EPA United States Environmental Protection Agency

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Workshop For Indoor Air Quality Officials
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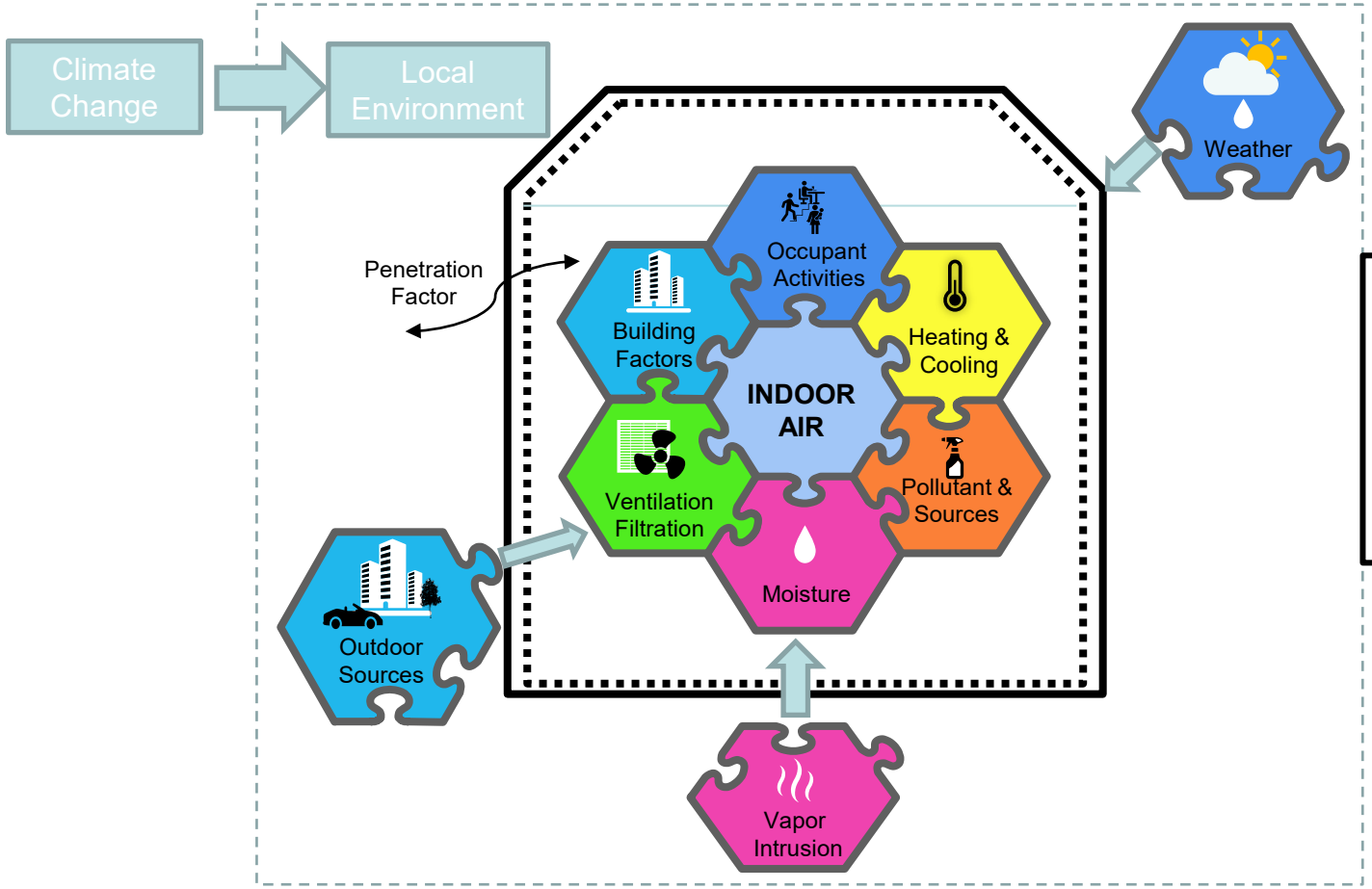
The Complexity of IAQ

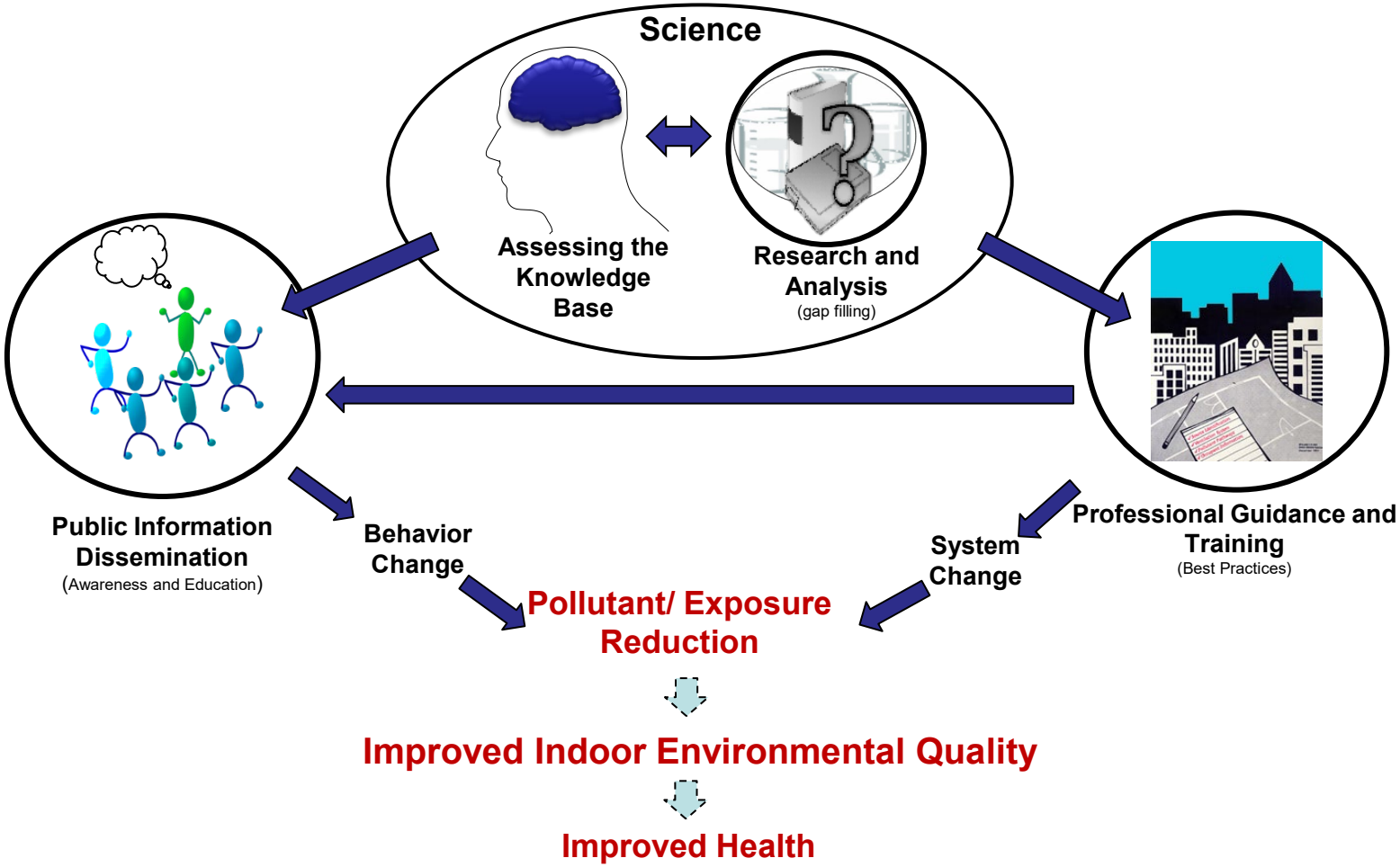


Basic Strategies to improve IAQ:

- Source Control
- Ventilation
- Supplemental Air Cleaning/Filtration

EPA's Role in Improving IEQ

MISSION:
Protecting the public's health from indoor environmental concerns where they live, learn, work and play



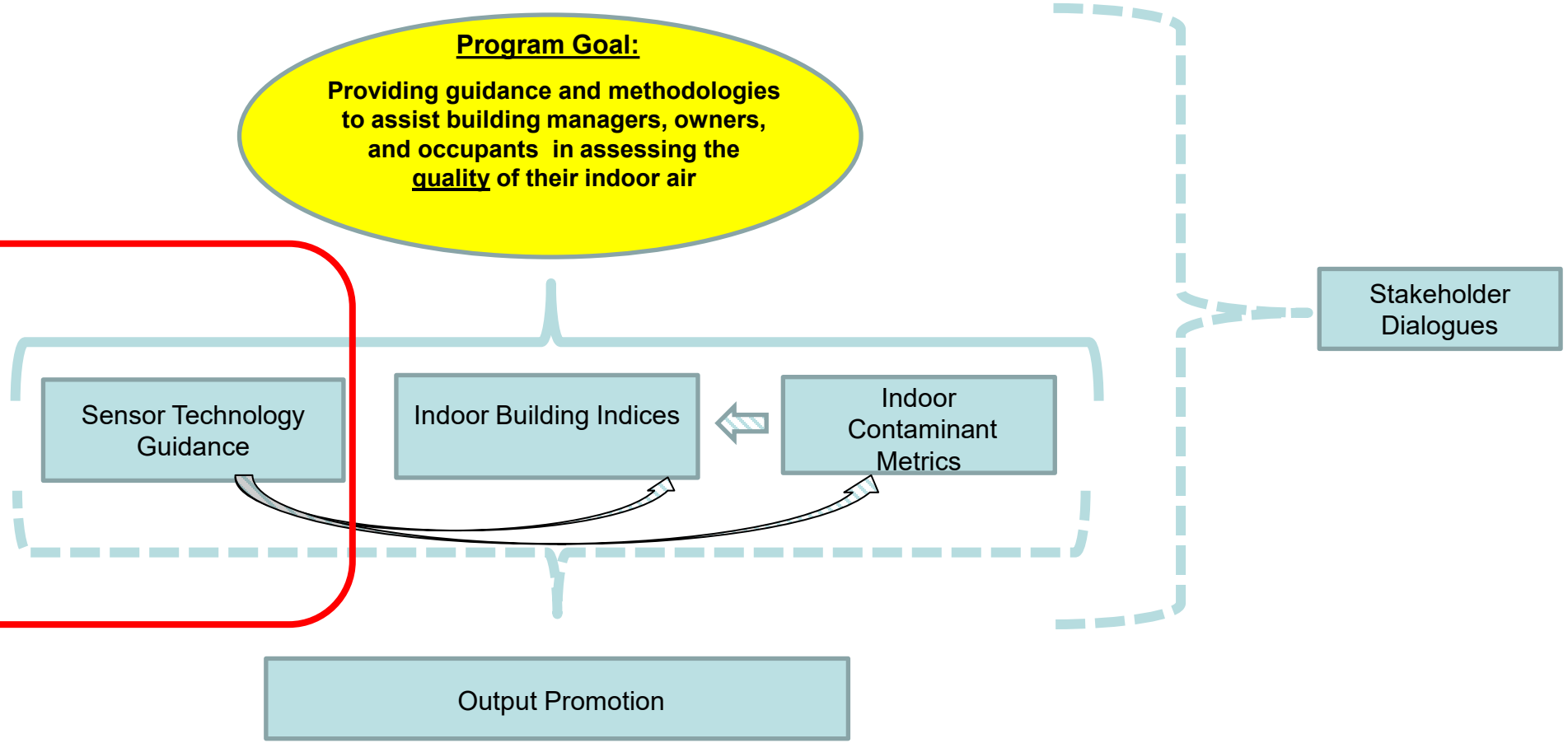
IED's I-MIST Program: Work Areas

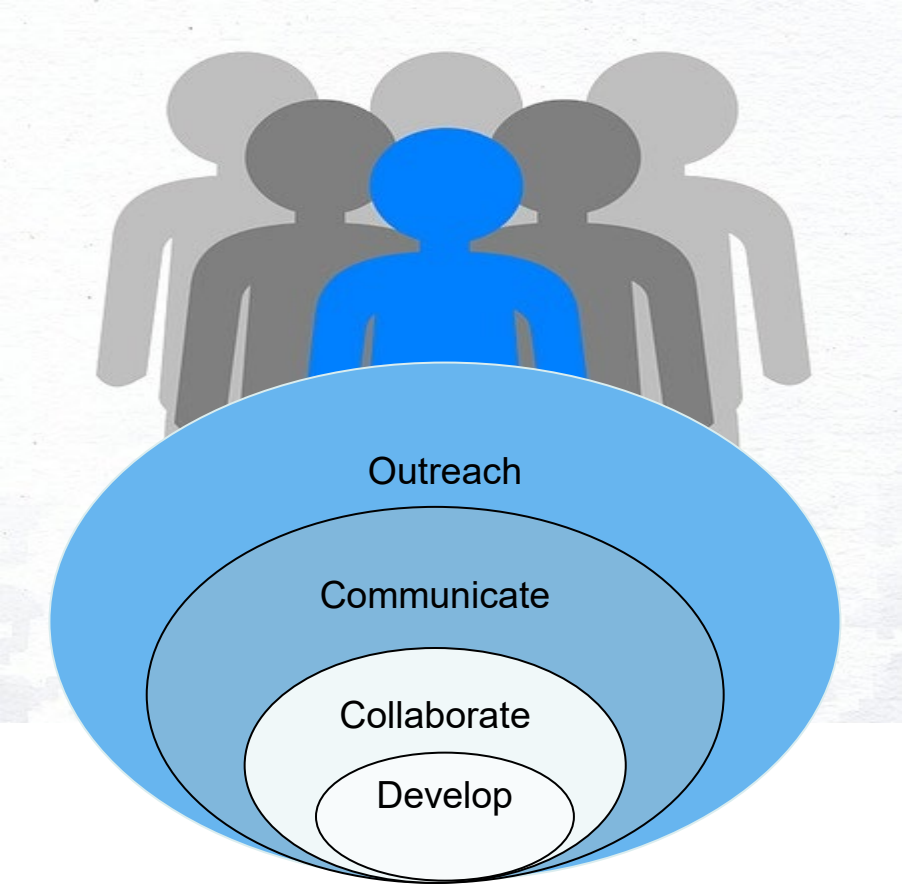
I-MIST Metric and Building Indices Project Goal

1. Establish IAQ metrics for priority indoor air contaminants
2. Develop building performance and asset rating systems or indices

I-MIST Sensor Technology Project Goal

1. Summarize current scientifically credible information/data
2. Develop guidance for the public on appropriate use of consumer-oriented, indoor sensors





IMIST Spheres of Influence

- Analysis of Current Information
- Promoting Stakeholder Communication and Consensus Building
- Promoting collaboration and consistent messaging indices & indoor contaminant metrics on indoor sensor technology, indoor building among stakeholders
- Development and Dissemination of Professional/Consumer Guidance

WEB-BASED GUIDANCE:

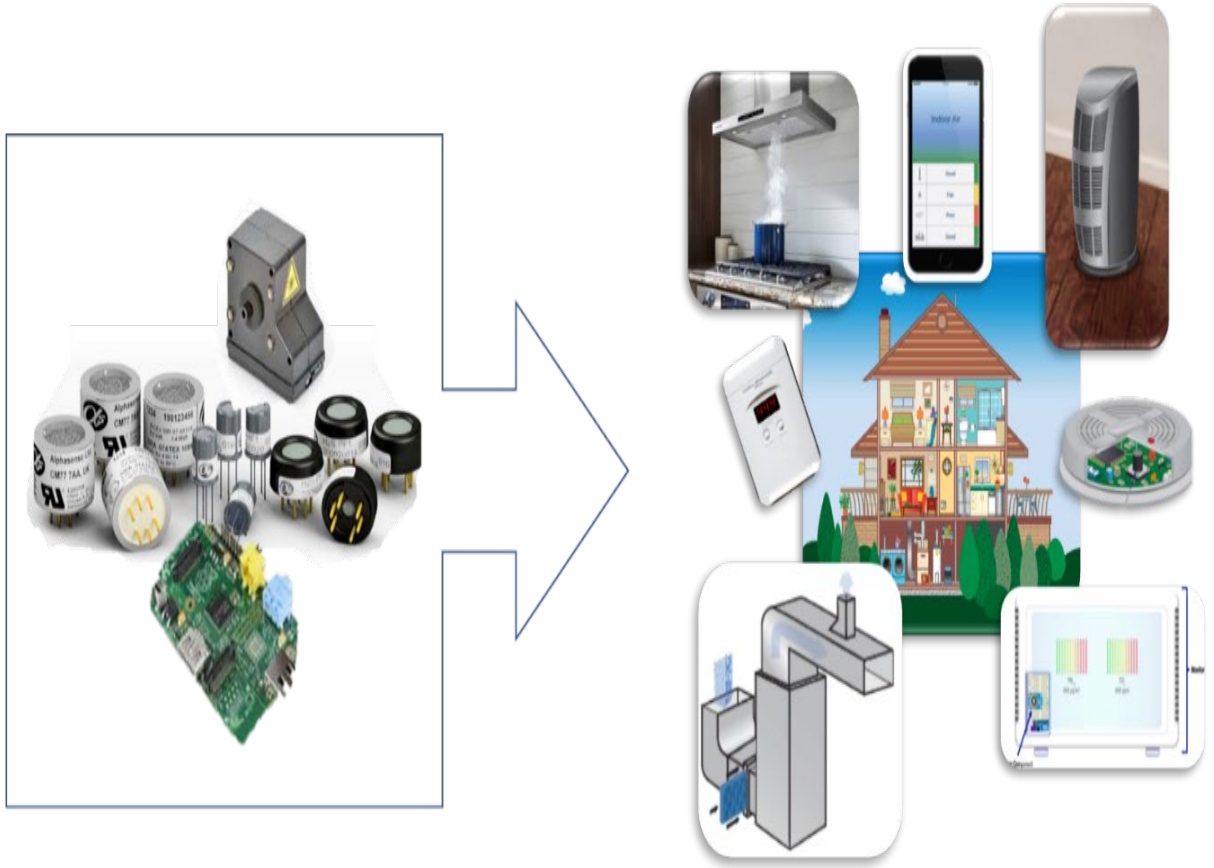
“AIR SENSOR TECHNOLOGY AND INDOOR AIR QUALITY”

AND

“LOW–COST AIR POLLUTION MONITORS AND INDOOR AIR QUALITY”

Air Sensor Technology and Indoor Air Quality

- Hub Page
  - Consumer web-based guidance on indoor use of sensor technology
  - A centralized location for all things related to indoor use of sensors technology



Air Sensor Technology and Indoor Air Quality cont'd

Hub Page Content

- Terminology
- Introduction of sensor technology as a change factor in IAQ management
- Introduction to common uses indoors
  - Detecting airborne pollutant concentrations.
  - Triggering an action
  - Activation of safety devices
  - Research and educational activities.

Information Expansion (linked webpages)

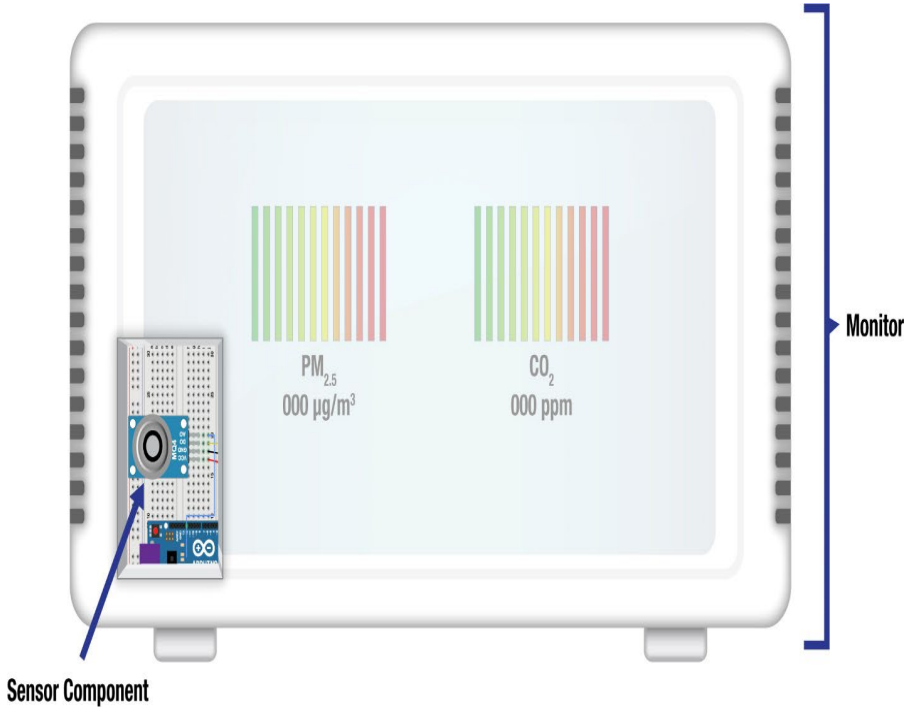
- Low-Cost Air Pollution Monitors (published)
- Educational Activities (pending)

Indoor Air Quality and Low–cost pollutant monitors

Consumer web-based guidance

- Developed to help inform and increase consumer understanding of pros and cons of these devices

- Why this issue?
  - IAQ monitor market is a multi-billion dollar a year industry
  - Unknowns and uncertainties of equipment operation
  - No agreed upon protocols of use
  - Lack of indoor health-based standards or action levels for most contaminants



Indoor Air Quality and Low–cost pollutant monitors cont'd

Responses to commonly asked questions such as

- Types of pollutants and environmental factors measured by available low-cost air pollution monitors
- Difference in meaning of alert from low-cost monitor and emergency devices (e.g., smoke detector, CO alarm)
- Typical lifespan of a low-cost air pollution monitor
- Accurate and precision concerns
- Low-cost monitor readings and indoor air quality actions to take
- Low-cost monitor readings and health

Question, comments, interested in collaborating:

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Websites:

- Indoor Environments Division Website
  - www.epa.gov/indoor-air-quality-iaq
- Air Sensor Technology and Indoor Air Quality
  - www.epa.gov/indoor-air-quality-iaq/air-sensor-technology-and-indoor-air-quality
- Indoor Air Quality and Low-cost pollution monitors
  - www.epa.gov/indoor-air-quality-iaq/low-cost-air-pollution-monitors-and-indoor-air-quality

Suggestions?
Questions?
Discussion