APPENDIX B

MANAGEMENT RESPONSE TO DRAFT REPORT

U.S. Department of Labor

Assistant Secretary for
Occupational Safety and Health
Washington, D.C. 20210

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MEMORANDUM FOR: ELLIOT P. LEWIS
Assistant Inspector General for Audit

FROM: DAVID MICHAELS, PhD, MPH

SUBJECT: Response to OIG's Report No. 02-16-201-10-105, "OSHA Does Not Know if Special Emphasis Programs Have Long-Term Industry-wide Effect"

This memorandum is in response to your transmittal of the Office of the Inspector General (OIG) Audit Report No. 02-16-201-10-105, "OSHA Does Not Know if Special Emphasis Programs Have Long-Term Industrywide Effect" (the Report). The Occupational Safety and Health Administration (OSHA) appreciates this opportunity to provide comments on the audit findings and recommendations outlined in the report.

OSHA is committed to assessing its enforcement activities and ensuring that the Agency is using its resources effectively to reduce the number of workplace injuries, illnesses, and fatalities. The OIG's audit objective asked: *"Can OSHA demonstrate whether SEPs are effective in improving safety and health conditions for workers in high-hazard industries and occupations."* Evaluation of Special Emphasis Programs (SEPs) to determine whether they are effectively targeting high hazard worksites and reducing workers' exposure to hazards is an important and required component for all of OSHA's regional and local emphasis programs.

OSHA regularly uses inspection outcomes, such as the number of serious hazards eliminated and the percent of violations issued as serious, to evaluate whether emphasis programs are effectively reaching worksites where workers are exposed to hazards. In addition, a substantial body of evidence already demonstrates that targeted OSHA inspections result in reduced injury risk for workers at inspected establishments[1]. Because OSHA inspections have been shown to lead to fewer injuries, we believe that ensuring that emphasis programs are successful at reaching worksites with hazards and requiring employers to abate those hazards should meet the objective of "improving safety and health conditions for workers in high-hazard industries and occupations."

[1] For an overview of this literature, see Michaels D. OSHA does not kill jobs: It helps prevent jobs from killing workers. *American Journal of Industrial Medicine* 2012; 55:961-963.

Recommendation 1: Develop a performance measurement strategy inclusive of output and outcome measures to appropriately assess program goals and objectives.

Response: OSHA already requires an evaluation component in all of its regional and local emphasis programs (CPL 04-000-001, *Procedures for Approval of Local Emphasis Programs (LEPs*).

OSHA notes that many of the inspection metrics that OSHA routinely reviews when evaluating SEPs—including serious hazards eliminated, percent of violations cited as serious, and average violations per inspection — are not simply measures of output, but are "outcomes" in the sense that they show whether an emphasis program is successful at inspecting worksites where there are hazards. This level of data-driven review appears to be consistent with OMB Circular A-11 Section 270.3. However, OSHA has concerns with the feasibility of using the metrics that the OIG defines as "outcome" measures—including industry-wide injury, illness, and fatality rates—for assessing program performance. These concerns are discussed in response to Recommendation 2.

Recommendation 2: Require and perform periodic program assessments using outcome-oriented measures to determine whether SEPs have a long-term impact on the targeted hazards and health conditions.

Response: Previous research has already established that OSHA inspections have a causal effect on reducing injuries: A study of inspections conducted by researchers at the University of California and Harvard University demonstrated that programmed safety inspections led to a subsequent 9.4 percent decrease in workplace injury claims at the inspected establishments.[2]

Because the methods used to evaluate the impact of OSHA inspections—comparing the long-term injury rates between establishments that were randomly assigned for inspection and those that were not—are not feasible at the industry level, OSHA does not have the means to determine the long-term impact of SEPs on industry-wide hazard and health conditions. Given the peer-reviewed research that already demonstrates that OSHA inspections reduce injuries, OSHA is concerned that investing substantial additional resources in conducting rigorous, controlled studies of the effect of the special emphasis programs in particular on industry-wide changes in injury, illness, and fatality rates would not further improve the Agency's performance or productivity in accordance with OMB Circular A-11.

The report expresses concern that OSHA has not routinely used what it terms "outcome" measures – which the OIG defines as industry-wide injury, illness, and fatality rates—to evaluate the effectiveness of emphasis programs. OSHA believes that it would be impractical to use such measures to evaluate the effectiveness of emphasis programs. While periodically assessing changes in industry-wide injury, illness, and fatality rates is appropriate for informing the development and modification of emphasis programs, these

[2] David Levine, Michael Toffel, and Michael Johnson, "Randomized Government Safety Inspections Reduce Worker Injuries with No Detectable Job Loss." *Science*, Vol. 336, No. 6083, pp. 907-911 (May 18, 2012).

metrics are not appropriate for evaluating emphasis programs on a routine basis as a program management tool. First, publication of industry-level injury, illness, and fatality rates from the Bureau of Labor Statistics lags the implementation of a new emphasis program by several years, which means an emphasis program would need to be in effect for years before this data could be analyzed and used to inform program management decisions. Second, since fatal injuries and catastrophic events are generally infrequent within any industry targeted by an emphasis program, it often will not be statistically possible to attribute changes in the number of fatal injuries or catastrophic events directly to an emphasis program. Third, BLS injury and illness rates are inadequate for tracking changes in exposure to occupational hazards associated with many serious health conditions (e.g., occupational asthma, silicosis, cancer, etc.) since occupational illnesses are known to be underreported on workplace injury and illness logs. OSHA's review of inspection metrics, on the other hand, provides timely data that OSHA managers can use to determine whether special emphasis programs are identifying and eliminating hazards at establishments targeted for inspection and thereby directly reducing the injury and illness risks that workers face.

OSHA is committed to using available data to improve the evaluation of its enforcement activities. Beginning in 2017, certain employers will be required to electronically submit information from the OSHA Form 300 – *Summary of Work-Related Injuries and Illnesses* – for the previous calendar year. The new reporting requirement will improve OSHA's ability to identify changes in injury and illness rates in industries that are covered by an LEP by providing establishment-level data, although such industry impact evaluations will be limited by scarce Agency resources.

Even with additional data, OSHA notes that individual emphasis programs are just one factor behind changes in industry-wide illness and injury rates, fatalities, and catastrophic events. The number of injuries, illnesses, fatalities, and catastrophic events in an industry will be affected by a range of factors in addition to OSHA's enforcement presence – including long-term changes in economic activity, the composition of the working population, and other internal and external industry pressures. As the OIG points out, OSHA and its State partners are only able to inspect about one percent of all worksites in high hazard industries each year. Given the complex range of factors that contribute to workplace injuries, illnesses, and fatalities, OSHA believes it is not possible for OSHA to isolate the impact of emphasis programs on industry-wide injury and illness at this time.

Recommendation 3a: Establish a written policy for developing and executing NEPs that requires a formal assessment of hazards that weighs all available information; defines "high-hazard" industries, occupations, and processes that are not sufficiently covered through other OSHA targeting programs; and uses a documentable methodology for targeting industries, occupations, and processes that have high potential for these hazards.

Response: OSHA agrees to establish a written policy for developing and executing NEPs that provides guidance for weighing available information about hazards. OSHA also agrees to define "high-hazard" industries for developing a documentable methodology for targeting industries with high potential for hazards. Incorporating high

hazard occupations and processes into the assessment, however, would be redundant since any implementation of a programmed inspection schedule to target high hazard occupations or processes would be based on industries associated with those occupations or processes.

Recommendation 3b: Establish a written policy for developing and executing NEPs that requires an assessment of the nationwide risk exposure to support developing an NEP that includes a risk-based justification for mandating state implementation, taking into account the applicability of the program within each state's area of coverage.

Response: OSHA understands the importance of including state plans in NEPs and will revise its field guidance to ensure that each NEP includes *assessment of the nationwide risk exposure* for greater transparency.

Recommendation 3c: Establish a written policy for developing and executing NEPs that requires Periodic review and update to ensure NEPs continually target the most significant industry, occupation, and process hazards.

Response: OSHA generally agrees with this recommendation. However, see the discussion in the response to 3a regarding high hazard industries, occupations, and processes.