

HIGHLIGHTS



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COVID-19

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VIRUS COUNTERMEASURES DRIVE WORKER SAFETY

By Scott Jenkins | August 1, 2020

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The COVID-19 threat has increased the urgency for implementing contagion-prevention strategies and controls for workers at industrial sites

Chemical process industries (CPI) companies are used to managing a range of worker health risks related to chemical exposure, extreme temperatures and noise, among others, but the global coronavirus pandemic has forced CPI facilities to elevate a broad set of infectious disease considerations to prominence among other process safety priorities. To reduce infection risk in industrial workspaces, companies are enhancing disinfection protocols, increasing use of respiratory personal protective equipment (PPE), implementing physical distancing at jobsites, relying on remote work, and other strategies. Industry consultants have provided some guidance for companies to use as they operate in the midst of a

pandemic. Meanwhile, vendors and equipment providers have responded by introducing products to help reduce contagion risk in various scenarios.



Theresa McCollom, a certified industrial hygienist and environmental, health and safety consultant at the U.S. headquarters of Antea Group (St. Paul, Minn.; us.anteagroup.com) says that while the pandemic has impacted the chemical process industries unevenly — petroleum refining has seen reduced demand, for example, while chemical plants making ingredients for disinfectant formulations have seen a surge in demand — most companies and plant sites are taking whatever actions they can when it comes to preventing workplace infections. “Most employers in the industrial space are doing some sort of health screening, either asking questions for workers to self-report, or using thermal thermometers,” McCollom says, and “most sites are doing some sort of workplace reconfiguration, where it is possible, such as putting up barriers, as well as cleaning high-touch areas.”

Eastman Chemical Co. (Kingsport, Tenn.; www.eastman.com) senior vice president and chief manufacturing, engineering and supply chain officer Mark Cox confirms that there has been a sudden emergence of safety efforts focused on COVID-19 prevention at Eastman facilities. “We work with a zero-incident mindset in everything that we do, and this pandemic has been no different. We are doing all we can to keep our teams safe and healthy while still continuing to produce the critical products our customers need — many of which have been important in the battle against this virus.”

To help companies protect workers in the face of public health threats, there are many new product offerings available from simple to complex, and targeting a variety of public health risks. McCollom says many of her clients are looking for evaluations of new products. “They are asking: Is this ‘snake oil?’; Will this be effective?” she says. “Although there are many products that can help reduce public health risks, there are not really any ‘miracle widgets’ that can make the risks go away,” McCollom says. “If product claims appear too good to be true, they most likely are.”

HAZARD EXPOSURE TOOLS

For CPI sites, pandemic-related risks must be placed into a wider context of risk management. American Industrial Hygiene Association (AIHA; Fairfax, Va.; www.aiha.org) board member Nancy McClellan, the CEO of Occupational Health Management PLLC (Detroit, Mich.; www.oh-management.org), says “whether the hazard is chemical, physical or biological, hazard exposure and control banding (HECB) can assist organizations in wrapping their arms around the challenges of the hazard by identifying the highest risks and prioritizing the most appropriate solutions.” HECB tools can also provide key performance indices to measure an organization’s progress in mitigating the hazards, she notes.

To explain HECB in the context of COVID-19, McClellan says “In the case of a biological hazard, one needs to identify all of the relevant factors involved in risk. Since risk equals the likelihood of incidence multiplied by the severity of the hazard, we need to drill down to all of the factors influencing ‘likelihood’ and ‘severity.’” Likelihood of exposure to COVID-19 can include social distancing practices, building operations and cleaning practices. Severity of the hazard depends on factors that can include age and comorbidities of the individuals, she continues. “Once these factors are identified, assigned a risk level and mathematically weighted, risk scores can then be calculated. The risk score then directs the HECB tool user toward potential solutions or controls for mitigating the hazard.”

As an organization’s risk scores are reduced with proven solutions, the tracking of the scores from year to year can clearly illustrate progress in risk mitigation, she adds.

At industrial plants, there is now “more of a three-way conversation among industrial health and safety officers, engineers and ‘C-suite’ leaders about how to allocate resources to where they will have the largest impact,” McClellan says.

AIHA is among a number of industry associations and consulting firms that have issued guidance that is relevant to operating in chemical manufacturing plants with an added focus on public health safety. The AIHA has compiled a series of industry-specific plans for making workplaces as safe as possible. Other organizations that have come out with industrial workplace guidance include PPE supplier Protective

Industrial Products Inc. (Latham, N.Y.; www.pipglobal.com), which has released the “PIP Essentials Safety Book,” and business consulting giant McKinsey & Co. (New York, N.Y.; www.mckinsey.com), which published the article “Managing a Manufacturing Plant through the Coronavirus” online.

WORKPLACE RECONFIGURATION

One main pillar in the fight against COVID-19, in all settings, is maintaining physical separation among workers to reduce exposure to infectious particles. There are multiple strategies to achieve this including altering team structures and working methods to limit contact across the workforce. The McKinsey guidance states: “Minimizing the potential future impact of infections will require companies to alter team structures and working methods in order to limit contact across the workforce. One way this can be done is by establishing ‘pods’ for all on-site personnel, organized for self-contained teams with clearly defined tasks and workspaces that can be physically and socially separated from each other as much as possible.”

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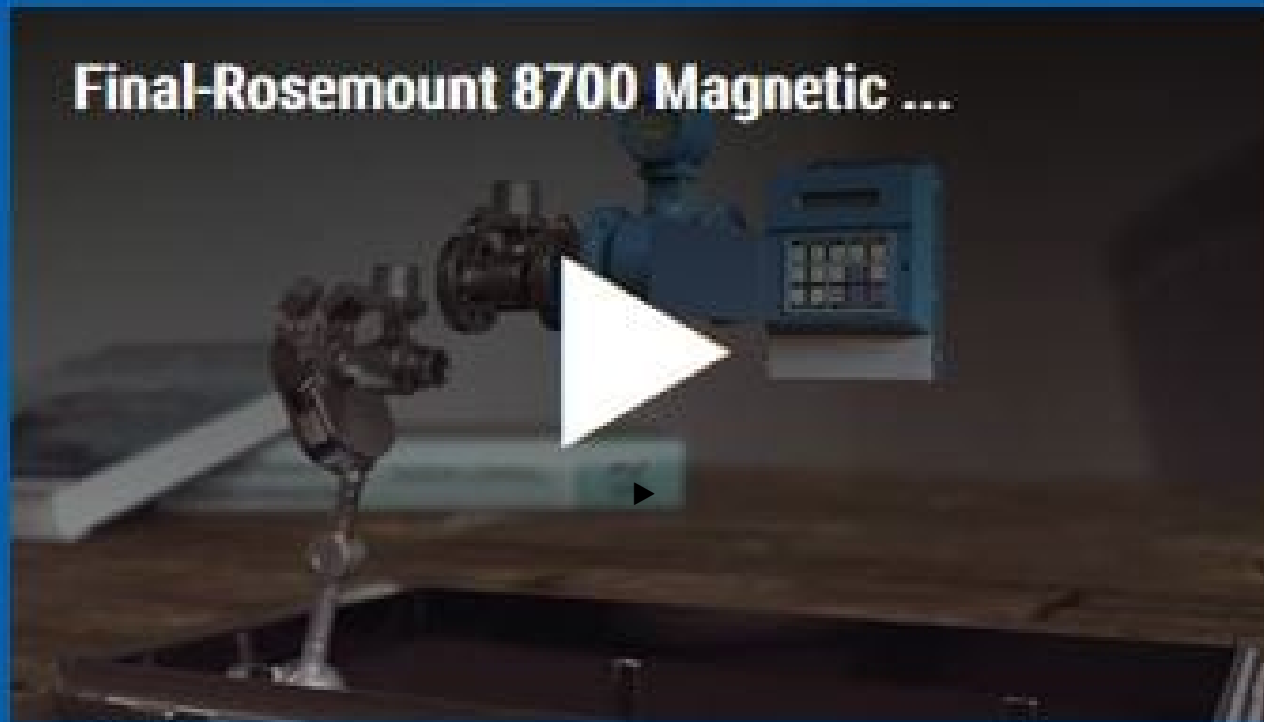
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