

Renewed Action on the Occupational Health Front

November 2013

Over the last two months, several workplace air regulatory activities have gotten off the ground at both the federal and state levels. All relate to Permissible Exposure Limits (PELs), the standards that define the maximum allowable amount of a chemical or substance that may be in the air of a workplace.

At the federal level, the Occupational Safety and Health Administration (OSHA) has issued a proposal that would tighten the mandatory PEL for silica dust and has released guidance urging industry voluntarily to adopt stricter PELs across the board. At the state level, the California Department of Public Health (CDPH) has recommended that the state's PEL for lead be lowered to about 1/25th of the current level, and the state's Division of Occupational Safety and Health (Cal/OSHA) appears likely to pursue such a rulemaking. These developments are reviewed below.

Companies in all industries, even those not directly affected, would be well advised to pay attention to all three of these efforts. OSHA's across-the-board guidance shows that all of the current PELs are under scrutiny. And the silica and lead efforts are important, precedent-setting processes that will set the stage for future PEL changes for other substances. Indeed, OSHA's more informal initiative raises significant questions about whether OSHA intends to step up its use of the General Duty Clause to sidestep its existing substance-specific PELs. Few can dispute that many of those are based on outdated science, but OSHA has had serious difficulties updating them—OSHA's last attempt to update a large number of the PELs was struck down by the 11th Circuit in 1992.

Federal Silica PEL Activity

First, in September, OSHA released a proposed revision to the Silica Permissible Exposure Limit rule. *Proposed Rule, Occupational Exposure to Respirable Crystalline Silica*, 78 Fed. Reg. 56,274 (Sept. 12, 2013) (to be codified at 29 C.F.R. pts 1910, 1915, and 1926). The proposal would lower the current PEL from a formula-based approach, which is approximately equivalent to 100 $\mu\text{g}/\text{m}^3$ respirable silica, to a simple limit of 50 $\mu\text{g}/\text{m}^3$ of respirable silica. The current PEL was established in 1971, and the National Institute for Occupational Safety and Health (NIOSH) and public health advocates have been calling for OSHA to lower the PEL since at least 1978.

OSHA's proposal would require monitoring of only smaller, respirable-sized particles, rather than total dust as required by the current PEL, in part because "there is no evidence that dermal or oral exposure presents a hazard to workers." *Id.* at 56,296. OSHA says that it believes the new PEL will be simpler and easier to understand because it only measures respirable-sized particles.

The particle size issue addressed in the proposed silica rule is also relevant to other substances. Advancing science developed since most of the PELs were adopted has shown that for many chemicals only respirable particle sizes pose a significant hazard to workers. Non-respirable particles are not as easily absorbed into workers' bodies. While the impact of this principle requires chemical-by-chemical analysis, OSHA's recognition of this principle (assuming it is retained in the final rule and upheld in the inevitable judicial review) should lead to more focused protective standards. That, in turn, should allow employers to invest in technologies that are more cost-effective.

Federal PEL Guidance Activity

At the end of October, OSHA published Annotated Z Tables for all current OSHA PEL regulations. The new tables match each current OSHA PEL to standards adopted by other bodies, including Cal/OSHA, NIOSH and the American Conference of Governmental Industrial Hygienists (ACGIH). The tables are available at www.osha.gov/dsg/annotated-pels/index.html.

Notably, this is not a formal amendment to any OSHA standard. But, in the case of many regulated substances, the recommendations are substantially lower than the current OSHA PELs. OSHA says that it developed these new tables because its own mandatory standards are "out-of-date and inadequately protective." It also strongly urged employers to "voluntarily adopt newer, more protective workplace exposure limits." Dr. David Michaels, the current head of OSHA, released a supporting statement saying: "I advise employers, who want to ensure that their workplaces are safe, to utilize the occupational exposure limits on these annotated tables, since simply complying with OSHA's antiquated PELs will not guarantee that workers will be safe."

These statements raise the question of whether OSHA intends to look to the Occupational Safety and Health Act's broadly worded General Duty Clause as an alternative to enforcing existing substance-specific standards. That clause requires employers to "furnish . . . a place of employment . . . free from recognized hazards that are causing or are likely to cause death or serious physical harm to his employees." 29 U.S.C. § 654(a)(1). Further, OSHA's existing enforcement policy (set forth in the OSHA Field Operations Manual) states that a limit stricter than a PEL can be required where "it can be proven that an employer knows a particular safety or health standard is inadequate to protect his employees against the specific hazard it is intended to address."

While it is still too early for industry to know what to expect from these new Annotated Z Tables, OSHA has set the stage for asserting in enforcement cases that "simply complying" with the existing mandatory PELs could violate the General Duty Clause. If this is the case, many companies will see substantially increased enforcement risks. It is also unclear how OSHA will update the Annotated Z Tables as the referenced

standards are changed going forward, as the following section explains may happen in California for the lead PEL.

California Lead PEL Activity

During the first week of October, the California Office of Environmental Health Hazard Assessment (OEHHA) submitted to the CDPH a pharmacokinetic modeling analysis to support CDPH's and Cal/OSHA's reconsideration of the state's PEL for lead. Soon thereafter, and based on OEHHA's modeling, CDPH released a recommendation that Cal/OSHA reduce the state's lead PEL from 50 to 2.1 $\mu\text{g}/\text{m}^3$. CDPH stated that this would be a "health-based PEL," intended to achieve worker blood lead levels of 10 $\mu\text{g}/\text{dL}$ or less.

To support its report, OEHHA created a modified version of the Leggett blood-lead model, which OEHHA calls "Leggett+." The original Leggett model was developed in the early 1990s and is designed to simulate the movement and absorption of lead into the human body. OEHHA changed several of the original assumptions and calculations in an attempt to reflect new studies and science published since the model was originally developed. These "adjustments" include changes to the particle size assumptions and inhaled and swallowed lead-to-blood transfer rates. Furthermore, the modeling attempts to characterize expected blood lead levels over a 40-year working career, although there is little empirical data on which calibration might be tested. While draft versions of the report were provided to a small group of academics for comment, the report and underlying Leggett+ modeling efforts have not yet been subjected to rigorous, independent review.

The Cal/OSHA formal rulemaking process for initiating changes to the California PEL based on CDPH's recommendation is expected to begin in early 2014. Cal/OSHA is not obligated to adopt CDPH's recommendations, however. To the contrary, Cal/OSHA's statutory requirements are similar to those in the Federal Occupational Health and Safety Act. Therefore, as Cal/OSHA considers CDPH's recommendation, it will be obligated to evaluate the technological and economic feasibility of any standard it ultimately proposes.