OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD 1017 L Street, PMB #254 Sacramento, CA 95814-3805 (916) 274-5721 FAX (916) 274-5743 Website address: www.dir.ca.gov/oshsb



PROPOSED PETITION DECISION OF THE OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD (PETITION FILE NO. 579)

INTRODUCTION

The Occupational Safety and Health Standards Board (Board) received a petition on January 10, 2020, from Pam Saling (Petitioner). The petition seeks changes in existing standards concerning the presence of mold in employee-occupied buildings.

Labor Code Section 142.2 permits interested persons to propose new or revised regulations concerning occupational safety and health and requires the Board to consider such proposals, and render a decision no later than six months following receipt. Further, as required by Labor Code Section 147, any proposed occupational safety or health standard received by the Board from a source other than the Division of Occupational Safety and Health (Division) must be referred to the Division for evaluation, and the Division has 60 days after receipt to submit an evaluation regarding the proposal. California Governor Gavin Newsom, in recognition of the State of Emergency that exists in California due to the COVID-19 pandemic, extended the six month timeline by 120 days in Executive Order N-71-20 (modifying the previous 60-day extension provided in Executive Order N-63-20).

SUMMARY

The Petitioner requests the Board incorporate guidelines from a document entitled "Indoor Environmental Professionals Panel of Surviving Mold – Consensus Statement" (Statement) into a new regulation within Title 8 to aid in the investigation of a water-damaged building (WDB) whose occupants exhibit symptoms of potential illness from mold exposure.

The Petitioner asserts that existing Title 8 requirements addressing mold "fall short" and do not require employers and building owners to sufficiently address employee complaints of mold exposure. The Petitioner writes that mold exposure is an "epidemic [that affects] all ages, races and economic classes" and provides a web address where one can obtain information on "the latest scientific studies, laws and regulations, articles and further mold information resources." The Petitioner hopes that California will be the first state in the nation to adopt the principles explained in the Statement and that other states will follow.

The Statement recommended by the Petitioner for adoption into Title 8 is written by a panel of doctors who specialize in resolving concerns of mold exposure to the segment of the population most affected by the presence of mold in WDBs. The panel labels these individuals as having chronic inflammatory response syndrome, which is acquired following exposure to the interior of water-damaged buildings (CIRS-WDB). Table 1 in the document contains a list of 30 "toxins,

inflammagens, and microbes found in WDBs", which the Petitioner asserts, can contribute to CIRS-WDB.

The Statement describes an in-depth procedure for 1) finding causes of and preventing water damage, 2) investigating and remediating WDBs, 3) maintaining indoor environmental quality after remediation, and 4) verifying that a damp indoor environment has been remediated so mold-sensitive individuals can safely reoccupy the space. The document is specifically written to alleviate complaints of mold exposure from those identified as having CIRS-WDB.

According to the document, the Statement's "primary objective is to establish modified standards for the evaluation and management of WDBs to be applied to all buildings, not just those where occupants meet diagnostic criteria for CIRS-WDB." Continuing, it says, "Such standards will necessarily also correct indoor conditions that are encountered by less adversely affected occupants."

DIVISION'S EVALUATION

The Division's evaluation report dated July 30, 2020, states the Division agrees with the Petitioner that water intrusion, leakage from interior water sources or other accumulation of water inside a building, if not corrected, can cause the growth of mold. Similarly, the Division concurs that the presence in buildings of visible water damage, damp building materials, visible mold, or mold odor is unhealthy and can increase the risk of workers suffering a respiratory illness, particularly if exposure to the damp building is not recognized and corrected and the exposure continues indefinitely.

The Division also agrees with the Petitioner that Title 8, subsection 3362(g) is insufficient in addressing mold hazards for the following reasons:

- Subsection 3362(g) is unnecessarily limited in scope. The subsection limits water sources to exterior water intrusion, leakage from interior water sources, or other uncontrolled accumulation where water occurs. Uncontrolled is irrelevant to mold and microbial growth. Whether controlled or not, if water intrusion or excessive moisture inside a building is continuously present, mold will grow.
- Subsection 3362(g) does not address high humidity environments that lead to mold growth as recognized by the American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) and the United States Environmental Protection Agency (U.S. EPA).
- Subsection 3362(g) contains no requirements for removing mold growth from buildings, only controlling certain water intrusion. Once mold growth is present, it will continue to present a hazard to building occupants even after the removal of moisture.

The Division does not agree with the Petitioner that quantitative methods be required or used to determine mold or other microbial levels in buildings. The Centers for Disease Control and Prevention (CDC), National Institute for Occupational Safety and Health, World Health

Organization (WHO), and California Department of Public Health (CDPH) recommend against measuring indoor microorganisms or using the presence of specific microorganisms to determine the level of health hazards. Conventional quantitative measurements of fungi or other microbiologic exposures, such as counts of culturable airborne fungi, have shown less consistent associations with health effects than have qualitative assessments of visible dampness or water damage, visible mold, or mold odor. Additionally, there are no set standards to determine the different kinds of mold that could be present.

The WHO guidelines state the most important means for avoiding adverse health effects is the prevention (or minimization) of persistent dampness and microbial growth on interior surfaces and in building structures. Therefore, indoor dampness, high humidity, water intrusion, and fungal growth should be always eliminated in a safe and efficient manner, by (a) identifying and correcting the source of water, moisture, and/or humidity, (b) drying or removing damp materials, and (c) cleaning or removing the mold and moldy materials.

The Division recognizes that the presence of water damage, damp materials, and excessive mold growth inside buildings is unhealthy, and the best method to protect workers in buildings is by ensuring water intrusion, excessive moisture, and excessive humidity be corrected and mold be cleaned and removed promptly.

The Division recommends the petition be granted to the limited extent that an advisory committee be convened to consider appropriate changes to subsection 3362(g) to address deficiencies in the subsection as noted in the analysis of the Division's evaluation.

BOARD STAFF'S EVALUATION

Board staff prepared an evaluation dated August 10, 2020. According to a "Frequently Asked Questions" (FAQ) sheet from the CDC, "mold is found both indoors and outdoors... [and] is very common in buildings and homes." Additionally, it says mold enters indoor spaces "through open doorways, windows, vents, and heating and air conditioning systems," as well as, on clothing and shoes.

Although exposure to mold increases the risk of mold-related health effects, the FAQ sheet also explains that "exposure to damp and moldy environments may cause a variety of health effects, or none at all," depending on a person's individual sensitivities to a particular mold. According to the sheet, people with allergies, immune suppression illness, or chronic respiratory diseases are at the highest risk of the most serious complications resulting from mold exposure.

The Petitioner's request aims to require employers to remediate a WDB until the symptoms of CIRS-WDB are abated for all employees. Because of the differences in employees' individual sensitivity to mold and other contaminants listed in Table 1 of the petition, the extent and cost of the remediation efforts can vary greatly. Furthermore, many of the contaminants listed in Table 1 can be found in buildings that do not show signs of water damage (e.g. cell fragments, bacteria, protozoa, volatile organic compounds, and airborne particulates), potentially adding confusion to a requirement to abate the contaminants as recommended in the Statement.

Adding to the potential for excessive costs to a business, the Statement recommends the use of "a moisture meter, an infrared imaging system, a meter to measure relative humidity, and a laser particle counter" to perform an interior inspection of a WDB. The Statement states "Both moisture meters and laser counters require professional knowledge and training for accurate use."

The Statement also contains recommendations for destructive exploratory testing, removal of occupants during remediation, and confirmatory conditions for post-remediation success that could be problematic to enforce. For example, the Statement reads:

Although laboratory testing is needed, for many persons with CIRS-WDB the optimal level of cleanliness to reach and show with post-remediation testing will (i) have no odors including fragrances or strong smelling chemicals; and (ii) have no visible dust seen with a bright light. The surfaces should be generally white glove clean. Blue painter's tape can be pressed onto smooth surfaces to show if residues and dust have not been removed with cleaning. These are test methods that can be used by workers, customers, and consultants and are not medically conclusive.

In contrast to the Statement's requirements to confirm that mold and other contaminants have been sufficiently removed from a work area, the CDPH provides the following on its FAQ page in response to the question, "How do I know if the remediation was good enough and solved the problem?"

The best known indicator that the dampness-related health risks have been reduced is if the source of the moisture is remedied, all damaged materials have been cleaned or removed appropriately, and all remaining materials are dry and free of visible mold and mold odor. As of now, no mold tests or measurements can show when remediation efforts have been successful.

The CDPH recommendations do not require special tools or training to implement and are arguably as protective with respect to the removal of mold from the workplace.

Labor Code Section 6400(a) requires those who suffer from hypersensitivity to mold be provided with a workplace "that is safe and healthful to the employees therein." However, the consensus of the mold information, including the Statement, is that controlling the presence of water in an area is the most effective means of preventing mold growth, as required by existing Section 3362. Board staff does not see the need to add the requirements of the Statement to Title 8 regulations.

Board staff asserts that Section 3362, regarding the uncontrolled accumulation of water and the requirement to provide work areas that are clean, orderly, and sanitary, sufficiently requires employers to abate the conditions that could lead to mold exposure in the workplace. Additionally, the performance based standards of Section 3203, "Injury and Illness Prevention Program" and Section 5141, "Control of Harmful Exposure to Employees" require employers to take steps to protect employees from onsite hazards. When properly implemented, existing Title

8 requirements for the prevention and control of mold in the workplace reasonably address the risks to employees.

Consistent with the foregoing discussion, Board staff does not believe the Petitioner's request is necessary and recommends that Petition File No. 579 be DENIED.

BOARD DISCUSSION

The Division agrees with the Petitioner that Title 8, subsection 3362(g) is insufficient in addressing mold hazards, but does not agree with the Petitioner's proposed remediation. The Division notes:

"The Centers for Disease Control and Prevention (CDC), National Institute for Occupational Safety and Health, World Health Organization (WHO), and California Department of Public Health (CDPH) recommend against measuring indoor microorganisms or using the presence of specific microorganisms to determine the level of health hazards. Conventional quantitative measurements of fungi or other microbiologic exposures, such as counts of culturable airborne fungi, have shown less consistent associations with health effects than have qualitative assessments of visible dampness or water damage, visible mold, or mold odor. Additionally, there are no set standards to determine the different kinds of mold that could be present."

Board staff point to Labor Code section 6400(a), which already provides protections for sensitive workers, while existing Title 8 Sections 3362 and the performance based standards of Section 3203, "Injury and Illness Prevention Program" and Section 5141, "Control of Harmful Exposure to Employees" require employers to take steps to protect employees from onsite hazards, including those introduced by water and/or mold.

Division's concurrence with some of Petitioner's assertions is not sufficient basis alone for a grant, in-whole or in-part, of the subject petition which seeks specific, prescriptive amendments to Title 8. The Division is provided with wide latitude to propose health standards to the Board, independent of a petition grant. The Board encourages the Division to utilize its resources to advance those projects, as it sees fit, for future consideration through established rulemaking process.

CONCLUSION AND ORDER

The Occupational Safety and Health Standards Board has considered the petition of Pam Saling, to make recommended changes to existing standards concerning the presence of mold in employee-occupied buildings. The Board has also considered the recommendations of the Division and Board staff. For reasons stated in the preceding discussion, the petition is hereby DENIED.