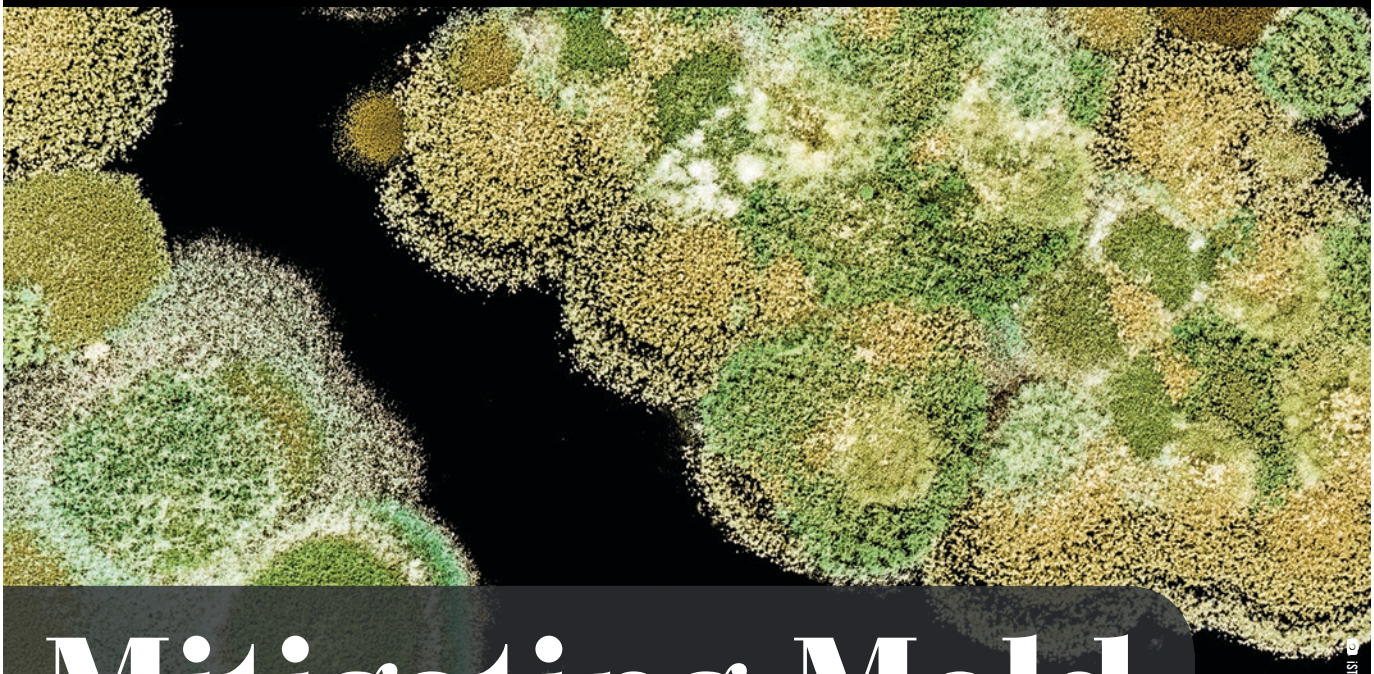
ESI GROUP USA DESIGN-BUILD SOLUTIONS

ESI is a nationally recognized design-build firm specializing in food facility design and construction.



ISTOCK/GETTY IMAGES PLUS/NNORDZOFF

Mitigating Mold

IN FOOD & BEVERAGE FACILITY CONSTRUCTION

QUICK FACTS

- Mold can grow on **virtually any substance**
- If found, engage a testing/ **inspection consultant**
- Prevent with proper **building maintenance**

Many of today's food and beverage companies are adding on to existing facilities vs. building new. They're adding or retrofitting space for additional product offerings, storage capacity and to promote employee safety and well-being. However, in this process, there could be a hidden danger—mold.

Mold is a part of everyday life. It can grow on virtually any substance, and can be found in any manufacturing plant or distribution center, especially those producing temperature-controlled products. And, sometimes, mold isn't even visible.

That's why, when left unchecked, mold can create deeper, more serious problems, especially during a facility expansion or addition project.

"[Mold] occurs when the building envelope is disrupted, mechanical systems are not providing proper air quality and normal protocols are not followed. These factors may cause moisture (relative humidity) to increase," says David Bye, executive project director, ESI Group USA, Hartland, Wis. "During new construction, building materials can be subjected to rain, moisture and environmental conditions. That introduces moisture and promotes the growth of mold. In certain conditions, buildings must be dried out. Otherwise, mold will be allowed to propagate and spread."

The only way to control indoor mold growth is to control moisture. For instance, food plants that require frequent washdown can increase moisture and relative humidity levels. Mold can also grow inside a common wall between office and refrigerated spaces such as docks or coolers, where humidity and condensation form. When in operation, mechanical (HVAC) systems and dehumidification will keep moisture levels at desired levels, Bye adds.

Furthermore, certain parts of the country are at a higher risk of harbor-

FEATURED PROJECT

Frick's Quality Meats Expands Meat Processing HQs Facility

Frick's Quality Meats tapped ESI Group USA, Hartland, Wis., to expand its Washington, Mo., headquarters meat processing facility.

The 28,000-plus-square-foot expansion includes a 15,000-square-foot addition for casing, packaging, palletizing and staging of product as well as a 12,500-square-foot 28°F finished goods cooler and a 700-square-foot mechanical room to house new refrigeration equipment. The expansion also includes a hot water heater for improved efficiencies and added capacity as well as a 2.5-acre employee parking lot.

"We're pleased to partner with Frick's Quality Meats to expand their presence in serving some of the fastest-growing categories in the grocery industry," says Brad Barke, president of ESI. "Together, our project team's expertise and commitment will be key contributors in making this a successful project."

Founded in 1896, Frick's processes artisan-style, value-added products using real cane sugar to create perfectly smoked ham, bologna, turkey and sausages sold to retail customers in 47 states. This renovation project will help Frick's expand retail offerings in the natural segment to meet consumers' growing demand, according to Dave Frick, president of Frick's.

Frick's launched its natural line in early 2017, and has plans to enter into organic products at some point in the future. The current plant was USDA-certified in 2016 to produce organic products.

MITIGATING MOLD continued ...

ing mold, usually facilities located in coastal regions or where there's higher levels of annual rainfall.

"Basically, damp areas as opposed to arrid environments are at higher risk," Bye says. "If a building has a mold problem, it must be cleaned up and the source of moisture must be eliminated. When mold is suspected, ESI engages a testing/inspection consultant that specializes in mold. They inspect the building, take samples and analyze the type of molds and extent to which they are present. Once the testing and inspection process is complete, ESI assists owners in hiring a remediation contractor to remove and treat the molds."

To mitigate mold, food and beverage companies must be proactive.

"It starts with proper building maintenance programs," adds Bye. "Established building maintenance and routine equipment service is the first line of defense. It is equally important employees be educated in the awareness and presence of indoor molds."

Bye suggests walking through office areas and looking at drywall above the floor and ceiling areas and checking lighting grills and vents on diffusers.

"You're looking for evidence of moisture," he adds. "During the colder months, look at windows for condensation."

Any food distributor and manufacturer is at risk. It's imperative that companies conduct due diligence on their facilities to ensure mold doesn't become a problem. Mold may be a part of everyday life, but it doesn't need to be a part of the food and beverage manufacturing and distribution process. ●

STEPS TO PREVENTING MOLD

1. Establish routine building and equipment inspections.
2. Thoroughly check office ceilings, walls, window frames and lighting grills.
3. Routinely maintain your HVAC system.
4. Frequently check humidity levels.
5. Call ESI Group for assistance.