INTERNATIONAL UNION OF OPERATING ENGINEERS
Indoor Air Quality Testimony
U. S. House Financial Services Committee
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My name is Thomas C. Tighe and I am the Executive Assistant to General President Frank Hanley of the International Union of Operating Engineers and Director of Stationary Affairs . I have been a Stationary Engineer for thirty four years. My training includes an apprenticeship program and numerous advanced skill based training in the field of stationary engineering. Additionally, I earned a Bachelor of Arts from the University of Pittsburgh and a Master of Arts from Saint Francis College. I have a stationary engineers license from the City of Pittsburgh and a chief engineers license from the National Institute for the Uniform Licensing of Power Engineers (N.I.U.L.P.E.)

I worked for 18 years as a stationary engineer in a variety of commercial facilities. During these years, I gained valuable experience in operating and trouble-shooting building systems. I also gained experience with a wide array of indoor air quality problems.

The International Union of Operating Engineers (IUOE) is a progressive trade union with over 400,000 members. Of that number, 120,000 members are stationary engineers, employed in the field of facility operations and maintenance. Stationary engineers operate, maintain, repair and renovate the mechanical infrastructures of American commercial and public facilities providing a safe and efficient environment. This infrastructure consists of a variety of mechanical, refrigeration, air conditioning, electrical, electronic, fire-life safety, and plumbing systems, including all types of computer operated HVAC systems and/or automated building control systems.

Stationary engineers most often are the only qualified persons at a facility who understand how these systems work and function in an integrated manner. They are vested with the responsibility for ensuring that all facility systems work in a safe, effective and efficient manner.

Stationary Engineers perform work in a multitude of facilities throughout the United States. They are employed in office buildings, hospitals, hotels, universities, school districts, apartment buildings, shopping malls, airports, power plants, industrial and manufacturing plants, breweries, co-generation plants, petro-chemical plants, sports arenas and many government facilities.

The IUOE has a long history of commitment to ensuring that its members receive training necessary and appropriate to the performance of their work. For over one hundred years, the IUOE and its local unions have been involved in establishing, operating and administering a wide range of training programs and projects. Because the IUOE has developed a sophisticated and comprehensive network of training facilities, it can provide craft and regulatory compliance training programs.

Our members acquire their skills through a four-year apprenticeship program, journey-person upgrade programs and on-the-job training which are sponsored by the International Union of Operating Engineers.

In addition to on-the-job training, apprentices receive classroom instruction in a variety of fields such as boiler operation and maintenance, air conditioning and refrigeration, practical chemistry, elementary physics, blueprint reading, applied electricity, instrumentation and controls, electronics,

energy conservation, welding, direct digital controls, air balancing, indoor air quality and other technical subjects.

The IUOE stationary locals offer their members over 1000 hours of skill base and safety training. The core of the IUOE skill based training program is a 675-hour series of modular courses. Each module is a 75-hour program designed to train apprentices and a more advanced curriculum is also used to upgrade the skills of the journeymen. This standardized course curriculum offers each stationary engineer the benefit of portability between jobs in different jurisdictions in the United States and Canada.

The IUOE is uniquely qualified to offer comments on Indoor Air Quality in commercial facilities. Our organization has been a national leader in providing Indoor Air Quality training for a number of years.

The IUOE partnered with the Environmental Protection Agency in the mid-l990s to develop Indoor Air Quality training for stationary engineers. The Stationary Engineers Department of the IUOE in conjunction with its local unions developed a 75-hour Indoor Air Quality course between the years l993 and l995. It conducted a train-the-trainer class in early 1995 for the large network of IUOE local union training programs.

Since that time, IUOE local unions have administered Indoor Air Quality training to stationary engineers who have maintenance responsibility for two (2) billion square feet of commercial facilities. This initiative has been instrumental in training the workforce that is responsible for maintaining a safe and healthy environment in America's commercial facilities.

These stationary engineers are trained in Indoor Air Quality. Unfortunately, when this course was being developed, mold was not a major IAQ concern. The focus at that time was related to the design and operation of Heating, Ventilating, Air Conditioning systems and a variety of other IAQ subjects. These systems, however, can be a contributory factor to the mold dilemma.

Since that time, the mold issue has become more visible and the confusion over this issue continues to expand. We represent a workforce that is in a unique position to prevent many conditions that lead to the development of mold problems and, therefore, we are interested in the development of future policy on this matter. I believe it's imperative that workers are given the proper training so they can perform their jobs in a safe and effective manner. Mold presents a potential work place hazard for workers and facility occupants and your deliberations at this Committee are important to the American public.

The IUOE has three specific concerns and would like to briefly comment on each.

1) Education on the Overall Mold Issue.

The general public and industry-wide personnel (ie. contractors, building owners and managers, architects, manufacturers, stationary engineers), need to be educated about the facts related to mold.

Mold and IAQ-related issues are part of the new reality for the general public. It is estimated that the general public spends 90% of its time indoors. Currently the media and litigation/settlements are educating the populace on the health hazards of mold. Without a consensus from the scientific community on the health effects of mold, speculation will continue to be diverse. There needs to be

a comprehensive educational program with a clear understanding of the facts about mold and its potential health effects in our homes and workplace. Additionally, a comprehensive plan needs to be developed for the delivery of this educational program to the public.

2) The Lack of Federal Mold Standards

Due to the lack of Federal Standards on the prevention, investigation, testing and remediation of mold, the industry continues to be in a state of confusion. The lack of standards has multiple ramifications within a variety of industries.

In commercial facilities, the manner in which mold complaints are handled, are varied and lack uniformity. It is left up to the experience of the facility managers/maintenance personnel to establish their own procedural guidelines. This could create a variety of inconsistent procedures that can lead to questionable practices on how to handle mold in commercial facilities.

The Environmental Protection Agency should be commended on their work in producing guidelines on mold remediation in schools and commercial buildings. The guidelines provide a general approach to a variety of issues when dealing with mold. The IUOE believes this is a good first step in addressing this issue.

The problem remains, however, that until guidelines are transformed into standards, the industry wide practice will remain non-uniform and, therefore, potentially unsafe. As an example, if an employer is not compelled to follow a standardized method for containment and remediation of mold, they could create a situation that could escalate the problem. If a mold surface is being cleaned or remediated in a ceiling that is being used as a return air plenum, without the proper containment, the mold could become airborne and be dispersed into an occupant area. The occupants could then be faced with a variety of health problems.

Another example, workers who attempt cleanup or remediation without the correct personal protective equipment such as respirators would risk endangering their health.

These are only a few simple examples of how a lack of uniform standards could lead to some practices in the industry that would not lend itself to a safe, consistent handling of mold issues.

3) Specific Training on Mold Standards Needs to be Developed and Delivered to a Variety of Industry Personnel

With the establishment of Federal Standards, training programs could be established to ensure a consistent and safe approach to mold issues. Standards would create specific procedures for the prevention, investigation, testing and remediation of mold. The development of comprehensive training for workers is imperative to the appropriate future handling of this issue. The collaboration of interested parties during this process would assist in identifying a series of best practices that could be incorporated in the curriculum.

I have been involved in many aspects of curriculum development and training implementation over the last ten years and can attest to the benefits of providing workers with detailed training on performance based objectives. This approach, in our judgment, provides a cost effective, results oriented approach to addressing complex problems such as mold prevention and remediation.

The IUOE has experience in developing and delivering skill based training programs and would be willing to explore the possibility of assisting in any future projects or programs recommended by the Committee.

I would like to thank the Committee for their time and effort in this matter.