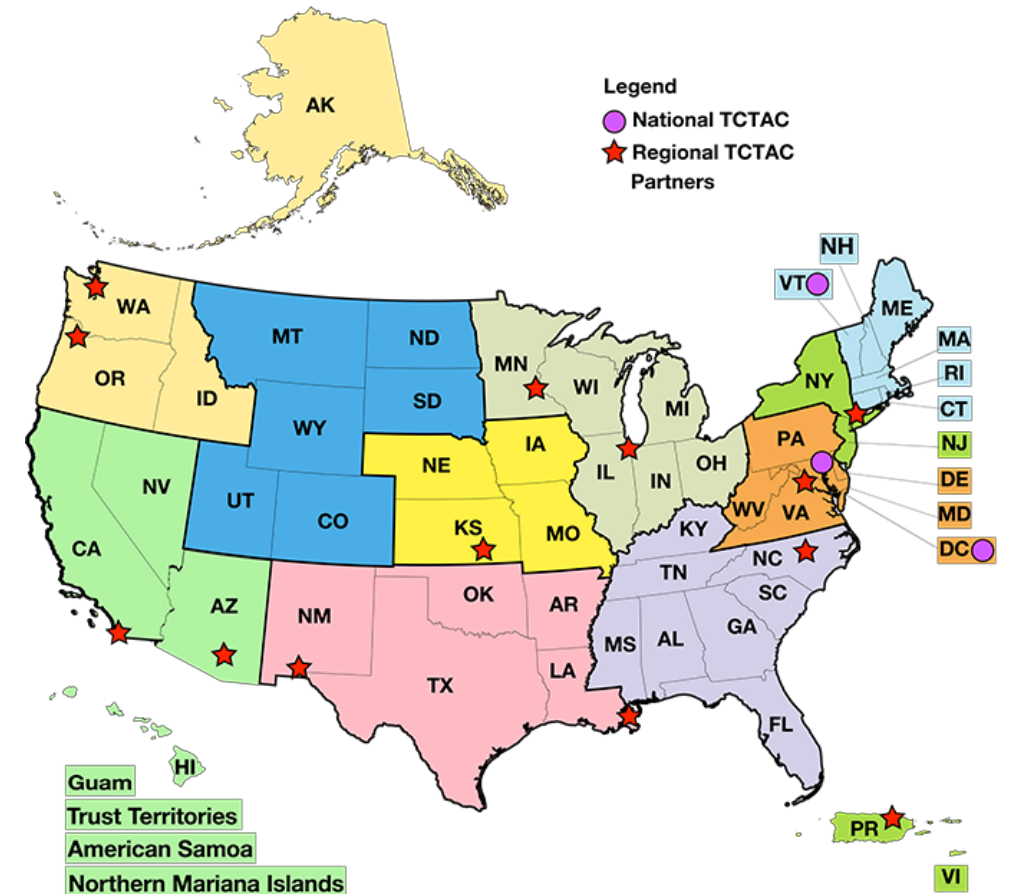
<p>American Lung Association</p> 	<p>Go Green Initiative</p> 	<p>New York State Dept. of Health and Health Research Inc.</p> 	<p>U.S. Green Building Council's Center for Green Schools</p> 	<p>University of Utah</p> 
<p>Deploy the Clean Air School Challenge to raise awareness, educate, build capacity, increase implementation and recognize the efforts of schools in low-income, disadvantaged and tribal communities nationwide.</p>	<p>Provide education and training for school staff, administrators and school board officials involved in improving school IAQ and reducing climate pollution across all 50 states.</p>	<p>Provide capacity building in IAQ and greenhouse gas reduction in disadvantaged and tribal schools throughout New York state and additional states across the country.</p>	<p>Build capacity among school district staff in low-income, disadvantaged and tribal communities to establish IAQ management and greenhouse gas reduction plans.</p>	<p>Support the development of IAQ management and greenhouse gas reduction plans for schools in urban and rural areas in Utah and Nevada, as well as with the Northern Arapaho Tribe in Wyoming.</p>

Resources

Find Support in Navigating the Federal Grants Landscape



- EPA's [Environmental Justice Thriving Communities Technical Assistance Centers \(EJ TCTACs\) Program](#)
 - Provide training and assistance to build capacity for navigating federal grant application systems, developing strong grant proposals and effectively managing grant funding.
- [EPA.gov/grants](https://www.epa.gov/grants) Training Opportunities
 - Learn how to prepare your application and develop a budget.



Map of EPA EJ TCTAC locations

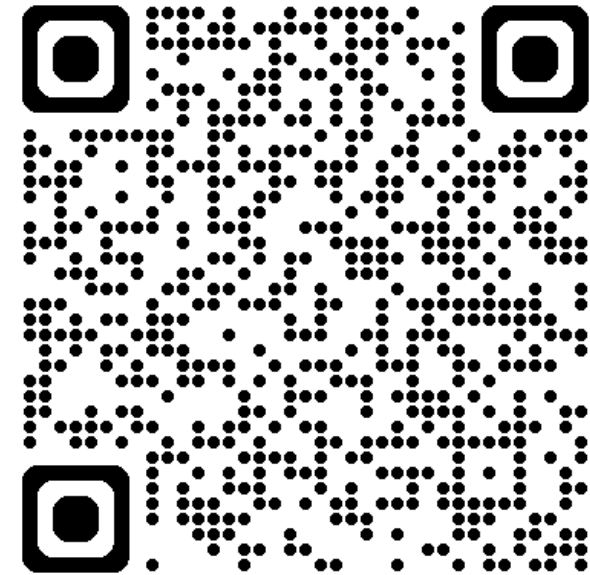
How Can Schools and School Districts Extend Their Collaborative Reach?



- Share Knowledge and Partner With Others
- Explore Federal Grants and Get to Know Grantees
- Connect with us to:

Tell	Your story
Learn	More about IAQ tools and resources
Pilot	IAQ tools
Receive	IAQ news

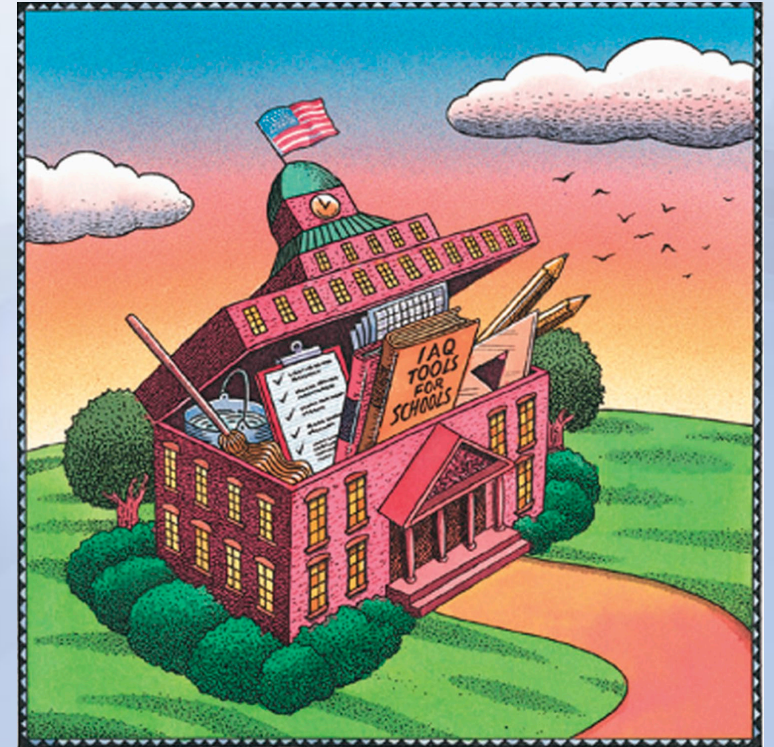
iaqschools@epa.gov



Scan the QR code above to subscribe to the EPA Schools Indoor Air Quality Connector Network for email updates.



Questions?



Additional Resources to Help You Get Started!



**IAQ Tools for Schools
Action Kit**



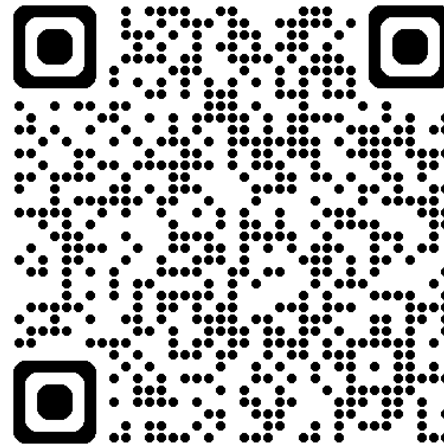
**Energy Savings Plus Health Guide
and Interactive Air Quality Planner**



**Framework for Effective
IAQ Management**



**IAQ Master Class
Professional Training
Webinar Series**



www.epa.gov/iaq-schools



**IAQ Tools for Schools:
Preventive Maintenance
Guidance**



Thank You for Attending!

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