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**Report of the Small Business Advocacy Review Panel on
the Occupational Safety and Health Administration's Draft Proposed
Ergonomics Program Rule**

OSHA
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DATE MAY 3 1999
TIME _____

April 30, 1999

L 0214

Mr. Charles N. Jeffress
Assistant Secretary for Occupational Safety and Health
Occupational Safety and Health Administration
Department of Labor
200 Constitution Avenue, N.W.
Washington, D.C., 20210

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Dear Mr. Jeffress:

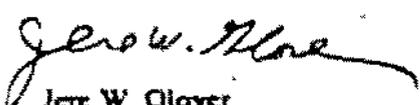
Enclosed for your consideration is the Report of the Small Business Advocacy Review Panel convened for OSHA's draft proposed rule on ergonomics programs.

The Panel was convened on March 2, 1999, by OSHA's Small Business Advocacy Chairperson, Marthe Kent, under Section 609(b) of the Regulatory Flexibility Act, as amended by the Small Business Regulatory Enforcement Fairness Act of 1996 (SBREFA). In addition to the Chairperson, the Panel consisted of Don Arbuckle, Acting Administrator of the Office of Management and Budget's Office of Information and Regulatory Affairs; Jerr W. Glover, Chief Counsel for Advocacy of the Small Business Administration; Joseph Woodward, Associate Solicitor for Occupational Safety and Health; and Robert Burt, the senior OSHA economist for this rule.

Sincerely,



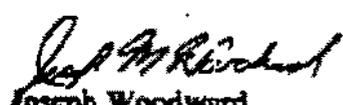
Marthe B. Kent
Panel Chair



Jerr W. Glover
Chief Counsel,
Office of Advocacy,
SBA



Don Arbuckle
Acting Administrator,
Office of Information
and Regulatory Affairs,
OMB



Joseph Woodward
Associate Solicitor
for Occupational
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Robert E. Burt,
Senior Economist
OSHA

L 0215

Report of the Small Business Advocacy Review Panel on the Draft Proposed Ergonomics Program Rule

1. INTRODUCTION

This Report has been developed by the Small Business Advocacy Review Panel consisting of representatives of the Occupational Safety and Health Administration (OSHA), the Office of Advocacy (Advocacy) of the Small Business Administration, and the Office of Information and Regulatory Affairs (OIRA) of the Office of Management and Budget for the proposed ergonomics program rule that OSHA is currently developing. On March 2, 1999, OSHA's Small Business Advocacy Panel Chair convened this panel under section 609(b) of the Regulatory Flexibility Act (RFA), as amended by the Small Business Regulatory Enforcement Fairness Act (SBREFA). Section 609(b) requires the convening of a review panel prior to the publication of any Initial Regulatory Flexibility Analysis that an agency may be required to prepare under the RFA. In addition to the chair, Marthe Kent, the panel consists of the Associate Solicitor for Occupational Safety and Health, Joseph Woodward; the senior OSHA economist for this rule, Robert Burt; the Acting Administrator of the Office of Information and Regulatory Affairs within the Office of Management and Budget, Don Arbuckle; and the Chief Counsel for Advocacy of the Small Business Administration, Jere Glover.

This Report provides background information on the proposed rule being developed and the types of small entities that would be subject to the proposed rule, describes the Panel's efforts to obtain the advice and recommendations of representatives of those small entities, summarizes the comments that have been received to date from these representatives, and presents the findings and recommendations of the Panel. The complete written comments of the small entity representatives are attached as Appendix A of this Report.

Section 609(b) of the RFA directs the review panel to report on the comments of small entity representatives and make findings about issues related to certain elements of the Initial Regulatory Flexibility Analysis (IRFA), as outlined in Section 603 of the RFA:

- a description of and, where feasible, an estimate of the number of small entities to which the proposed rule will apply;
- a description of the projected reporting, recordkeeping and other compliance requirements of the proposed rule, including an estimate of the classes of small entities that will be subject to the requirements and the type of professional skills necessary for preparation of the report or record;
- an identification, to the extent practicable, of all relevant Federal rules that may duplicate, overlap or conflict with the proposed rule; and

- a description of any significant alternatives to the proposed rule that accomplish the stated objectives of applicable statutes (in this case the OSH Act) and that minimize any significant economic impact of the proposed rule on small entities.

This Panel Report will be provided to the Assistant Secretary for OSHA, and OSHA must include this Report in the rulemaking record. OSHA may also, as appropriate, modify the proposed rule, the Initial Regulatory Flexibility Analysis, or the decision as to whether an Initial Regulatory Flexibility Analysis is needed, based on the Panel's recommendations.

It is important to note that the Panel's findings and discussions are based on the preliminary information about the draft proposed ergonomics program rule available at the time this Report was drafted. OSHA is continuing to conduct analyses relevant to the proposed rule, and additional information will be developed or obtained during the remainder of the regulatory development process. The Panel makes its Report while development of the proposed rule is still underway, and its Report should be considered in that light. At the same time, the Report provides the Panel and OSHA with an opportunity to identify and explore potential ways of shaping the proposed rule to minimize the burden of the rule on small entities while achieving the rule's statutory purposes (i.e., the protection of workers from the significant risk of incurring musculoskeletal disorders on the job). Any options the Panel identifies for reducing the rule's regulatory impact on small entities may require further analysis and/or data collection to ensure that the options are practicable, enforceable, and consistent with the Occupational Safety and Health Act.

Background

In response to the growing body of literature on the relationship between musculoskeletal disorders and the work environment, the OSHA Training Institute offered its first course on ergonomics in 1983. In 1986, OSHA began a pilot program aimed at the reduction of back injuries that involved a review of injury records during inspections and recommendations for training or job redesign using NIOSH's Work Practices Guide for Manual Lifting. As part of that effort, the Agency requested information on ways of reducing back injuries in general industry that resulted from manual lifting.

In 1987, OSHA issued its first citation for ergonomic hazards under the General Duty Clause, Section 5(a)(1) of the OSH Act, automotive plants received the first General Duty Clause citations, and, in 1988, the Agency issued such citations to several meat packing plants. A series of corporate-wide settlement agreements followed, affecting hundreds of plants. In late 1988, several employers asked OSHA to develop a standard addressing ergonomic issues. In 1990, the Agency published its voluntary ergonomics guidelines for the red meat industry. In a broader educational effort, the Agency later published a 24-page booklet, "Ergonomics: The Study of Work," as part of a nationwide educational and outreach program to raise awareness and reduce the incidence of cumulative trauma disorders.

In 1991, the United Food and Commercial Workers Union and the AFL-CIO petitioned

OSHA to issue an emergency temporary standard to address ergonomic issues. In response, OSHA published an Advance Notice of Proposed Rulemaking on ergonomics in 1992. The Agency drafted a proposed ergonomics standard in 1995 and conducted an extensive series of stakeholder meetings. A Congressional rider prohibited the Agency from issuing a proposal until the rider expired on September 30, 1998. In 1997, California issued its own ergonomics regulation, and North Carolina and Washington state are currently developing their own ergonomics rules. In November of 1998, Congress asked the National Academy of Sciences (NAS) to conduct another study of MSDs (see Table 1 for history of previous NAS studies) in the workplace that will be completed in 24 months. The NAS study will cover: an assessment of the biomechanical literature; an examination of the literature on links between MSDs and job characteristics, work organization and non-work-related activities; a review of data characterizing the incidence of MSDs in the workplace; an evaluation of the state of knowledge on prevention strategies; an examination of the effects of changes in work and the workforce on prevention strategies; and recommendations for research.

Table 1 provides, for background purposes, a summary of OSHA's reasons for developing the draft ergonomics program rule.

I. OSHA's Reasons For Developing The Draft Ergonomics Program Rule

In 1996, the Bureau of Labor Statistics reported 647,000 lost workday musculoskeletal disorders (MSDs), accounting for 34% of all lost-workday injuries and illnesses. OSHA estimates that such disorders account for more than \$20 billion in direct costs for workers' compensation and as much as \$80 billion more in indirect costs.

BLS data show that MSDs like carpal tunnel syndrome cause, on average, more days away from work than the average workplace injury. On average, MSDs with lost workdays require 40% more time away from work than other injuries and illnesses with lost workdays. Some MSDs are particularly severe. More than 42% of carpal tunnel syndrome cases involve more than 30 days away from work. A number of follow-up studies of these workers indicates a long history of crippling disability. For example, a study by Kemmlert et al. (1993) found that, of 195 persons who reported work-related MSDs, one-third had been on sick leave for more than 6 months during the year following the report of injury. Three years after the initial report, 78% continued to have symptoms, and fully half of these workers reported a worsening of symptoms over this period. The average cost of a workers' compensation claim for low back pain is \$8,321, about twice the amount for the average workers' compensation claim.

Many employers have realized, however, that many of these disorders are preventable by the modification of work processes. MSDs have been studied extensively, and the literature on these disorders now represents one of the largest data bases of human epidemiological evidence accumulated for any occupational health hazard. A data base of 600 studies was reviewed by NIOSH in 1997; these studies consistently showed increased levels of risk among workers exposed to the job-related risk factors the draft proposed standard is designed to address (e.g., repetition, force, vibration, awkward posture, lifting).

At the request of Congress, the National Academy of Sciences reviewed the epidemiological evidence on MSDs and concluded in 1998 that

- * "musculoskeletal disorders are a serious national problem...
- * These problems are caused by work and non-work activities.
- * There are [workplace] interventions that can reduce the problems."

At the request of Congress, the General Accounting Office (GAO) in 1997 released a study of ergonomics programs in a variety of businesses. According to the GAO:

"... the processes used by the case study facilities to identify and control problem jobs were typically informal and simple and generally involved a lower level of effort than was reflected in the literature. Controls did not typically require significant investment or resources and did not drastically change the job or operation.

"Officials at all the facilities we visited believed their ergonomics programs yielded benefits, including reductions in workers' compensation costs associated with MSDs. These facilities could also show reductions in overall injuries and illnesses as well as in the number of days injured employees were out of work; in some cases, however, the number of restricted workdays increased as a result of an increased emphasis on bringing employees back to work. Facility officials also reported improved worker morale, productivity, and product quality."

Over time, the demand for an ergonomics standard has arisen out of the recognition that a significant occupational hazard exists, is preventable, but that employers need direction on how to satisfy their legal obligation to minimize musculoskeletal hazards in the workplace.

Employers, rather than trying to satisfy a shifting quilt of state standards on ergonomics, would have one federal standard to comply with. Employers can be educated on the value of ergonomics, but frequently are reluctant to make an initial investment absent a government standard that creates a level playing field for all employers. Moreover, while larger employers are more likely to be fully experience-rated with regard to injuries, smaller employers may be only partly experience-rated or not experience-rated at all. For these smaller employers, the need to regulate is particularly compelling.

2. OSHA's OVERVIEW OF THE DRAFT PROPOSED ERGONOMICS PROGRAM RULE

To ensure that the draft proposed rule could be applied to the great variety of workplaces in general industry, OSHA has developed a tiered rule designed to adjust the scope of the program to the extent of the MSD problem in a given workplace. The draft proposed rule would require employers with production manufacturing operations and manual handling jobs to:

- demonstrate management leadership and develop ways for employees to report problems, get responses and be involved in the program;
- review existing records, set up a reporting system, and provide information so employees can recognize and report problems.

If a work-related MSD is reported or the employer knows a hazard exists, then, under the draft proposed rule, the employer would have to:

- analyze problems jobs, implementing measures to eliminate or control the hazards to the extent feasible;
- provide training about work-related MSD hazards and the employer's program to control these hazards;
- make available to employees prompt access to medical management for work-related MSDs, and any necessary follow-up. The employer would provide for recommended work restrictions during the recovery period, as necessary;
- retain the worker's pay and benefits during the recovery period, for up to 6 months; and
- evaluate the program and controls to ensure that these comply with the rule.

Each of these requirements is described in the draft proposed rule in a plain language, question and answer format. Each provision is written broadly to allow employers flexibility in application so that compliance can differ in small and large firms, in technologically simple and complex environments, and in low and high hazard firms.

3. APPLICABLE SMALL ENTITY DEFINITION

To define small entities, OSHA used, to the extent possible, the Small Business Administration (SBA) industry-specific criteria published in 13 CFR Section 121. Because these definitions apply to 4-digit SIC code industries and OSHA did not conduct its analysis at this level of detail, and because some industry classifications use small business definitions requiring data not readily available from general data sources (such as kilowatt hours of electricity produced), OSHA instead used the definitions of small entities for industry divisions, except in cases where there was no division definition; in such cases, OSHA used the industry (2-digit SIC code) definition of small entity. In future analyses conducted for this rule, OSHA will rely on 3-digit or 4-digit SIC codes for analytical purposes.

4. INDUSTRIES THAT MAY BE SUBJECT TO THE DRAFT PROPOSED RULE

The draft proposed rule would apply to all employers in general industry. In terms of standard industrial classification codes, this means that the standard would apply to certain small entities in SICs 07, agricultural services; 08, forestry; 09, fisheries; 13, oil and gas well drilling, and SICs 20 to 96, with the exception of SIC 3731 (shipbuilding), some operations in SIC 45, railroads, and SIC 44, water transportation (including longshoring and marine terminals). The draft proposed rule would also apply to small public entities in State-plan states; approximately 50% of all state and local employees work in State-plan states and would be covered by the draft proposed rule.

There are 5.5 million small entities, as defined by the Small Business Administration (SBA), that are potentially covered by the draft proposed standard. Of these, 1.45 million small entities would be required by the draft proposed standard to maintain a basic ergonomics program at all times. In any given year, 516,000 small entities would be required to initiate the full ergonomics program envisioned by the standard because at least one employee at the worksite had reported a work-related MSD during the year or because there were known hazards at the establishment.

The draft proposed standard potentially covers 5 million very small entities, i.e., those employing fewer than 20 employees. Of these, 1.27 million very small entities would be required to maintain a basic ergonomics program at all times. In any given year, 271,000 very small entities would be required to initiate a full ergonomics program because at least one of their employees had incurred a reportable MSD during the year or the employer had learned of a known MSD hazard.

5. SUMMARY OF OSHA'S OUTREACH

General Outreach

In order to provide substantial input from the business community, including small businesses, the Agency has held a series of stakeholder meetings to assure that the Agency is aware of the special needs of many different kinds of businesses. OSHA has been holding stakeholder meetings on topics related to ergonomics for over 5 years. In 1998, OSHA began a series of meetings designed to identify issues that would help the Agency formulate the current draft of the proposed ergonomics program rule. The first set of five sessions was held February 4-6 in Washington, D.C. On July 21, OSHA staff met with stakeholders in two sessions in Kansas City, Mo., and on July 23 for two sessions in Atlanta. A final series of three meetings was held September 24 and 25 in Washington, D.C. Representatives present included personnel from the National Federation of Independent Businesses and the Chamber of Commerce.

These efforts built upon the Agency's earlier initiatives to obtain information from small

businesses. As previously indicated, in 1992 OSHA published an Advance Notice of Proposed Rulemaking on ergonomics. This notice to the public provided an open forum for small businesses, among others, to comment, and in return the Agency received hundreds of comments. In addition, in 1993 the Agency performed a telephone survey of thousands of businesses nationwide, most of them small, to find out about the current state of ergonomic and general safety programs in businesses, and conditions relating to them. These efforts were followed by a series of stakeholder meetings in 1995, some of which were specifically focused on small businesses.

The SBREFA Panel

On March 2, 1999, the OSHA SBREFA Panel chair convened the Panel for this rulemaking. The Panel provided small entity representatives with initial drafts of the proposed rule, a summary of the draft rule, a Preliminary Initial Regulatory Flexibility Analysis, a summary of the benefits and costs of the draft rule, a one-page description of the benefits and costs of the draft rule for small firms in the small entity representative's industry, a discussion of the risks associated with musculoskeletal disorders, and a list of issues of interest to panel members. The Panel held teleconferences with the SERs on March 23rd, 24th and 25th, in which almost all of the small entity representatives participated and which allowed for interactive discussion. After these teleconferences, the Panel received the written comments of the small entity representatives; these comments, and the Panel's responses to them, form the principal basis for the Panel's Report.

6. SMALL ENTITY REPRESENTATIVES

In consultation with the Office of Advocacy of the Small Business Administration, OSHA invited 20 small entity representatives (SERs) to participate in the panel process. Table 1 shows the names, affiliations, and industries of the SERs who chose to participate in the process, and indicates whether a particular SER submitted written comments.

Table 1. Small Entity Representatives Participating in the Panel Process

Name(s)	Affiliation	Industry (SIC Number in parentheses)	Written Comments Provided
Jo Spiceland	Charleston Forge	Forged/Shelving/ Furniture (SIC 3462)	Yes
Peter Meyer	Sequins International	Sequined Fabric (SIC 2395)	No
David Carroll	Woodpro Cabinetry	Furniture Manufacturer (SIC 2434)	No
Richard Murphy, Jr.	Murphy Warehouse Co.	Warehousing (SIC 4225)	Yes
Mike Walkowiak	Lincoln Plating	Plating (SIC 3471)	No
Gary Neill	Consolidated Telephone	Telecommunications (SIC 4813)	Yes
Andy Ramirez	Braselton Poultry	Poultry Processing (SIC 2015)	No
Deborah Hayden	Tindell's Builder Supply	Lumber & Building Material Dealer (SIC 2439)	Yes
Roger Sustar	Fredon Corporation	Tool and Machining (SIC 3599)	Yes
Gary Fisher	Whiting Distribution Services, Inc	Public Distribution (SIC 4225)	Yes
David Bolen	New World Tours, Inc.	Bus Charter (SIC 4142)	Yes
Troy Stentz	Somnos Laboratories	Medical Laboratory (SIC 8071)	Yes
Willard Kelly	Bragdon-Kelly- Campbell	Funeral Home (SIC 7261)	Yes

Charlie A. Martin	Bommer Industries	Manufacturer of Hinges/Hardware (SIC 3429)	Yes
Connie M. Verhagen	Dr. Connie M. Verhagen	Pediatric Dentist (SIC 8021)	Yes
Victor Tucci	Three Rivers Health & Safety, Inc.	OSHA Consultant (SIC 8742)	Yes
Clifford Wilcox	Camellia City Services	Landscaping Maintenance (SIC 0781)	Yes
Jim M. Wordsworth	J.R.'s Goodtimes	Restaurant & Caterer (SIC 5812)	No
David E. Mitlefehldt	Prior Aviation Service, Inc.	Air Transportation (SIC 45)	Yes
Janet Kerley	Lead-Rite, Inc.	Safety and Health Consultant (SIC 87)	Yes

7. SUMMARY OF SER INPUT

This summary reflects both the oral comments expressed by the SERs in three teleconferences and the written views submitted by them to the Panel. The complete text of the written comments has been provided as Appendix A to this document, and will be submitted to the docket as part of this Report.

General Questions/Comments

A number of SERs who commented on the question of the standard's clarity expressed the opinion that the standard, on the whole, was fairly clear. However, certain terms were singled out as creating difficulties. Some SERs had particular difficulty with the following concepts: "manual handling," the criteria for a recordable injury or illness, "similar jobs," and "feasibility." For example, one SER asked whether all jobs in his cabinet works would be considered similar because all of his jobs occasionally involved moving furniture. Another SER asked whether spending \$300,000 to automate a hand assembly line would be considered feasible, or whether a \$20,000 expenditure reducing exposure in the same job would be considered sufficient. Many SERs believed that the concept of work-relatedness was unclear and that it was a difficult decision for an employer to make. Many felt this decision should be made by a medical professional.

Some SERs questioned the need for the standard, based in part on the decline in the rates and numbers of work-related musculoskeletal disorders reported to the BLS in recent years. Others argued that the scientific basis for the standard has not yet been fully developed. Several urged that OSHA wait for publication of another NAS study to determine the adequacy of the scientific basis for the regulation of work-related MSDs. Mr. Wilcox questioned OSHA's data on the incidence of the MSD problem, arguing that repetitive strain injuries represent less than 4 percent of all work-related injuries and illnesses.

Some SERs felt that it was essential that employees, as well as employers, be held accountable and responsible for their role in minimizing MSDs.

Mr. Bolen expressed a concern that analysis at the two-digit, and even the four-digit industry level, could be misleading and fail to recognize major distinctions among businesses.

Mr. Martin felt that there should have been a panel for manufacturing firms only.

Costs and Impacts

Total Costs

Most of the SERs felt that the costs of compliance projected by OSHA were significantly underestimated. Ms. Kerley asserted that "governmental estimates are always 1/10 to 1/4 of the actual implementation costs." Ms. Kerley provided a detailed direct comparison of OSHA's draft estimates of the proposal's cost with her own. Ms. Kerley also questioned the concept of combining data from different years in the cost estimates (e.g., MSD rates from 1996 and percentage of firms with programs from 1992). She also questioned what was included in the fringe benefit estimate. Mr. Martin raised the issue that no one is average, and illustrated his point by saying you "can drown in a lake that is an average of 2 inches deep," and, therefore, the use of average costs for an industry can be misleading when applied to an individual firm.

Program Costs (General)

Some SERs felt that OSHA had neglected to recognize that there would be costs even for firms that were not in the scope of the standard at all. For example, Dr. Verhagen maintained that even dental practitioners and other employers who were not covered fully by the standard would incur substantial familiarization costs. She estimated costs of over \$5,000 simply to understand the standard and be ready should an MSD occur, as compared to the one hour per establishment OSHA estimated for the familiarization process. Several SERs believed that OSHA's estimates for the cost of providing for management leadership and employee involvement were too low. Assuming that program-related costs would be similar to the program costs of OSHA's bloodborne pathogens standard, Dr. Verhagen drew on the American Dental Association survey of the costs of the bloodborne pathogens standard to provide a detailed estimate indicating that the program-related costs would be almost ten times more

expensive than the \$73 for a small firm estimated by OSHA. Mr. Mittlefehldt estimated that it would take 1000 hours to identify "redundancy" issues. Mr. Stentz estimated that adding an ergonomics program to a general health and safety program would take 10 to 20 manhours, at a cost of \$150-\$300. Mr. Murphy felt that developing a program for his 170 employee warehouse firm would require 4 to 5 hours per day of a manager's time for 5 months. Once established, he felt the program would require 25% of a manager's time thereafter. Some SERs felt that outside consultants would be necessary to set up a program or determine even if the program requirements applied to them.

Training

Some SERs felt that training costs were underestimated. Mr. Murphy felt that in the first year he would need a total of 1013 hours of employee time plus 755 hours of management time for "safety and health reminder times." Ms. Kerley believed that the training costs were generally underestimated, particularly for supervisors. One SER expressed concern about the costs of providing training and information "in the languages employees use," which could mean languages other than English.

Job Hazard Analysis Costs

Ms. Kerley believed that OSHA's estimate of \$1000 for an ergonomic consultant was low. Her sample of ergonomic consultants indicated a range of \$2000 for a simple walk-through to \$25,000 to do a hazard control analysis. She quotes an hourly rate of \$100-\$175.

Job Control Costs

Some SERs differed with OSHA's estimate of average costs of \$800 per affected employee for job control costs. Mr. Mittlefehldt estimated that controlling costs in his business would run \$250,000 annually, or \$20,161 per employee, with a 70% standard deviation. Ms. Kerley provided examples of job control fixes which ranged from \$600-\$150,000, although she noted that her sample was limited to the electronics and semiconductor industry. She also noted that the \$150,000 example she provided "was probably justified by the increase in production" that resulted from the job fix.

Medical Management/Medical Removal Protection (MRP)

Some SERs felt that these were the most costly provisions of the draft proposed standard. Many SERs were concerned with the high costs of medical removal protection and provided sample calculations of the costs of supporting an employee in their facility for 6 months. Ms. Kerley noted that employers in relatively rural locations will have greater difficulty in providing for doctors with sufficient knowledge of MSDs. She also argued that employees would effectively receive an after-tax pay raise as a result of the draft rule's medical removal protection requirement. Some SERs were concerned that the costs of medical removal protection could

force very small firms out of business.

Use of Outside Consultants

Many SERs were concerned that small firms would need to make use of expensive outside consultants in all phases of the program, from program set-up to hazard analysis to hazard control. In addition to the costs of such outside consultants, some SERs were concerned about whether an adequate number of consultants would be available to meet the demand.

Ability to Pass on Costs/Economic Feasibility

Almost all SERs indicated they would not be able to pass on the costs of compliance, although at least two indicated this would be possible. Ms. Kerley brought up the issue that the fact that benefits exceeded costs over the long run was not adequate for small businesses, which have difficulty getting credit. Several SERs endorsed the idea of an ergonomic tax credit for small businesses so that they would be better able to absorb the cost. Ms. Kerley estimated that 20% of the suppliers for a particular company would not have the economic resources to comply with the draft proposed standard. She also suggested that while there may be an economic payoff associated with an investment in controls, this payoff would happen too slowly for some small firms to remain in business.

Mr. Meyer suggested in oral comments that some firms in his industry, textiles, would move operations overseas in response to what he perceived of as the burden imposed by the draft proposed standard. Others cited foreign competition as a reason costs would be difficult to pass on.

One SER in the warehousing industry pointed out that international shipments frequently come in forms that are difficult to handle manually. Neither the warehouse owner nor U.S. law has any control over these forms of shipment.

Effectiveness of Programs

Those SERs who had previously adopted ergonomics programs or had studied other programs in industry generally acknowledged that they had been successful in reducing MSDs. Mr. Meyer in oral comments indicated that despite his concerns about the proposal, he felt the ergonomics program at his facility had been a success. Ms. Kerley indicated that Intel's program began to show benefits after an initial spike in reported MSDs. She also indicated that a program at Silmax, while expensive, "did eliminate MSDs and production capacity was doubled without an increase in headcount."

Mr. Mittlefehldt estimated that the draft standard would increase the number of MSDs by as much as 20% "due to the incentive to report and inability to dispute or confirm cause and

effect." Mr. Martin was concerned that ergonomics programs "could possibly deflect time and attention away from more serious and life threatening type injuries."

Selective Hiring

Several SERs were concerned that the rule would lead to discrimination against workers perceived to be more likely to have or report an MSD. Discrimination against older workers, persons previously on welfare, and persons who had had MSDs in the past were mentioned as possible types of discrimination the draft proposed standard might encourage.

Separate Analysis for Entities with Fewer than 10 Employees

Several SERs felt that it would be useful for OSHA to provide a separate data breakout on entities with fewer than 10 employees in the Agency's preliminary economic analysis.

Comments on the Standard

Scope

Some SERs believed that the standard should cover all industries. An Appendix to Ms. Kerley's comments suggested that the omission of construction and agriculture "is probably arbitrary and capricious," given that "it is well-documented that repetitive motion trauma is extremely prevalent in construction and agriculture."

Definitions

Several SERs felt that the meaning of the term "feasible" was unclear. Several of the SERs expressed reservations about the definition of "similar" jobs. Ms. Spiceland and Mr. Mittlefehldt felt the definition of "heavy" was unclear. The definition of a WMSD was unclear to many, including those portions of the definition that have been used in OSHA's recordkeeping rule for many years.

Hazard Identification and Training

Some SERs questioned the draft proposed requirement stating that employees must be informed about the signs and symptoms and ways of recognizing MSDs because they feared that such awareness would result in an increase in the reporting of MSDs.

Standard/Full Program "Trigger"

Many SERs felt that a trigger of one work-related MSD (WMSD) for activating the full program was too sensitive. Some were concerned that one WMSD could trigger the program for a very large number of workers. Others were concerned that WMSDs were caused by factors

outside the workplace, while some felt that a single WMSD was a "random" event and should therefore not trigger the program. Several SERs pointed out that even the best programs cannot hope to eliminate all MSDs and questioned whether a program should be triggered by the kinds of MSDs that are work-related in some sense but for which the workplace source of the hazard cannot be identified with certainty. Some SERs indicated that their concern about this issue was heightened by the presence of the Medical Removal Protection requirements (MRP is discussed further elsewhere), in that workers may be encouraged to report back pain and other MSDs whether or not they truly have an MSD, whether or not the MSD was caused by work, and even if the injury was attributable to a work activity. Dr. Tucci stated: "Backaches are like headaches, if you have it you know it, but there is not conclusive [underlined in written comment] physiological method of proof that the person is or is not experiencing pain." He also believed the draft proposed standard created a presumption that all MSDs are work-related. Some other SERs believed it would require substantial effort on the part of the employer to determine whether or not the disorder was work-related, although others disagreed. Many SERs were concerned that the risk of incurring an MSD is determined by such factors as the age, condition, after-work activities, and physiology of the worker. These SERs felt that such factors reduce the significance of the occurrence of a single MSD in a workplace. Suggestions for alternative triggers are discussed in the Alternatives section of this Report, below.

Some SERs felt that the "known hazard" trigger would discourage proactive programs or the calling in of outside expertise unless an MSD had already occurred.

Similar Jobs

Dr. Verhagen emphasized that the purpose of fixing "similar" jobs should be the job-relatedness of the WMSD. She argued that where a particular job has no history of WMSDs, it should not be necessary to fix similar jobs. Mr. Wilcox pointed out that his firm of 26 full time employees had 21 employees with identical jobs

Hazard Analysis

One SER expressed a concern about how to identify similar jobs, or even to isolate the hazard when a shop uses extensive job rotation

Hazard Control

Some SERs were concerned with how they could determine if they had fixed a job adequately so that they would be in compliance with the draft proposed standard. Others were uncertain as to the meaning of the term feasible. One SER was particularly concerned that administrative controls included "adjustment of work pace" and that this might mean the employer would have to slow down the pace of work whenever there was an MSD.

Clarity of Medical Removal Protection (MRP)

Some SERs were concerned that the draft medical removal protection provision could be read to require that employees receive more take-home pay than they would receive if they were at work.

Medical Removal Protection (MRP)

Most SERs expressed reservations about the draft's proposed MRP provision. Some SERs were unclear about who (the employer or the employee) would provide the physician to make the determination that removal was warranted. Many SERs were most concerned about the possibility that they would need to compensate an employee for an injury or illness that would not be compensable under state workers' compensation law. Even where workers' compensation would apply, several SERs expressed concerns about increased workers' compensation claims, including fraudulent claims, due to the provision for full income protection in cases of a reported MSD. Some commenters believe that this provision would effectively provide for a pay increase if the worker is out on disability. Some SERs indicated that their companies did not have alternative duty (restricted work) jobs. Ms. Spiceland was uncertain how the MRP provision would affect fringe benefits. Several SERs expressed concerns that this provision would provide a disincentive for employees to return to work after an injury. (Concerns about legal and administrative conflicts with workers' compensation systems are dealt with below.)

Many SERs were also concerned that MRP, or the combination of MRP and employee information on MSDs, would cause an increase in worker compensation costs and in reported MSDs.

Program Evaluation

Ms. Kerley questioned how programs were to be evaluated, and felt that any evaluation of the program based solely on the number and rate of MSDs would be problematic, particularly since some MSDs cannot be readily fixed even with the best programs.

Recordkeeping

Mr. Martin objected to the recordkeeping requirements in the draft proposed standard; he believed that they were redundant with requirements in other standards and with "good business practice." One SER, with less than 10 employees, who is currently exempt from the OSHA's recordkeeping rule, would begin to keep records if the draft proposed ergonomics program rule were promulgated.

Implementation Deadlines

Ms. Kerley indicated that most job hazard analyses take from 16 months to 3 years to

complete, longer than the year provided for in the draft proposed standard.

Enforcement

Some SERs expressed concern about OSHA enforcement, and stated that these concerns were heightened by the vagueness of some of the language in the draft standard. For example, several SERs expressed concern as to how the term feasibility would be interpreted. Others suggested that one of the major problems with the MSD trigger is that employers and OSHA inspectors would differ over whether hazards likely to cause an MSD were present, and what might constitute a routine part of the job.

Regulatory/Statutory Overlap/Conflict

Several of the SERs raised concerns regarding the interaction between state workers' compensation systems, the Americans with Disabilities Act (ADA), Equal Employment Opportunity Commission (EEOC) rules (see comments under selective hiring), and the Medical Removal Protection requirements of the draft standard. Many SERs were concerned that the medical removal protection provisions would override state worker compensation rules. Ms. Kerley also provided a detailed description of the points of perceived conflict between the workers' compensation system and MRP. Mr. Sustar suggested that the MRP provision would encourage discrimination against older and handicapped workers. Ms. Kerley argued that this provision would effectively conflict with the goals of welfare-to-work programs. Some SERs were concerned about possible overlaps between the draft proposed ergonomics rule and the draft safety and health programs rule, and questioned whether both rules are necessary.

Regulatory Alternatives

Most SERs argued that non-regulatory avenues, such as the dissemination of information on MSDs, should be pursued. Some SERs felt that a combination of outreach and enforcement under the General Duty Clause should be adequate for small businesses. Some SERs indicated that these should be pursued as alternatives to rulemaking.

SERs suggested a wide variety of alternatives to specific provisions of the draft proposed standard. Several SERs recommended raising the trigger for the full ergonomic program to more than one WMSD. Ms. Kerley suggested using lost workday MSDs as the trigger. Mr. Sustar suggested a trigger of 3 employees with WMSDs, or 5-10% of the workforce with WMSDs, or perhaps several incidents over a three year period. Mr. Martin suggested using a rate reflecting employee work hours, although he noted that this approach would trigger the standard for small employers much sooner than for many larger employers. Dr. Verhagen suggested that the standard be triggered only by a medical diagnosis of a WMSD. She also suggested that the standard include an exemption for establishments that had not had WMSDs for three years. One SER suggested that OSHA look to the way insurers do experience rating for workers'

compensation, i.e., their approach to the weighting of injuries by size of firm and their use of three years of data.

Mr. Neill submitted written comments suggesting that the whole notion of an MSD trigger was "very reactionary" and advocated a proactive approach to prevent injuries in the first place: "We all know that cumulative trauma disorders are extremely costly. It seems to me that a proactive approach would be far more beneficial, both from a financial and human suffering viewpoint."

Dr. Tucci suggested that it would be helpful for the physician to have the employee job description as well as description of all non-work related activities to determine if the injury is truly work related. He noted that, "Without all the facts, the physician may not be able to determine accurately if the MSD is or is not work-related."

Ms. Kerley suggested that the ergonomics standard adopt age-related nuances, similar to those in OSHA's Hearing Conservation standard.

Many SERs suggested that the medical removal protection provision should be dropped. Some SERs noted that they followed a policy similar to the requirements of the medical removal protection provision for restricted work; however, no SER had a policy of paying anything above and beyond workers' compensation for time away from work.

Many SERs stated that if an ergonomics standard were promulgated, extensive outreach would be necessary, and some recommended that OSHA postpone any regulation until adequate consultation services were available from OSHA.

As indicated previously, several SERs endorsed the idea that businesses be provided tax incentives to purchase "ergonomically correct" equipment. This was suggested both as an independent initiative and as a way of making the proposed standard more economically feasible for employers.

8. PANEL DISCUSSION AND RECOMMENDATIONS

Costs and Impacts

Underestimation of Costs and Burdens

Many SERs felt that OSHA's preliminary cost estimates had underestimated costs. Based on these SERs' concerns and Panel discussions, the Panel agrees that OSHA's preliminary cost estimates may have underestimated the costs, perhaps materially. The Panel recommends that OSHA review its cost estimates in light of these comments, with specific attention to those comments that offered alternative cost and hour estimates or explanations of why the commenters believed the costs to be underestimated and to those areas of the program highlighted by the SERs and the Panel as major cost issues (training, consulting costs, medical removal protection, job hazard analysis, job control). This review, with a presentation of the estimates provided by the SERs, should be included as part of a revised IRFA.

The Panel also recognizes that increased costs of certain kinds, such as those for consulting, may decrease other kinds of costs, such as those for training. If OSHA concludes that the costs were not significantly underestimated, the Agency should explain the rule more clearly to help assure that small businesses will not misunderstand the intended requirements and why OSHA believes that the SERs' estimates were excessively high. The Panel also recommends that OSHA continue to present cost data in a manner that not only reflects average costs but reflects the distribution of costs between those firms with and without an MSD. The Panel notes that OSHA presented costs in terms of the time-stream of direct costs, a format that small firms most easily comprehend, and recommends that the Agency continue to use this form of presentation in its discussion of the costs of this rule.

Major Assumptions Underlying Benefit and Cost Estimates

The Panel recognizes that OSHA provided the Panel with a clear and well prepared presentation of the major assumptions underlying its cost analysis. Accordingly, the Panel recommends that a similar presentation of the assumptions underlying benefits estimates be included. The Panel also recommends that OSHA discuss the sources and bases of these assumptions, significant alternative assumptions, and the reasons OSHA selected the proposed assumptions.

Similar Jobs

Some SERs suggested that OSHA may have underestimated the number of employees in similar jobs. Some pointed to large numbers of workers with identical jobs in their own

facilities, and some stated that everyone does every job in a small facility. The Panel recommends that OSHA reexamine its estimates of the average number of persons in similar jobs (see below for specific recommendation to modify the term "similar job"), and how this estimate may impact overall costs.

Program Costs

Some SERs felt that there may be substantial costs for firms to understand the rule and to determine whether they are covered by the rule, even for firms not required to have a basic program and who have not had an MSD. The Panel recommends that OSHA examine its cost estimates to be sure that it has adequately accounted for the burden on firms who do not have an MSD and are not required to have a basic program. This examination should include an examination of the costs of determining whether an MSD is work-related.

Need for Outside Consulting Services

Many SERs expressed doubt over their capability to make an either the initial determination about whether they need an ergonomics program or to implement ergonomics program itself. Many SERs felt that they would need the assistance of consultants to set up an ergonomics program and to assist them in their hazard identification and control activities. The Panel recommends that OSHA consider whether the Agency's analysis may have underestimated the need for help from outside consultants and that OSHA examine the necessity for, and cost and availability of, the services of ergonomic consultants.

Cost Pass-Through

Almost all of the SERs stated that they would not be able to pass on the costs of an ergonomics program to their customers. The ability to pass through costs may be dependent on the level of domestic and foreign competition. The Panel recommends that OSHA consider the extent to which small firms can pass along any price increases to consumers or might experience feasibility problems if such costs could not be passed along.

Incentives for Selective Hiring

The Panel is concerned that many SERs felt that the proposed rule would significantly increase the incentives not to hire (or to dismiss) individuals that were members of groups that they perceive to be more likely to incur MSDs, and that some employers would be tempted to set up new kinds of screening tests in order to evaluate the likelihood that future employees would incur an MSD. The Panel is aware that selective hiring incentives are already present to some extent in the workers' compensation and health insurance systems. The Panel recognizes that selective hiring practices are often illegal. The Panel recommends that OSHA assess the SERs' statements as part of its analysis, consider how to mitigate any potential that may exist for expanding such selective hiring incentives or creating new ones, and solicit comment on these

issues.

Workers' Compensation Costs

Many SERs were concerned that the medical removal provisions or the information provisions of the draft rule might encourage more reporting of MSDs, leading to an increase in workers' compensation costs. OSHA recognizes that ergonomics programs frequently result in an increase in the number of injuries reported, but OSHA notes that empirical data show that ergonomics programs generally reduce workers' compensation costs over time. The Panel recommends that OSHA assess these data as part of its analysis. The Panel further recommends that OSHA provide additional data to support its arguments about the costs and cost-savings implications of these programs and specifically address any potential effects of medical removal protection in encouraging workers to remain off work.

Number of Small Entities

A few SERs were concerned that OSHA's initial analysis was conducted at the two-digit (major industry group) level, instead of the three or four-digit level. The Panel notes that analysis at this level sometimes involves aggregating data from very dissimilar industries (e.g., doctors' offices and hospitals). The Panel recommends that OSHA conduct the analysis at level of detail that does not mask the relevant economic differences among industries through aggregation.

Description of Proposed Requirements

Use of Outside Consultants

Many SERs questioned OSHA's estimate that consultants would not be necessary for any element of the program except in 10% of those cases involving job fixes. The Panel recommends that OSHA review whether small businesses would need consultants for other elements of the program, whether they may be necessary in a greater percentage of cases, and to what degree these factors would alter cost estimates.

Outreach

Many SERs expressed doubt over their capability to make either the initial determination about whether they need an ergonomics program or to implement the ergonomics program itself in a way that would satisfy OSHA compliance personnel. The Panel agrees with OSHA's plan to conduct an outreach program that would provide small entities with the materials and assistance they may need to make initial determinations and to implement an ergonomics program.

Use of Checklists

Some SERs expressed an interest in having checklists to help them in determining if the work activities of a job pose hazards that are likely to cause or contribute to an MSD, and to aid them in hazard identification. The Panel recommends that OSHA evaluate the usefulness of checklists for these purposes. In the event OSHA develops checklists for its own enforcement personnel, it should make these checklists available to the public.

Definition of the Work-Relatedness of MSDs

Many SERs had difficulty understanding OSHA's criteria for determining the work-relatedness of MSDs. Many SERs interpreted OSHA's criteria for determining the work-relatedness of MSDs in such a way that, in practice, the two criteria in addition to a recordable MSD would be unworkable or ignored. The Panel recommends that OSHA should either consider alternative approaches to this issue or clarify these criteria.

The Panel also recognizes that employers believed they would incur significant burdens in making the determination on their own. Some SERs felt that the work-relatedness decision should be made by a physician rather than an employer. The Panel recommends that OSHA clarify that employers may, if they wish, rely on a physician's opinion in making a work-relatedness determination, and that OSHA would bear the burden of proof if it disagreed with such an opinion.

Known Hazard Provision

Some SERs found the known hazard provision unclear. Some were also unclear about the difference between a "known hazard" in this rule and the concept of a "recognized hazard" in the General Duty Clause. Others were concerned that the use of the known hazard concept would discourage employers from establishing new, proactive programs.

The Panel recommends that OSHA clarify and consider alternatives to this trigger (these are discussed in the Alternatives Section at the end of this report), and that OSHA assure that any provision it adopts would not create disincentives to the proactive identification of ergonomic hazards.

Clarity of Definitions and Compliance Enforcement Concerns

Some SERs expressed concerns about how certain terms and provisions of the draft rule would be interpreted and enforced by OSHA compliance personnel. Many SERs found it difficult to apply the concepts of feasibility, similar jobs and manual handling, as these are defined in the draft rule. The Panel recommends that OSHA seek ways to clarify, explain, and provide examples of these terms. The Panel recommends that OSHA clarify that the draft

proposed rule only requires the employer to control hazards to the extent feasible for that firm, using the normal OSH Act definition of feasibility (i.e., "Is it capable of being done"), discuss in the preamble the factors that go into that determination, and seek ways to include such explanatory information in the preamble, outreach, and compliance assistance materials.

Specifically, the Panel recommends that OSHA clarify the idea of similar jobs and use a more precise term, such as "similar work activities," in light of SER comments that all or a portion of employees sometimes engage in all or a portion of the work activities in the establishment. The Panel also recommends that OSHA provide in the regulatory document, examples of which similar work activities would or would not be covered by the standard.

The Panel also recommends that definitions of personal protective equipment and engineering controls be added to the proposed standard, with ergonomic examples that help to explain how they differ.

Hazard Control

Some SERs were uncertain how to determine when a job is adequately controlled and were concerned that OSHA compliance personnel might have different interpretations of the meaning of adequate controls than employers. The Panel recommends that OSHA discuss the issue of adequate control and provide examples. The Panel also recommends that OSHA clarify the meaning of the proposed rule so that employers will have a better idea of when they have done enough to comply with the standard. Examples should be added to the preamble to further clarify this point.

Program Evaluation

The Panel also recommends that the proposed standard be modified to clarify the requirement for program evaluations. Such modifications should reflect the flexibility of employers to use non-quantitative measures, quantitative measures, or a combination of these to evaluate their ergonomics programs.

Duplicative and Overlapping Rules

State Workers' Compensation

Many SERs and the Panel were concerned about perceived overlaps between State workers' compensation laws and the draft standard's medical removal protection requirements. The Panel recognizes that OSHA has used medical removal protection provisions in the past, but has never had a medical removal protection provision that would cover so many cases. The Panel recommends that, if MRP is included in the proposed rule, OSHA explain in the preamble how the proposed provision interacts with state workers' compensation laws and why OSHA believes the rule's MRP provision is not in conflict with Section 4(b)(4) of the OSH Act, and solicit

comment on this issue.

Equal Employment Opportunity (EEO) regulation and guidance

Some SERs suggested that employers' increased concern about MSDs could create additional incentives for employers to discriminate against individuals who may be members of protected classes of employees based on the perceived likelihood that such workers would have more MSDs than other workers. The Panel understands that OSHA designed the draft proposed rule to avoid conflicts with EEO laws, such as the Americans with Disability Act (ADA) and Age Discrimination in Employment Act (ADEA), and recommends that OSHA draft the proposed rule to achieve these objectives.

Specifically, some SERs suggested that employees trying to avoid MSDs would violate the ADA. The Panel also recommends that OSHA address how the ergonomics program accommodates the requirements of the ADA. The Panel also recommends that OSHA seek to minimize any unintended consequences of the rule that might undermine the protections afforded under the ADA, as well as the ADEA.

National Labor Relations Act (NLRA)

Some SERs were concerned that the employee participation provisions of the draft rule could lead to conflicts with the NLRA. The Panel understands that OSHA designed the draft proposed rule to avoid conflicts with the NLRA. The Panel recommends that OSHA draft the proposed rule to achieve these objectives and discuss and give examples of employee participation mechanisms that would allow employers to be in full compliance with both the NLRA and the proposed rule.

Safety and Health Program Rule

Some SERs expressed concern that they would need to set up two programs if OSHA were to issue a safety and health program rule that was separate from an ergonomics program rule. The Panel recommends that OSHA ensure that the two rules are developed in a way that allows an employer's ergonomics program to be an integral part of that employer's general safety and health program and to avoid duplicative requirements or recordkeeping (for example, by making clear that an ergonomics program can be part of an effective safety and health program). The Panel also recommends that the economic analyses supporting the two rules be compatible and not double count either costs or benefits. The Panel further recommends that OSHA ensure consistency between relevant definitions in their upcoming revision of the recordkeeping rule and the proposed ergonomics standard.

Regulatory Alternatives

Non-regulatory guidance

Many SERs suggested that non-regulatory guidance would be preferable to a rule. The Panel recommends that OSHA further explain its non-regulatory guidance efforts to date, the basis for its belief that a significant risk remains, and why it believes a proposed rule is now appropriate to reduce that risk. The Panel recommends that OSHA solicit comments on the need for a rule and on the effectiveness of non-regulatory approaches.

Issue Only a Safety and Health Program Rule

The Panel recommends that OSHA discuss whether a safety and health program rule would adequately address MSDs, thereby eliminating the need for a separate ergonomics rule.

Delay until NAS study is complete

Some SERs recommended that OSHA delay the ergonomics rule until the completion of the NAS study that is now underway. The Panel recommends that OSHA explain why it does not wish to delay this proposed regulatory action until that time, and consider any available results of the NAS study that are in the record of the final rule.

Phased Implementation

The Panel recommends that OSHA consider phased implementation, allowing additional time for small employers and/or employers in particular industries where feasibility may be a concern.

Alternative triggers

The Panel agrees that the purpose of including a trigger in the rule is to ensure that only those whose jobs pose real ergonomic hazards are required to implement the full program. The Panel also agrees that the trigger must clearly identify which employees and/or operations are covered by the rule and which are not.

Many SERs questioned the usefulness of OSHA's reliance on one work-related MSD as a trigger for implementation of a full ergonomics program. The Panel notes that many SERs did not find the second and third tests for work-relatedness in the draft standard workable, perhaps because they found these tests subjective and likely to be interpreted differently by employers and OSHA compliance personnel. In addition, the Panel recognizes that the California ergonomics standard, the only State with an ergonomics standard, has a two-incident trigger.

The Panel recommends that, in addition to OSHA's draft proposal of a trigger of one work-related MSD, where regular work activities expose the employee to hazards likely to cause or contribute to that MSD, OSHA analyze and consider a variety of alternative triggers, paying special attention to:

- A trigger using multiple work-related MSDs over a time frame that might exceed one year; and
- Staged implementation of program elements based on multiple work-related MSDs.

In addition, the Panel recommends that OSHA look at other types of triggers, including lost workday MSDs, MSD rates, numbers of MSDs or MSD rates for different sizes of firms and different periods of time, as well as the use of a checklist to determine the presence of a hazard.

Alternatives to known hazards

Some SERs were concerned that including the concept of known hazards in the trigger used to determine whether an employer needs a program would discourage employers from launching proactive programs, or from bringing in expert consultants. The Panel recommends that OSHA consider this issue and ensure that any provision it adopts would avoid disincentives to identify hazards. The Panel recommends that OSHA also consider not including this provision in the proposed rule.

Scope of the rule

The Panel recognizes that many businesses and work operations are not intended to be covered by the proposed rule. Panel recommends that the proposed rule clearly indicate which manual handling and other operations are included in the proposed rule and which are excluded from it.

The Panel also recommends that OSHA continue to analyze and solicit comments on the alternatives of limiting the proposed standard to manufacturing only, and to manufacturing and manual handling only.

Alternatives to Medical Removal Protection

The Panel recognizes that the draft rules' MRP provisions are extremely controversial. The Panel agrees that these MRP provisions account for a substantial percentage of the total costs of the standard (OSHA's preliminary estimate is that these MRP provisions may have costs of \$900 million), and that many SERs felt that under some circumstances these MRP provisions may threaten the viability of small firms.

OSHA notes that MRP has been included in many health standards, based on findings

that MRP was necessary in order to assure employee participation in medical surveillance/ medical management programs and that the draft standard is more dependent than most health standards on adequate employee participation. It is generally agreed that early detection of MSDs is critical to the success of an ergonomics program, and the program required by the draft standard would trigger action upon a finding that a work-related MSD has occurred. OSHA is concerned about the possibility of seriously reduced employee participation in the absence of MRP.

However, an ergonomics program standard with an MRP provision will affect substantially more workplaces, trigger more MRP coverage, and have more overlap with workers' compensation than MRP provisions in OSHA's other health standards. The Panel notes that many MSDs are currently being reported, that more serious MSDs are more likely to be reported, and that SERs with existing ergonomics programs stated that the institution of a program in and of itself led to increased reporting of MSDs. The Panel also recognizes that MRP may increase the incentive to report non-work-related MSDs as work related and may increase time away from work.

Many SERs also expressed concern that employees would be able to take up to six months away from work simply because they stated they had MSDs. The Panel recognizes that this scenario is not what the draft standard would require. MRP would only come into effect once the employer has determined the MSD is work-related and that medical removal is necessary and only for so long as necessary. The Panel understands that in most cases lost workdays resulting from MSDs only last several days.

Given the serious controversy concerning this provision of the rule, the Panel recommends that OSHA pay particular attention to the following issues related to MRP:

- Determine whether the evidence indicates that MRP or other provisions are necessary to achieve the goal of prompt and complete reporting of MSDs. The Panel realizes that, as with any other decision, OSHA's final determination of whether MRP is necessary must be based on substantial evidence in the standard's record considered as a whole. The Panel also recommends that OSHA solicit comment on the alternative of excluding MRP from the rule.
- If MRP or another provision is necessary, examine whether the purposes of MRP could be met with a more limited form of MRP, such as a shorter time limit for MRP coverage, a smaller percentage of income replacement, or recognition of a feasibility limitation on MRP at the firm level, such as that used in OSHA's Methylene Chloride standard;
- Assess whether alternatives other than MRP would be as effective in achieving the goals of prompt and complete reporting, such as alternatives that may not involve payments to employees; and

- Examine whether MRP should be phased in over a period of time.

Some SERs also expressed concern that, as currently drafted, OSHA's draft language could be interpreted as providing injured employees on MRP with more take-home pay than they would have had before the injury. The Panel recommends that, if a form of MRP is included in the proposed rule, OSHA make it clear that MRP will not result in higher take-home income for removed employees than they would otherwise have received.

APPENDIX A
SMALL ENTITY REPRESENTATIVES
COMMENTS

L 0242

Corsey, Adrian

From: vicki worden [SMTP:vickiw@erols.com]

Sent: Thursday, April 08, 1999 12:21 PM

To: Corsey, Adrian

Subject: Comments from SEP on Ergo

Deborah Hayden asked that I please email you with her written comments for the panel review. Let me know if you need hard copy to be couriered over. Thank you.



ergo comments 4-1-99
from dh doc

Vicki Worden, 202-547-2230

L 0243

**Comments submitted to
SBA/OSHA Small Entity Panel
On Draft Ergonomics Program Standard**

Submitted by

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**Written Comments Submitted, April 7, 1999
Conference call participant, March 25, 1999**

19 total pages

L 0244

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L 0245

Profiles of Companies in Building Material Industry

Thank you for the opportunity to participate in the review of OSHA's Draft Ergonomics Program Standard. As you know, Tindell's Builder Supply Inc. is a 150-person operation supplying building materials to contractors and consumers. In addition to our retail operation (SIC 4441), we also manufacture trusses (SIC 249) for new home construction. Safety is a top-priority at Tindell's, and we are fortunate to have 2 staff people dedicated solely to maximizing our employees work environment. However, we network frequently within the building material industry, and we know that relatively few of our peers across the country are able to have any one person assigned just to "human resources" or for that matter, safety or job hazard analysis. For that reason, I've chosen to provide a profile, not just of Tindell's, but of two other companies in different parts of the country that do not have a human resources professional on staff.

Let me clarify one thing before I begin: the majority of companies in our industry are such that management works hand-to-hand with the employees in conducting daily business. I do not know of any company that does not consider safety a priority. In fact, with so many family-owned businesses in our industry, safety becomes a dinner-time conversation. With that in mind, please review the following company profiles that were created to give the writers of the Ergonomics rule a preview of how several companies in our industry might receive such a rule.

General Industry Profile*

Avg Number of Employees per Company	35
Avg Payroll Per Employee per Company	\$33,002
Typical Sales Volume per Company	\$8,719,600
Typical Sales Volume per Facility	\$5,687,210
Avg Cost of Goods Sold per Company	\$6,609,457
Total Avg Payroll/Salaries/Benefits per Company	\$1,246,903
Total Avg Salary/Wages/Bonuses per Company:	\$1,055,071
Avg Owner/Officers Salary/Bonuses	\$191,831
Avg Employee Salary/Wages/Bonuses:	\$863,240
(Employee/Labor costs are 81% of avg company salary/wage/bonus)	
Average Profit per Facility Before Taxes:	\$113,000

**Data from the National Lumber & Building Material Dealers Association's 1998 Cost of Doing Business Report*

Type of Work Related to Draft Ergonomics Program Standard

Manual labor is a daily part of every operation. Heavy lifting is a normal part of a yard worker's job. Additionally, many companies in the industry are combating aggressive

competition by adding manufacturing facilities for components used in home building and remodeling (i.e., doors, windows, trusses, cabinets, etc.)

Competition

HEAVY. With competition from large national chains that advertise the **LOWEST** prices around, small retailers cannot afford to raise their prices one iota. These companies must compete solely on the basis of their service, reliability, and the quality of their products. Each **PERSON** makes a difference to the success of that person's company. Losing any person, for even a day, impacts the profitability of that company exponentially. **It can't be emphasized enough that the average before-tax company profit in our industry is only 2%.**

Sample Company Profiles within Building Material Industry

5-person Company, Oklahoma (1 rural facility)

With only five employees, this company has an impressive safety record. In ten years, it has experienced **ZERO** workers' compensation claims due to musculo-skeletal disorders. But the management team (the President), realizes how fortunate he has been. With only **FIVE** employees, losing one person due to a back injury would decrease his workforce by 20%.

The work that his people do that may result in an MSD includes lifting on sheet rock delivery, roofing deliveries, and loading people's cars. The average weight lifted several times a day is 75lbs. and sometimes heavier. Most of the loads don't have handles or easy grip areas and therefore are awkward.

Yes, he says they have sore backs. And he's combating that by bringing in someone from the local VoTech school (a service provided for free to area businesses) to teach a safety seminar that covers heavy lifting (he does not have a safety program, so to speak).

He says, if someone was injured, he'd "get by" for 3 or 4 days, but after that he'd have to have a replacement. He pays minimum wage for the people that work in his yard. In his small, rural town in Oklahoma, he would have to pay slightly above that to hire someone as a temporary replacement. On average, his workers make \$17,500/year. He says within the first 3-4 months the replacement worker would have very little productivity until they were thoroughly trained.

In addition to the generic manual labor, his people have to provide service that requires do-it-yourself know-how and product knowledge. Providing light duty would be OK for a short time, but after awhile it would put him "in a bind." He says that the folks that work in the office or at a desk have a lot of responsibility and need a lot more training than the workers do. He says that moving someone to light duty would decrease productivity by 50% and still likely require him to hire a replacement worker. With his narrow profit margin, he prays that will never happen. If this standard were to be put into effect, he is afraid of what having to provide 100% wages for up to six months plus hiring a replacement and conducting additional training would do to his profits and his ability to take care of his existing employees. His other big concern is, "What if I make a mistake and hire the wrong person at some point?" If that person decides to "milk" the system, and depending on the market, this company owner could go a year with little

to no profit (i.e., no ability to reinvest in the company or the existing employees.) Additionally, if this standard were implemented, he'd be the sole person responsible for reading it, interpreting it, and implementing a "program" to eliminate MSD injuries (zero risk?). He wonders how he could ever find the time to do that (especially in an industry that is dependent on manual handling) when he can barely find the time to learn how to use a PC. He'd be at the mercy of his trade associations and outside consultants who would no doubt charge him a "pretty penny" for the benefit of advice that is specific to his operation and when there was, in his opinion, little chance that he could ever "eliminate" the potential for MSDs at his workplace.

32-Person Company, California (1 suburban facility)

Over ten years this CEO of this 32-person company estimates that he has had about 20 workers' compensation claims, but only about four were back strains. Employees with back injuries were out of their normal jobs from two days to three weeks. This company is employee-owned. The CEO has one other manager, and between them they take care of all of the human resources needs of the company. In other words, there is no one person dedicated solely to human resources, safety, or job hazard analysis. However, safety remains a priority. No formal program exists, but safety discussions take place regularly at monthly, 10-minute "tailgate" meetings where employees and management stress proper lifting and personal protective equipment use. He also receives a safety evaluation each year from his insurance providers.

The average worker earns \$12.25/hour, or \$26,000/year. Like the 5-person employer above, the CEO agrees that there are many hidden costs and losses in productivity when employees are out and/or on light duty for an extended period. However, he does whatever he can to keep the injured employees working somewhere within the establishment. In his company, about 15 of his 32 people are exposed to WMSDs.

If a regulation this comprehensive was implemented, he estimates that he'd rely on his trade association primarily for information on his compliance responsibilities. He typically sends someone to a seminar to be briefed on any new regulations. He estimates that the registration fees, lost time, and travel costs involved would be about \$2,000-\$3,000 just to learn what his company's responsibilities were. This CEO happens to be familiar with the kind of study and analysis that would need to be done by a professional to properly evaluate his employees' daily tasks and make recommendations on changes that would need to be made to reduce WMSDs. He said a consultant with this expertise would easily cost between \$10,000-\$30,000 in his area. These costs, of course, do not reflect implementing changes.

Tindell's Builder Supply Inc., Knoxville, Tennessee (150-employees, 7 facilities)

Tindell's, an independent building and material supply company, has been in business in Tennessee for almost a hundred years. Tindell's core business is the retail and manufacturing of building materials. Added value services provided include installation of garage doors, fireplaces, and insulation. Tindell's operates four retail facilities and an Installed Sales Division. Our manufacturing facilities include a Truss Plant and a Millwork Division. The Truss Plant produces roof trusses and wall panels. The Millwork Division produces interior and exterior doors.

Eighty percent of our employees are involved in manual handling and manufacturing job functions. The physical demands of these job functions require our employees to manually lift, carry, push, and pull up to 100 pounds several times a day, while frequently lifting and carrying up to 50 pounds during the normal course of performing their jobs. The probability of MSD's occurring during any work day is high.

As evidenced above, Tindell's is a labor intensive company. We firmly believe that Safety and Health are a shared responsibility. Everyone, from top management to each and every employee, must take ownership of his or her safety and that of co-workers. Building upon this concept and using the program elements of TOSHA's Safety and Health Program Management Guidelines, we train our employees in all areas of safety management and empower them to accept and take responsibility for their safety and the safety of their co-workers. A comprehensive Safety Management Manual detailing Tindell's commitment and belief in safety was developed and implemented during June of 1995. All employees attend Safety Management Training sessions and are asked for feedback on and commitment to achieving our safety goals. As a result of our efforts, Tindell's is participating in OSHA's SHARP Program and has been nominated for OSHA's STAR Award. Our Incident Rate has been reduced 40% and our LWDI has been reduced 50%.

Tindell's has successfully managed all MSD injuries over the past years. However, with implementation of the Ergonomics Regulations, as drafted, Tindell's believes the costs could be so exorbitant that the already very low profit of the building material industry could be reduced to the point of forcing the very small companies (1-50 employees) out of business. Depending upon the number of MSD's incurred, businesses our size would "struggle to survive." Even a 1% increase in operating costs threatens the continued viability of a building material business. The very competitive nature of our business forbids the "passing of these costs to our customers."

During 1996, 1997, 1998, Tindell's had 8 MSD-related injuries. Tindell's paid a total of \$1,438 for medical treatment of all of these injuries. One employee was on light duty two days, one for four days, and one for three days. All other employees returned to work duty the very next day. The number of days of light duty was low enough that co-workers were able to increase their workloads to compensate for the recovering employees. No replacement workers were necessary. Comparing these costs with the proposed Medical Management Removal approach allowing up to six months at 100% salary/benefits, the costs for these same MSD injuries could be \$173,280. These amounts do not take into consideration the additional costs of required training, job analysis, and workstation/job redesign. Please see the attached Cost Comparison of Medical Management Removal.

Tindell's strongly opposes the adoption of the proposed Ergonomics Regulations. We firmly believe that alternatives exist that would not increase our current cost of \$180 per WMSD to a cost of \$21,660 per WMSD.

TINDELL'S MSD's 1996, 1997, 1998

<u>Year</u>	<u>MSD</u>	<u>Days Lost</u>	<u>Medical Cost</u>
1996	Neck Strain	2 Light Duty	\$171
1996	Back Strain	0	50
1996	Pulled Muscle- Elbow	0	45
		Total Medical	\$266
		% Total Medical	11%
		% Total Injuries	30%
1997	Back Strain	4 Light Duty	\$475
1997	Strain Biceps	0	184
1997	Strain Groin	0	96
		Total Medical	\$755
		% Total Medical	4%
		% Total Injuries	30%
1998	Back Strain	3 Light Duty	\$277
1998	Shoulder Strain	0	140
		Total Medical	\$417
		% Total Medical	9%
		% Total Injuries	13%

- 1 Total Cost for three years \$1438
- 2 Using Medical Management Removal scenario would have cost \$173,280* assuming same wages/benefit cost for the three years. This cost represents Medical Management Removal only and does not take into consideration the additional cost of Management Time, Training, Job Analysis, Work Station and Job Redesign.

* See Cost Comparison Medical Management removal

Cost Comparison Back Strain/Sprain Medical Management Removal

Cost of Injury Now: Up to 7 days light duty and then full return to work with medical cost of \$500.

Proposed Regulations: Recovering Employee -Up to six months plus costs of

- Physician visit @ \$500 per month X 6 months = \$3,000
- Employee Wages \$475 X 26 weeks = \$12,350 @ 33% = \$4125
- Employee Benefit Cost \$200 per month X six months = \$1200

Total \$8325

Plus Cost of Replacement Worker:

- Pre-employment Screen = \$185
- Wages \$475 X 26 weeks = \$12,350
- Benefits @ \$200 per month X 4 months = \$800

Total \$13,335

Total Cost of One Claim \$21,660

Upon return to work of the recovering employee unemployment and layoff costs will be incurred for the replacement worker.

General Questions

The following are my thoughts on the General Questions provided by OSHA. I have addressed only those I consider to be extremely pertinent to my industry in respect to the cost and burden of compliance.

1. The draft standard is not clear. My experience flags several definitions as real problems in implementation and in protecting my company from overzealous enforcement officers. I've asked my legal counsel to help me to explain our concerns. The comments below reflect these concerns.

Definitions

Heavy

Significant Part of a Job

To contribute to

Problem Jobs

General Questions 1 and 13 are so closely related that they are appropriately addressed as part of the same discussion. Essentially, Question 1 asks whether any provisions are unclear and Question 13 asks whether we have any concerns about how the standard would be enforced. Our answer to both questions is an emphatic "yes!"

It is our understanding that OSHA rules must satisfy certain legal requirements. They must be written so that they can be understood by both those required to comply with them (employers and employees) and those charged with enforcing them (OSHA compliance personnel). They must be reasonably necessary and appropriate to control a significant risk. Finally, in the effort to advance workplace safety, OSHA may not turn a blind eye to the consequences of measures which it would require but which would undermine the operational and economic stability of the American workplace. In our view, the draft rule does not satisfy these requirements.

Draft Sections 1910.500(a)(1) and (2) and 1910.502(c) use the terms "manufacturing operations" and "manual handling operations" as triggers for specified compliance obligations, and define those terms in draft Section 1910.512. We believe compliance obligations under an ergonomics management program standard should be limited to appropriate hazard information until the occurrence of a WMSD which meets the following criteria: 1) it is an OSHA 200 recordable; 2) it occurred in a job where the WMSD hazards present are reasonably likely to cause the type of MSD reported; and 3) it results in a lost workday case with more than seven days away from work.

It is not enough that a work activity may "contribute to" a WMSD. The use of that ambiguous phrase simply invites a debate over what is a significant contribution and what is an incidental contribution. In any event, the standard should be triggered only if the work activity, without contribution from any non-work activity or non-regular work activity, is reasonably likely to cause the WMSD. That is the only fair and reasonable way of ensuring that employers will be required to control only those hazards which are

both significant and under their control. Of particular concern is the implication that the standard would be triggered where work did not cause but merely aggravated an injury sustained during a weekend athletic activity (e.g., a softball game). If the language "likely to cause or contribute to" is retained, then it is essential to re-insert the following criterion in defining a covered WMSD in Section 1910.500(a)(3): "a significant part of the injured employee's regular job duties involves exposure to these hazards." It is also essential to clearly define the phrase "significant part." Expansion of the triggering phrase from "likely to cause" to "likely to cause or contribute to" will probably preclude most employers from making this type of determination without the assistance of outside consultants with expertise in ergonomics. The demand for this expertise is likely to exceed the supply, especially for the free services currently available from the state consultative services.

If the triggering approach of the draft standard is adopted, it is critical to define the triggering terms so they are clearly understood. Unfortunately, the definitions in 1910.512 simply add to the confusion.

To qualify as a "manual handling operation," the activity must: 1) "involve exertion of considerable force because the particular load is heavy or the cumulative total of the loads during a workday is heavy; and 2) be "a significant part of the employee's regular job duties. This definition is not understandable. First, it is not clear what would be considered "heavy on an individual or cumulative basis so as to constitute an exertion of considerable force. There is no reliable dose-response data that could be used to give some practical meaning to these terms for the multitude of tasks performed in American workplaces. Nor would it be acceptable to use the NIOSH lifting equation which was designed to be substantially over-inclusive and has never been validated as demonstrated in the Beverly Enterprises case.

Second, the definition of "manual handling operations" provides no guidance as to what would be a "significant part" of an employee's regular job duties. If the standard is adopted with this open-ended language, employers across the country will face the prospect of two unacceptable approaches to enforcement: 1) the bootstrap approach (i.e., there is a WMSD and therefore the load was heavy and the activity was significant), or 2) the self-evident approach (i.e., I can't define it but I know it when I see it). The presence of ambiguous enforcement provisions is of particular concern to small business. Because of limited resources to contest OSHA citations, those types of provisions generally mean whatever OSHA compliance personnel say they mean.

The language in the definition of "manufacturing operations" which states that the activities must be "a significant part of the employee's regular job duties" presents the same concern. Furthermore, it is not meaningful to define the term "significant" as "not incidental." OSHA should use a fixed percentage which may not be perfect but at least it establishes an objective standard.

Section 1910.502(c) would establish a "known hazard" trigger for manufacturing and manual handling operations in circumstances where there is no WMSD. As

discussed in the March 25 telephone conference, the adoption of this provision would be counterproductive. It would strongly discourage employers from fully utilizing the loss control services offered by their insurance carriers, from hiring consultants and from performing effective self-audits which might identify conditions or practices which could be viewed by OSHA as "known hazards." This would be the only way of avoiding the generation of reports from individuals who might be prone to automatically view the presence of any MSD risk factors as something to eliminate even in the absence of scientific evidence that there is a significant risk. This provision would also encourage employers to challenge workers compensation claims. In its Preliminary Initial Regulatory Flexibility Analysis (PIRFA, at p. 6), referring to the "known hazard" trigger, OSHA makes the following unsubstantiated and, as demonstrated by the responses from the SERs, completely erroneous statement: "This provision will apply almost solely to firms that have developed and then abandoned ergonomics programs prior to the implementation date of the standard." Finally, if this trigger is not deleted, we believe it would be both unfair and inappropriate to retroactively apply this trigger to events which occurred and materials which were generated prior to the effective date of the standard.

Section 1910.502(e) has been described as a "grandfather" clause which, in theory, would allow those with successful existing programs to achieve compliance by continuing those programs. As the small business participants on the March 25 conference call made clear, draft Section 1910.502(e) is not a meaningful grandfather clause. In essence, it says that if you are in compliance with the standard then you are in compliance with the standard. Since it is not possible to know whether a site is in compliance with the standard, it will not be possible to know whether a site is in compliance with the "grandfather clause." We address the "feasibility" requirement in the discussion of Section 1910.505(a).

Section 1910.503 raises a number of concerns. First, Sections 1910.503(a) and (b)(3) state that an employer's policies must not discourage employee reporting but fail to acknowledge that necessary and legitimate employee discipline will have that effect. There should be an explicit exemption for employee discipline but not an affirmative obligation to take disciplinary action under threat of citation as proposed in the draft safety and health program rule. Second, Section 1910.503(b)(2) contains open-ended language requiring employers to do what a compliance officer ultimately says is "necessary to meet their responsibilities." Again, the presence of ambiguous enforcement provisions is of particular concern to small business. Because of limited resources to contest OSHA citations, those types of provisions generally mean whatever OSHA compliance personnel say they mean.

We understand the agency's interest in encouraging proactive activity. However, given the lack of reliable and objective measures for verifying the existence, severity and cause of most WMSDs, we are concerned that the provisions requiring the employer to designate a person to receive reports and symptoms of WMSDs and to establish a process for receiving those reports would be enforced in ways which are counterproductive. An employer should be permitted to encourage employees to report any "problems" with their jobs and to solicit information from employees on that basis. An employer should

not be required to ask employees (per Section 1910.505(b)(2)(i)) whether they are "experiencing signs or symptoms of WMSDs" given the pervasive presence of MSDs in our society and the suggestive power of those types of questions. We would strongly object to this requirement under any circumstances but it is particularly troublesome in light of the proposed medical removal provision. It would create severe management problems, encourage a rash of unjustified complaints which would trigger benefits under the unjustifiably broad medical removal provision, result in a gross misallocation of resources and, in combination with the proposed medical removal provision, threaten the financial viability of many small businesses.

Along with the medical removal provision, Sections 1910.505(a) and (e) are the most troublesome provisions of the entire draft standard. Section 1910.505(a) states that if there are hazards that are likely to cause or contribute (to any degree) to a WMSD, the employer must "eliminate or control the hazards to the extent feasible." In other words, if this provision were enforceable, it would require the employer to reduce the WMSD hazards to ZERO, subject only to the limits of feasibility which in the OSHA context have traditionally meant what is technically and economically feasible without bringing industry or an industry segment to the brink of economic ruin.

Section 1910.505(e) specifies what an employer must do if WMSDs are still occurring "after you have set up the ergonomics program and implemented the controls that are feasible." In other words, the "safe harbor" language of Section 1910.505(e) does not apply until all feasible control measures have been implemented to eliminate or control WMSD hazards. Unless all feasible measures have been implemented, the occurrence of a WMSD on a "problem job" would appear to establish the existence of a violation of the standard. The January 6, 1999 draft ergonomics standard would have recognized that employers engage in a trial and error process to address ergonomics problems. Unfortunately, recognition of that principle was not preserved in the February 12, 1999 draft which sets up employers for a "gotcha" scenario and places those who attempt to develop and implement the most cost-effective solutions at significant risk of citation and penalty where a good faith effort ultimately proves ineffective and a much more costly but feasible method was deferred.

If Section 1910.505(e) were enforceable, it would require the employer to reduce the occurrence of WMSDs to ZERO, subject only to the limits of feasibility which in the OSHA context have traditionally meant what is technically and economically feasible without bringing industry or an industry segment to the brink of economic ruin. We are concerned that OSHA has initiated the review process of this draft standard mandated by SBREFA and asked small business entities, SBA and OMB to take valuable time to review a draft standard containing requirements (Sections 1910.505(a) and (e)) which clearly appear to be invalid under well-established decisions of the United States Supreme Court in what are known as the Benzene and Cotton Dust cases.

In addition to lacking a legal foundation, there appears to be a substantial disconnect between the stated intentions of OSHA's senior staff participating in the small business review and the actual language of Sections 1910.505(a) and (e). The

interpretation which the OSHA panel members would give to the phrase "to the extent feasible" in Sections 1910.505(a) and (e) bears no resemblance to the interpretation Federal OSHA compliance personnel and the Review Commission would be expected to give to that phrase as currently written. This conclusion is based on the interpretation which was given to the phrase "feasible means of abatement" by Federal OSHA and the Review Commission when applying the General Duty Clause in the Pepperidge Farm case discussed below.

Concerns were raised about how OSHA would define the phrase "to the extent feasible" in Sections 1910.505(a) and (e). Dr. David Cochrane, OSHA's Special Assistant for Ergonomics, was asked to explain what OSHA meant by that phrase. Dr. Cochrane explained that OSHA was seeking a good faith effort from employers in setting up programs which would require relatively modest changes rather than an overhaul of American industry. He illustrated his point by stating that a beer truck would remain a beer truck—a truck that was used to deliver full kegs of beer. We agree with the principle underlying that illustration. However, we have a real concern that Federal OSHA compliance personnel would interpret the phrase "to the extent feasible" in the draft standard to require that beer be delivered in half kegs, quarter kegs, or even single serving cans, to minimize the WMSD hazards, particularly where the delivery required climbing stairs or would be performed by a single delivery person.

Our concern is based not on imaginary worst case scenarios but on citations which were upheld in the Pepperidge Farm case. In that case, the Review Commission upheld citations alleging that the lifting of 100 pound bags of sugar constituted a recognized hazard under the General Duty Clause and that substitution of 50 pound bags at a cost of \$173,700 per year was a feasible means of abatement.

It is not possible to determine whether OSHA included costs of this magnitude in its estimates of the costs of engineering controls costing \$10,000 or more. In its Preliminary Initial Regulatory Flexibility Analysis (PIRFA), the agency explained that its cost estimates were based on the estimates developed by a contractor. OSHA did not provide an explanation of the methodology used or the underlying assumptions but it appears highly unlikely that the data provided by OSHA's ergonomics survey and OSHA's contractor were adequate for this purpose.

In the PIRFA, OSHA explained that the estimated rates of industry compliance with the February 12, 1999 draft standard are based on the responses to a single question (Have you implemented engineering controls?) included in an ergonomics survey which it conducted approximately 5 years ago. The question was not "Have you implemented all feasible engineering controls?" as would be required by the draft standard, but only "Have you implemented engineering controls?" OSHA does not identify the size or make-up of the survey pool or the response rate, or confirm that an adequate definition of the term "engineering controls" was provided to the respondents. Accordingly, it is impossible to assess the validity or significance of the survey results. In any event, we cannot understand how the 5 year old responses to the quoted question would be useful in assessing the current compliance rate with the February 12, 1999 draft standard which

was substantially revised from the January 6, 1999 draft. It would be reasonable to assume that the engineering controls which have been implemented either voluntarily or in response to the requirements of the General Duty Clause were skewed toward lower cost efforts and were not representative of all feasible measures.

We have the same objection to attempts to estimate current levels of compliance with the training provisions of the draft standard based on 5 year old answers to the survey question "Do you provide training in the identification and prevention of ergonomic hazards?" In responding to that question, there is no way of assessing the breadth or adequacy of that training. For example, it could be limited to lifting hazards and not address any other WMSD hazards.

Section 1910.505(b) requires the employer to analyze the "problem job" and any "similar jobs" which Section 1910.512 defines as "jobs that involve the same physical work activities as a problem job." It is unclear whether the phrase "same physical work activities" refers to the same manufacturing or manual handling process or to the same physical movements regardless of the process involved and, if the latter, how similar they have to be. A "similar job" is classified as a "problem job" if the employees are "exposed to the same WMSD hazards." It is unclear whether this refers only to those types of WMSD hazards which are considered significant, whatever that would mean, or whether it refers to all types of WMSD hazards which have a probability greater than zero of contributing to a WMSD, or whether it somehow refers to both the type and severity of the hazard.

In the past, OSHA has set standards by specifying the particular measure to be taken (i.e., locking out a piece of equipment) or by specifying the permissible exposure level. Now, for the first time in its history, OSHA is proposing to set what it describes as a standard by requiring whatever measures are necessary to achieve zero risk and zero injuries (WMSD), subject only to the limits of feasibility. In the OSHA context, this has traditionally meant what is technically and economically feasible without bringing industry or an industry segment to the brink of economic ruin. We do not believe these are permissible objectives under the OSH Act and, until the objectives of the standard are clarified, do not believe it is possible to assess the costs, benefits, or feasibility of compliance with the draft standard.

3 For non-regulatory approaches, I would strongly recommend:

No new regulation is necessary. Simply conduct a public relations campaign to educate employers on their responsibility for ergonomics injury remediation under the general duty clause. Talk about a cost vs. benefit analysis! That is sure to save OSHA much time and money and hassle. AND, I strongly believe it would achieve the benefits desired. Additionally, you will find as you review my comments, that I do not believe that ergonomic injuries should be treated any differently than other workplace injuries currently covered by a myriad of regulations. Separating out ergonomics only puts additional undue burdens on small businesses trying to make a small profit. Why not

create a PR campaign that has the added benefit of creating market incentives for reducing MSD-related injuries in the form of workers' compensation savings.

Additionally, as a human resources and safety professional for over twenty years, I am very concerned about issuing a regulation that would be based on "presumed" benefits from re-engineering and that also puts an undue and unwarranted burden on the employer to "manage" workplace injuries that should be left in the hands of medical professionals. Current public and private sector controls create sufficient incentive for my company to include ergonomics principles in its safety program. A simple PR campaign could help achieve greater results than a formal standard which would not work because the same shoe cannot fit all companies when it comes to reducing MSDs (especially not until OSHA has a much better reputation earned by consistent interpretation of these regulations by each OSHA inspector . . . after all, our businesses, employees, and their families' livelihoods ARE in your hands! You can ruin us with one erroneous interpretation, and this draft standard is rampant with possibilities.)

- 5 As is evident in our profile, we firmly believe that employee ownership is necessary for an effective safety program. However, to "invite" employees to announce a potential MSD goes beyond our commitment. I feel very strongly that certain employees prone to malingering will take full advantage of the ability to claim a MSD and receive 100% pay with no loss of benefits for six months.
- 6 In our conference call, you asked me to try to separate out the benefits attained by addressing ergonomic injuries in my current safety program. I found that we had 8 WMSDs over the last three years that cost us a total of \$1438 and 9 light duty work days. WMSDs represented 30% of our injuries during 1996 and 1997. WMSDs were reduced to 13% of our injuries during 1998.
- 7 A checklist is essential. This point I brought up in our conference call discussion. Without it, employers will have no way of knowing whether they have achieved all "feasible" remediation under the draft standard. Otherwise, how/who determines when an employer has implemented effective adequate controls for "problem jobs?"
- 8 This rule would result in my changing the pre-screening process of our company, "screening out" applicants with potential MSDs. I would begin requiring a back x-ray in addition to the drug-alcohol test that is currently being conducted. Yes, I would worry about potential conflict with the American's with Disabilities Act, specifically with the "reasonable accommodations" provision. However, I would worry more that it would increase my employment pre-screening costs by \$100 (increased by the cost of a physician's visit and the x-ray) I hire between 30-35 laborers a year.
- 9 Our "ergonomics program" consists of 30 minutes of back safety training, which was incorporated into our new employee orientation and our annual safety retraining. We reduced the percent of WMSDs from 30% of our total injuries to 13%.

10. We are participants in the OSHA's VPP and use the expertise of the Consultative Services Division. Since 80% of our jobs have a high probability of an MSD, we would have a difficult time paying the cost of Ergonomic Consultants. Likewise, the availability of Ergonomic Consultants that understand OSHA regulations would be hard to find in this area.
11. As with any other injury, I investigate each claim and leave the remediation in the hands of the physician. It is to my economic advantage, as well as being part of Tindell's mission, to ensure that this injury is not repeated and that other employees exposure to the same hazard is minimized or eliminated where possible.
12. Our safety programs and safety training has enabled us to successfully reduce our workers' compensation premiums 50% from 1998 to 1999. However, implementation of the Ergonomic Regulations would encourage the reporting of suspect claims causing an increase in our rates
13. Enforcement, See #s 3, 7.

Costs and Assumptions

2. Yes, I'm aware of my responsibilities under the general duty clause. See #3 above.
3. No costs associated with compliance with this standard can be passed on. (see profiles)
4. Table 1, p 8 *General comments* Mandatory work restrictions during an employee recovery period and continuation of that employee's normal earnings and benefits places a financial burden on small employers which, in most cases, do not have the luxury of additional staff to perform those additional work duties during the recovery period. The continuation of the recovering employee's normal earnings and benefits and the need to hire, pay, and train another person to perform those functions during the recovery period doubles an employers overhead. This could have significant impact on the future of independent lumber dealers.

Continuation of normal earnings and benefits during recovery is in conflict with most state Workers' Compensation laws that direct payment of 66 1/3 of average weekly wages

To insure 100% wages and benefits during recovery periods provides no incentive for the recovering employee to return to work and is in direct conflict with state workers' compensation return to work philosophies
5. Estimated first year costs of \$73 without an MSD would be close to our cost per employee. So the cost to Tindell's would be more like \$10,950. The first year's estimated cost with an MSD would be \$21,660. See the Cost Comparison Medical Management Removal

6. I believe that businesses that do not have a full-time person to address "human resources" should be considered small employers. In our industry, that would typically apply to companies with 50 or fewer employees.
7. The basic elements, minus the medical management element, are present in the proposed health and safety rule.

Specific Questions

3. A WMSD is a physical condition that is recordable on OSHA 200 logs and that occurred on a job where WMSD "hazards are present." "Hazards present is defined as "reasonably likely to cause or contribute to the type of MSD reported. The phrase "to contribute to" undermines the employer's ability to provide evidence to contest an injury as occurring on the job. "To contribute to" allows injuries from all of life's activities, whether on the job or off, to become the responsibility of the employer.

5. Having a trigger at one recordable injury is not realistic. This trigger appears purely to create a burden on business. Having a trigger as the "frequency of severity" warranted would be more reasonable

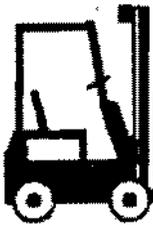
Medical Management

I am highly opposed to this provision. I recommend as an alternative treating MSD-related injuries like all other work-related injuries. We should keep the diagnosis in the hands of the medical professionals to determine whether or not an injury was incurred as a result of the person's job (see comments on "to contribute to" language above).

Placing a time limit, regardless of the amount of time, for providing "no cost to employee" work restrictions automatically triggers the potential of all cases to extend the recovering period to the maximum period of time - be it 3 months, six months, etc. A time limit potentially undermines the ability of the treating physician to medically manage and treat the recovering employee. A malingerer will understand the nature of symptoms to portray in order to extend the recovering period to the maximum.

Allowing income "from employment with another employer" to offset the employers obligation to maintain total earnings during recovery provides: (a) the recovering employee the opportunity to earn more than 100% of "normal earnings"; (b) the "other employer" the opportunity to hire an entire workforce of "recovering employees" at substantially reduced wages, which may challenge the Federal Minimum Wage, (c) the employer to suffer the cost of the recovering employee and the replacement worker during the recovery period.

OSHA has attempted to justify this provision on the ground that there was no traditional OSHA standard to prevent WMSDs and that prompt reporting of WMSDs was therefore important to achieve effective management of WMSDs through a programmatic standard. This explanation overlooks the fact that OSHA has developed a programmatic standard rather than a traditional health standard because OSHA has been unable to develop the dose-response data that forms the basis for traditional health standards. Furthermore, OSHA has, in effect, defined the injuries or conditions to be prevented on the basis of OSHA 200 record keeping rules because the existence of most WMSDs cannot be either verified or disproved through an objective medical diagnosis. This is in direct contrast to the ability to quantify the exposure and verify an objective diagnosis of the medical injury or condition triggering medical removal under OSHA's current health standards. For example, medical removal under OSHA's lead standard is triggered where the average of the last three blood sampling tests conducted over a period of six months shows a blood lead level at or above 50ug/100g of whole blood.



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March 31, 1999

Re Small Business Perspectives on the OSHA Proposed Ergonomics Program Standard, 2/12/99 Draft

Dear Federal Small Business Advisory Review Panel and OSHA:

Murphy Warehouse Company prides itself on being, at this point, a successful family-owned and run business with 170 work associates. We have grown since 1904 by treating our associates as family. As such we work and view our associates as valuable assets, which require safeguarding to the best of the company's and the individual's ability. We therefore have had a formalized safety and ergonomic program for over 10 years now. Therefore my comments will be based upon this perspective.

The issue before us is not do we want to safeguard our working associates, but issues related to the following:

1. How do we accomplish safeguarding the ergonomic quality of our workers?
2. How can we get OSHA to become a valued partner to business and workers in providing technical help and support (vs. just being a punitive and punishing regulator)?
3. How can we develop a program that works to protect workers while being economically feasible for a small business entity to run?
4. How do we determine the level of individual responsibility required by an employee?
5. How do we ensure that an individual employee approaches their job with his/her own safety attitude for themselves and others in mind?

By testimony here I will first highlight a few key points you must consider for a successful program. The second portion of this testimony will comment on select sections of the proposed ergonomics program standard.

PART I

KEY POINT 1 - Individual responsibility and accountability

To be successful here we need all parties working together as a team to achieve the same goal. If one part of the team is not responsible or shows no active participation, how can we expect success? How can we achieve success if the focus of all efforts (i.e. the individual worker) shares no responsibility for the process and the resultant outcomes? I believe firmly that all individuals are accountable to a certain degree for their own actions. If a worker is properly trained and involved in the improvement process but chooses to ignore or act as he/she sees fit for them and then creates an WMSD, why

L 0263



should anyone else but the individual be held responsible for their chosen actions? Under the proposed standard, the employer is always the victim. Is this fair in anyone's eyes--?

Should a company that truly doesn't try hard to work with its workers at reducing WMSD's be penalized? Absolutely yes! But on the other hand, where a company is making an honest effort to comply and a worker doesn't follow the rules, then it is only fair that the standard carry provisions for individual worker accountability

Our nation fought a revolution, two world wars, two Asian conflicts, and a cold war to secure our collective and individual right to personal freedom. With personal freedom comes personal responsibility under most of our laws today.

During our telephone conference call on March 26th with the panel, it was pointed out that OSHA does not have the regulatory authority to hold the individual worker accountable. If this is true, then OSHA should joint venture this standard with the appropriate authority to ensure worker accountability! Please understand that I do not continue to reiterate and advocate for this policy without understanding the legal hurdles that may need to be overcome in Washington to implement. However, it seems that not doing so is patently unfair to an employer. It also seems a bit ridiculous and counter-intuitive to develop a regulation where the focus is not responsible for its personal decisions and actions which have a direct impact and/or contributory factor towards possible WMSD's

KEY POINT 2 – Measurement of "Good Faith Effort"

The entire standard raises the question of "where is the line to be drawn for measuring good faith effort" in meeting standards that rely heavily on an individual company's perception and interpretation of WMSD situations and problem jobs when words such as "reasonably likely", "to the extent feasible", "kind of program depends on extent of the problem", "intended purposes", "significant part of", "basic obligation", etc are used. How does one know where they sit is really the question here

Now if OSHA's culture and reputation were one of assisting employers and employees as trusted advisors in bettering the work environment, then I think the looseness in the language is very appropriate and reasonable. However, with OSHA's current cloud of a punitive culture and a history that displays the perception that "businesses are bad guys always out to screw the workers", why should we expect business not to be leery and unbelievers in the process? With this type of cloud over its head, how can we expect business to see this as a win/win action?

To be successful here we need an OSHA that is supportive of business and its workers. An agency who's primary responsibility and charter is to first give assistance and to be a valuable resource to industry. Then, and only if then, the company shows no "honest effort" then nail them with punitive measures

OSHA must become a friend and trusted advisor in order for true short and long-term success to happen. I urge the panel and OSHA to seriously consider and heed these words.

KEY POINT 3 – Economic Impact

No small business can readily absorb the costs of implementing this standard. Our public warehouse industry's annual profit margins runs only 3-8%. As a service business in an industry that meets rate reduction pressure on a constant yearly basis from companies like Nabisco, Abbott Laboratories, Ross Laboratories, Bristol Meyers, etc. we are not in a position to pass these costs on. Absorbing this level of cost would stop all capital expenditures required to keep a viable business running.

In addition, as a company we find that the low end of compensation for a Teamster, fully benefited warehouse worker is \$48,500. Our employees value working with us and know how competitive our public warehouse environment is, especially against non-union companies. The standard program as currently drafted requires too much documentation. We estimate even given our ten-year start on an ergonomics program, that four to five hours per day, for three to five months are needed by one manager to minimally get this program up and running. Once established, we hope we could meet the standard's requirements with only 25% of this manager's time. Add in the training and "safety reminder session times" for us and we would see 1013 hours of worker time and 755 hours of management time needed the first year for a cost of \$79,013. Year two would need \$62,057 to maintain the ergonomics & safety program. Just to remind all our workers on a monthly basis about safety and this program will cost a minimum of \$26,558/year (see exhibit A). Again, we are not in a position or an industry that is able to pass on these additional costs to our customers.

In order to help small businesses accept this program, especially given their inability to pass the costs on to their customers through their pricing, we need to be creative in finding a solution to lessening the financial blow. Instituting a full tax credit in the first year of purchase for any ergonomic related equipment would be very beneficial. Coupling this with the grant of a partial tax credit in the first three years under this new program for soft costs such as worker training and involvement hours, management time, consultant fees, etc. should also be considered. One idea for the partial credit concept may be to offset 70% of related soft costs up to a maximum yearly figure of \$50,000 for firms with 500 workers and less. Attempting to provide this type of assistance to smaller businesses will help reduce the hurdle rate for many of them in trying to achieve success with this program.

KEY POINT 4 – Joint Development of Model Ergonomic Program

Since we all agree that we want healthy and productive workers, why not then have OSHA and the various industry trade groups work as partners to develop model ergonomic programs that all businesses can use. Let's get the experts to work together to

Proposed OSHA Ergonomics Program Standard
Economic Analysis of Implementation at Murphy
3/3/79

EXHIBIT A

Year One: Program Establishment

Manager Cost:		Maintenance Phase	
Start-Up Phase	4	45 hrs per week	2
Hours per day		25% to time saved	170
Costs per week	3	11.25 hrs per week	340
Hours per month	20	38 weeks left in yr	37
Hours in start-up	18	405 Total hrs	\$12,550
Total hrs	320	\$55 Cost per hr	
Cost per hr	\$55	\$22,275 Cost for 10 weeks	
Cost for 10 weeks	\$11,800		
	\$11,800		
	\$22,275		
	\$17,580		
	\$29,538		
Total Start-up Cost:	\$78,613		

Worker Training:

Start-Up Phase	
Hrs per worker	2
# of Workers	170
Total hrs	340
Cost per hr	\$37
Cost for 1st year	\$12,550

Monthly Safety Meetings Cost

Workers		Management	
# of People	170	2.5	Mgr Time / meeting in hrs
Months per year	12	12	Months per year
20 attendees / meeting	0.33	30	Annual hrs
Annual hrs	873	\$	35 Cost per hr
Cost per hr	\$	\$	1,850 Yearly cost
Yearly cost	\$ 24,908		
Yearly Cost	\$ 28,558		

Year Two: Yearly Program Maintenance Cost

Manager Cost:		Safety Committee Cost	
Hrs per week	45	# of Workers	1
% time saved	25%	12 Hrs per year	12
Hrs per week	11.25	72 Total hrs	72
Hours per year	52	\$ 31 Cost per hr	\$
Total hrs	585	\$ 2,964 Yearly cost	\$ 900
Cost per hr	\$55		
Yearly Cost	\$ 32,175	Yearly cost \$	3,324
	\$ 32,175		
	\$ 3,324		
	\$ 29,556		
Yearly Maintenance Cost:	\$ 62,037		

Monthly Safety Meetings Cost

Workers		Management	
# of People	170	2.5	Mgr Time / meeting in hrs
Months per year	12	12	Months per year
20 attendees / meeting	0.33	30	Annual hrs
Annual hrs	873	\$	35 Cost per hr
Cost per hr	\$	\$	1,850 Yearly cost
Yearly cost	\$ 24,908		
Yearly Cost:	\$ 28,548		

Summary: First Two Years of Operation Cost

Year One	\$78,613
Year Two	\$62,037
Total	\$140,650

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properly develop job hazard analysis and programs for key jobs in every industry. This would greatly help not only big industry but also obviously smaller businesses in complying with any proposed standard.

For our public warehouse industry I can envision models being developed for case picking, packaging, and recoup type activities. I can see forklift mounting/unmounting and ridership models. In the office I can see data input activities and workstation design as potential candidates.

Our industry trade association, the International Warehouse Logistics Association (formerly called the American Warehouse Association), is capable of working with OSHA on this effort. A recent example of a successful joint effort between our trade association and a third party is our ISO-9000 Certification Program. This is a program which has select portions of it standardized for our public warehouse industry which allows the small warehouse operator to have a reasonable chance of reaching ISO-9000 certification. The cost is also very attractive for the smaller business given that it has been developed by the association for a number of members vs. just having one company contract with a consultant to perform the work, etc.

KEY POINT 5 - Ergonomics "Fitting Jobs to People"

Pursuant to Section 1910.512, which defines ergonomics as the science of fitting jobs to people, we need to revisit this concept for a moment. In our system of democracy we are all equal under the law. The results of biological evolution however, have not conferred upon everyone equal strengths and weaknesses in mind, body, and psychological makeup. Therefore, it seems reasonable that not all people are good and safe fits for all jobs. (Note - this presumes that efforts have already been made to redesign a job in a "reasonable manner") Where in the standard do we recognize this natural reality and therefore recognize that all workers are never going to safely and properly fit into certain jobs.

This issue is a serious one which we must address in order to have a reasonable chance at success in implementing a proposed ergonomic standard that is not unduly burdensome to employers as well as workers. Ramifications of recognizing the principle that we want to fit jobs to people yet recognizing that biological evolution has rendered not everyone the same, raises some further points of consideration as follows:

A Individual Physical Conditioning

How should we deal with situations where a worker enters into a profession such as public warehousing which is by its very nature an active, physical profession which requires lifting, pushing, pulling type activities on at least a periodic basis. How do we then deal with the personal choices that a worker may make over the life of his or her career which impact their individual physical condition to perform the tasks of their chosen profession on an ongoing basis. For example, let us consider the individual who through their

own lifestyle choice becomes overweight based on weight to height charts as established by the insurance industry. When the individual first stepped into the profession let us assume that they were in fairly good physical conditioning. As time goes on their lifestyle choice off the job renders them overweight and basically out of condition for the type of physical activity normally associated with their profession of public warehousing. How is a company supposed to respond to this choice by an individual, which impacts their susceptibility to WMSDs.

B. Aging

Let's look at another situation, that being the issue of aging. It is a well-known fact that the aging process naturally takes its toll on our muscles, joints, and general state of health. We also know that an individual through choices that they make in various nutritional type practices and physical conditioning type activities can improve or at least delay the speed at which the aging process moves through ones body. Since we all agree that the aging process is a natural process that we all are subject to, how does the proposed ergonomic standard want to deal with this important situation? The reality of it is that a person enters at a young age the warehouse profession and can perform all of the duties on a fairly easy basis. As time rolls on, even assuming that they maintain good nutrition and physical conditioning practices in their off-duty life, one must assume that aging will potentially impact and/or contribute to possible WMSDs.

The implication of the age factor raises the predicament that an older worker may ask or be required by the company to perform other duties with less exposure to WMSDs. The question that this raises is - "Does this become an issue of discrimination under our laws?" What do I tell a younger worker who now has to perform all of the heavy and tiresome physical activities in our warehouse facility because the older workers can't or have been reassigned to reduce the contribution factor for future WMSD's in order to meet the proposed standard we are discussing here. In our union environment I would expect gnevances to be submitted since this does seem to be an issue of discrimination. Even if we were not working under union bargaining agreements, I believe as the employer that this does set up an unfair situation for the older as well as potentially the younger worker.

C "Contributing to" Issue

The issue raised in the proposed standard regarding "contributing to" issues related to WMSD's are most unsettling. The fact that people are not necessarily the same biologically is a serious issue for those of us who are trying to do the right thing. This whole area severely puts any small business into a no-win bind. Why do I say this? Because under the law, an employer is not allowed in any manner, to have a say in the off-duty lifestyle of a

worker. However, I think we would all agree that off-duty lifestyle choices have a direct bearing on your entire life and physical condition, and therefore when you walk in the door to go to work, your lifestyle choices have obviously contributed to your potential for a WMSD condition. Unless the new proposed standard can recognize this dilemma and come up with a way that is fair to all parties, it is not a reasonable standard as proposed. It places the entire burden upon an employer without any consequences to the worker for choices that they make under our democratic society.

KEY POINT 6 – Economic and Environmental Impact Assessment-Cross Regulatory Conflict Assessment.

Because of the significant impact this proposed ergonomic standard would have on individual businesses, the economy as a whole, groups of workers within a business, and the individual worker, I feel that the proposed standard meets the test for requiring an economic and environmental impact assessment study. This assessment, to a certain extent, has already been started by the very nature of including the small business input being sought by, for example, my participation on this advisory committee. I do know that other business interests and other interested parties input has also been sought under the greater scheme in the review of this proposed standard.

During our panel discussion with OSHA representatives on Friday, March 26th, it became clear through the various comments raised that there is much concern for how the proposed ergonomic standard impacts other existing regulatory laws presently in place by the government. It also raises further serious concerns as to the impacts on various state laws regarding workers compensation and other workplace control conditions.

To sight one simple example, we discussed during the conference call the issue of the receipt by our public warehouse industry, of products from overseas in ocean containers that are more likely than not floor loaded. What this means is that the warehouse environment will often receive 50-100 pound bags and/or cartons directly loaded onto the floor (i.e. not on to pallets, which allow mechanization to unload). The unloading of these international containers is a tough manual job which most of my employees and, in discussion with others in our industry, their employees also do not like to do. In fact, not only do they not like to do it, but they allow the company to hire temporary workers to perform this back breaking task in order to safeguard themselves, even when times may be slow for their own workloads. As an employer, I very much respect this issue when it comes to my workers safety and would want to continue to respect their wishes in this regard. On the other hand, I also recognize that, by this industry practice, we have merely shifted the burden onto someone else and in this case, the temporary employment companies which have grown significantly in these past few years.

The issue raised here has direct impacts on international trade, which far exceed the scope and authority of OSHA to control. OSHA's proposed standard by its very nature would suggest that the loading practices of the rest of the world should conform to what OSHA feels is right for US workers. Though I may be sympathetic to this philosophy, in

all conscience is it a reasonable position for the United States government to take when much of our economy is driven through international trade. The countries in which these products generally come from, whether they are European or Pacific Rim in nature, are countries, which can often be characterized as low-tech environments with a large number of available people who need employment opportunities.

During the discussion of section 1910.507 (e1-3) regarding medical management, it became very evident during our discussion last Friday that representatives of the committee were also concerned about conflicts with states rights over the setting of their workers comp laws and other workplace condition regulations. Because of this, I also believe strongly, that this proposed regulation must include as part of its impact assessment process, a review of the conflicts with states as to what OSHA is proposing since it is now in direct conflict with many states as proposed.

The proposed standard also is in direct conflict and therefore raises concerns on behalf of the businesses as to what law do they try to meet first when it comes to such things as EEOC, ADA, and other workplace regulations. I know that raising this issue of an impact assessment which looks at cross-regulatory conflicts potentially raises a major hurdle to the acceptance of the proposed ergonomic standard. But we must keep in mind, that businesses today are faced with an ever growing and often conflicting, much less often incoherent series of regulations that they attempt to meet. Any small business in today's environment has an impossible task of being in compliance with all regulations imposed by our present state and federal governments. Though we would all like to believe that we are all in compliance with everything, it is physically impossible to do, especially when we are faced with a proposed standard which has been shown by two simple examples above to already set up conflicting scenarios for business. Therefore this proposed ergonomic standard must go through a cross-regulatory conflict assessment process before it can continue further.

PART II

COMMENT ON SELECT SECTIONS OF PROPOSED ERGONOMIC STANDARD

1910-502, Figure 1 Flow Chart

Clear, concise and understandable as presented

1910.502 (a) "Employees (and their designated representatives)"

To make this program successful all parties must be directly responsible and active participants. The individual worker, as well as their designated representatives where appropriate and/or necessary, must both be involved. In other words, where a designated rep is part of the process, the worker must be involved directly also.

1910.504 Communication of information

"may use any form....."

"that employees are able to understand"

"...and providing information in the languages employees use and at levels they comprehend"

I commend the proposed standard for trying to be reasonable in understanding the multi-levels of communication abilities that exist in our workforce. However, my concern rests with the burdens that any small business may experience in attempting to meet this standard to the letter of the law. For example, who will interpret quotes 2 and 3 above as to its adequacy: the worker, the employer, or the OSHA inspector?

No small business that I am aware of, much less ourselves, would be able to afford to provide any of this information in other than the English language. In fact at what point do we assume that our nation's official language is English and therefore it is the ultimate responsibility of a worker to learn English to function in our society? I do not raise this issue without realizing the serious consequences implicit in my argument. I am not interested in discriminating against any potential worker because of language barriers. My comment is based on the premise that is it reasonable to expect any business, much less a small one, to carry the burden of society in assuring that a worker who does not speak the native official language of the society in which they now live does so? A role that OSHA could play is to provide assistance to any company where language barriers are a major issue in order for a company to be able to communicate with its employees at levels that they can comprehend.

The whole issue of at what level an individual comprehends to me seems to infringe upon a certain level of privacy. In other words, how do I deal with a group of employees where the scale ranges from a college graduate down to a level of someone who quit school after the age of 16 and who has led a life which can be described as "street oriented" vs academic oriented. A small company can only be expected to do its best to communicate to each and every one of its employees, but to place a burden which carries with it the implication of a future violation and thus punitive penalties seems to me unfair.

We have experienced even in our company, located in a part of the country where the general education level is fairly high and good, we have seen situations where employees have been through training, signed the proper documents attesting that yes, they understood it, and then they go out and do the opposite of what their training requested and/or required them to do. In all reality, this is not a situation that is uncommon, nor is it a situation that will go away given human nature. This again reinforces my earlier argument that a worker must be required, under this proposed standard, to carry some personal responsibility and accountability for their actions once they have been through a reasonable training process and especially when they have shown through documentation that they have attended and have either passed tests or attested to the fact that they understand the information that was provided to them.

1910.504 Line 211 "Violation of this standard"

If it is our intention through this proposed standard to help safeguard workers, why then is it necessary to discuss "violations"? This whole issue as I discussed under "key point 2" and which has questions which arise from sections 1910.501, 502 and 505(b), that if an employer and the employees make a best effort decision, then how can anyone be in violation of a proposed standard per se given the latitude as it is presently written? Again, I repeat myself from earlier - OSHA should become a trusted advisor and friend of industry and workers, and give up its primary role as a punitive enforcer of regulations which at best are decipherable only by experts in the field and/or attorneys.

1910.506 Training

In our program here at Murphy which we have been operating for over 10 years, we have found the use of appropriate accidents excellent case studies to communicate with employees safety issues and ergonomic process concerns. For example, in our case studies, we look at what went wrong, why it happened, how to prevent it in the future, and through this we try to reaffirm a safety attitude in all of our employees. I would encourage the panel to also consider the concept of case studies that arise within any one company as excellent tools for reinforcing any type of ergonomic and/or workplace safety culture. Accidents will happen unfortunately and though no-one in their right mind wants a worker to be injured, I do think that it is appropriate to look at it from a different angle and say that when an accident does occur, also look at the positive side of it in terms of how it can help us to reinforce our safety attitude so that other employees can learn from others misfortune.

1910.507- Medical Management

Under section d2, it is stated that we must ensure those employees' privacy and confidentiality regarding medical conditions. I don't believe anyone disagrees with this basic premise. However, what is a business to do when an HCP finds a related or unrelated to a WMSD condition a medical situation, such as a heart condition, which could jeopardize an employee's future health and/or contribute to a future WMSD condition. Why should this information not be provided to the employer in order to help protect the worker in the future, given that it is now a given known medical condition?

Where does basic logic enter into this equation in the safeguarding of an individual whether they are an employer and/or the worker under this regulation? Again, let me stress I have no qualms protecting employee privacy and confidentiality. However, how is a company to protect itself and its other employees against the risks - financial, physical, emotional, and perceptual - if it is found after a WMSD is created or, a worse situation happens, just because the company can not be informed of a truly serious medical condition that arose during an examination pursuant to meeting the letter of this

ergonomics regulation. We need to put back into this regulation and our general day to day functioning, a sense of reasonableness and logic.

In item e2, it states that an employer is to maintain an employees' total earnings when under work restrictions due to a WMSD situation. This directly conflicts with states' rights as to their individual workers comp laws and regulations! This statement alone raises serious questions as to how an employer is supposed to meet conflicting regulatory demands put upon it when they are not in sync.

Section e1 discusses providing duties that fit within the medical restrictions placed upon a worker after an injury has occurred. What is a small business to do if it has no duties that can fit within those restrictions and it has no ability to financially create duties to meet an injured workers' restrictions? It is patently unfair to the company as well as the rest of the workers to assume this financial burden in those situations where a business cannot truly find a place for an injured worker under light duty and/or medical restrictions. This provision must be changed to read something to the effect "an employer will work to try to meet work restrictions recommended for the injured worker by an HCP and/or designated work comp professional".

And finally, item e3 requires that a company "must insure" that an HCP periodically follows up on the employee during the recovery period. Why is it necessary for the company to be saddled with this personal responsibility? Why is it not in all of our best interests to have the worker take this responsibility to periodically follow up with the HCP? It seems that requiring an HCP and the company to make sure that an employee looks out for themselves and their own best interest is ludicrous, especially given a medical situation.

1910.512- Definition of key terms.

A "Administrative controls"

Under the definition of administrative controls is an example relating to "adjustment of work pace". In a small business, especially one in our industry, the public warehouse industry, our whole premise as a service business is based upon how long it takes to perform a duty and how much space it takes to either store and/or perform the duties required by a customer. This implies that a certain level of productivity is necessary in order to remain competitive in our industry. In addition, if I was to allow only certain employees the benefit that they could work at a slower pace because of either recovering from a WMSD hazard, or because they are prone to a certain WMSD hazard; or because of the aging process, I would set up within my company a highly discriminatory environment. In our union environment, this type of activity and/or selective benefits to only certain individuals would not be a tolerable situation. Nor should we disregard the human dynamic aspect of worker to worker relations when it comes to fairness and support of the team effort. I think that we would be setting up a no-win situation for the worker(s) and all others involved in this regulation if adjustment of work pace is taken seriously as a control to WMSD hazards.

During this definition it is described that exercise programs are not prohibited but that they are not considered administrative controls under the standard. We find here that over the past ten years after we instituted a formal exercise/stretching program to reduce our workers' exposure to pulled muscles on their backs, that this program was effective on a daily basis. It is especially effective in our region of the country where, during the spring and fall seasons, with the change of temperature, that this is the time when we had historically found most of our pulled muscles and strain type injuries. This type of injury has now been lessened significantly and we have also found that the stretching program has helped to reduce the frequency of any WMSD type muscle strain injury! We find that this stretching program is an effective prevention and control tool for certain manual tasks and, as such, we will continue with it. My question is why does OSHA not view it as a positive program under this requirement?

B "Manual Handling Operations"

Under the definition of manual handling operations the issue is raised as to what are "substantial loads" and what is considered "a significant part of an employees regular job duties". By the very nature of our warehouse industry, manual handling work activities can be a significant part of any of our workers' daily duties. This is not necessarily the issue at hand here however. No, the issue stems from what is substantial and significant to one individual worker versus another individual worker! Who, in reality makes the determination - the worker, the employer, the OSHA inspector, or others? I don't raise this issue to be trite. I raise it because, quite frankly, I am concerned as to what is a substantial load for one type of body composition is not substantial to another. Therefore, if a company determines by its job descriptions, with various lifting requirements that, in order to protect certain types of potential workers from future WMSD's, then does it not make sense that a company has the right, if not the duty, to discriminate against certain potential workers in obtaining certain types of jobs? I think this is a reasonable practice given the best information that an employer could obtain in a reasonable manner in order to protect certain individuals from work that could be or could become hazardous to their ultimate health and/or physical condition. Therefore, will this standard support an employer in carrying out its best effort in accomplishing this protective task, or will another government agency step in and charge a company with discriminatory practices, etc.?

This issue alone raises questions of where in this entire proposed standard has OSHA reviewed with other regulatory agencies the cross intersections under their regulations that this proposed standard will impact. It seems that in order to develop this standard so that it is not mired in a myriad of conflicting legal challenges and/or regulatory challenges that it must be put under review by such agencies as the EEOC, ADA compliance officials, and other work place regulatory agencies.

C. "MSD"

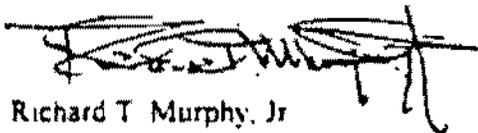
Under the definition of an MSD, if we were to strictly apply this to a normal routine behavioral situation for all of us, I think we would question whether it has gone too far. Let us take a look for a moment, and apply this standard to a worker or for that matter, any of us, who by the nature of how we slept the night before, wake up with a backache. Now, if we analyzed this situation under the proposed standard, we would find that, if over the course of a series of nights, that due to our sleeping position, we created for ourselves back pains then we are in essence, living with a "problem job" which is sleeping

Now I know that some of the readers of this letter may think that I am pushing this point too far. Yes, that may be true however it is raised under the perception that I do not know, nor do we have any feel as an industry group, how OSHA will interpret to the letter of the standard, each of the provisions contained therewith. Therefore, one very strict and narrow minded OSHA inspector could come to the conclusion that workers are suffering MSD's by how they sleep at night and because of the type of work they perform in their jobs, the employer is found to be contributory to the worsening of this condition. As you can see, this is a no-win situation for anyone including the poor worker.

In closing, I want to thank OSHA and the panel for the opportunity to have been a participant in this important process. Please let me know if I can be of further service.

Warm regards,

MURPHY WAREHOUSE COMPANY



Richard T. Murphy, Jr.
President

RTM/car

L 0275



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(excluding transmittal page)

*Richard T. Murphy, Jr. SBREFA
Comments.*



Winston W. Wood, D.D.S.
Connie M. Verhagen, D.D.S.

PEDIATRIC
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DATE: 1 April 1999

TO: Marthe Kent
Chair
Small-Business Review Panel for OSHA Ergonomics Standard

FROM: Connie M. Verhagen, D.D.S.

I want to thank you and the other federal panelists for inviting me to share my thoughts and concerns about the potential impact of OSHA's draft ergonomics standard on my dental practice. As you know, dental practices are really micro-businesses; the average dental office has only four employees. For this reason, I am grateful to both SBA and OSHA for including a dentist on this panel and thereby offering dentists, through me, an early voice in this rulemaking.

My written responses to your questionnaire are enclosed. Also enclosed is the back-up information on the estimated cost to dental offices, which several panelists specifically requested. In this memorandum, I would like to re-emphasize the three most important points that I raised during the March 24th meeting at OSHA.

Non-regulatory alternatives to OSHA rulemaking. OSHA has asked those of us participating in the panel process to suggest possible alternatives to the ergonomics rulemaking. As I said at the close of the panel meeting, I think OSHA should actively encourage—or at least be receptive to—employer-developed voluntary education programs that are consistent with OSHA's goal of reducing work-related musculoskeletal injuries. I would like to see OSHA solicit employer-developed model education programs that are workplace-specific. In the past, OSHA has collaborated successfully with trade associations and large and small employers on various educational initiatives aimed at preventing accidents and injuries in the workplace. OSHA recently held a conference for the small-business community to promote the possibilities of partnering with OSHA. It seems to me that the ergonomics rulemaking offers OSHA an excellent opportunity to put all this together and work with very small businesses and their trade associations to develop non-regulatory alternatives that are truly non-regulatory.

OSHA's "zero" cost estimate. OSHA's impact statement for me says that the draft ergonomics standard will cost nothing unless and until a work-related musculoskeletal injury actually occurs in my dental office. As I said at the panel meeting, I strongly

disagree. Just reading and understanding the standard will take a substantial amount of time. As I told the panel, it took me 40 hours just to read the material that OSHA sent me. I never even got to the material that the ADA library sent me. In most cases, dentists will have to do the work themselves. As very small employers, they do not have staff that can perform this function. So the cost of preparing for this standard is not zero. As I said at the panel meeting, I estimate the cost of preparedness at nearly \$5,500 for a dental office like mine. (Please see attached cost breakdown.)

"Medical removal protection." This is where the draft standard's disproportionate impact on very small workplaces is most obvious. During the panel meeting, OSHA staff indicated that the "medical removal protection" provision has been misunderstood. They said it was never intended to serve as an inducement not to work. I left the meeting with the impression that OSHA plans to completely rethink this provision, and I strongly urge the agency to do that. For a small dental practice like mine, the cost of double-coverage of a licensed clinical position (e.g., dental hygienist) for as long as six months would be ruinous. OSHA apparently based its own estimate on an absence of eight days, but that is not the way the draft standard is written. It is important for OSHA to take a fresh look at this issue.

I hope my comments are helpful to the OSHA, OMB and SBA panelists as they prepare to draft the final report. If I can be of any further assistance, please let me know. Again, I want to thank you for inviting me to participate in this review process.

Enclosures (2)

L 0278

Issues for Comment and Discussion With Small Business Advocacy Review
Panel on OSHA's Draft Proposed Ergonomics Program Standard

Comments from Connie M. Verbagen, D.D.S.

GENERAL QUESTIONS

1. Is the draft standard clear? Are any provisions unclear? If so, which ones are unclear?

Section 1910.500, "Does this Standard Apply to Me?" is unclear. The definition of "work-related musculoskeletal disorder" used here requires the employer to make three judgments to determine coverage:

- *Whether the condition is—or would be—"recordable" on the OSHA 200 log.*
- *Whether the hazards present on the job are likely to cause or contribute to that type of condition, and*
- *Whether a significant part of the employee's regular job duties involved exposure to those hazards.*

Very small employers such as dental offices are unfamiliar with requirements for "recordable" illnesses and injuries on the OSHA 200 log. OSHA has proposed a change in these requirements and the final rule hasn't been published. As a result, I don't know what will be "recordable" when the proposed ergonomics rule takes effect.

It's not clear who will determine whether the hazards of a particular job are likely to cause or contribute to a particular condition, or whether a significant part of the employee's regular job involves exposure to those hazards, or what standards they will use. Different employers may reach different conclusions. The result might be uneven and inconsistent compliance.

2. How could OSHA clarify the standard to eliminate any problems in understanding? *I could better understand my responsibilities under the standard if the single musculoskeletal injury triggering coverage were tied to an objective criterion such as medical diagnosis of the employer's condition.*

3. Are there any non-regulatory approaches OSHA could take that would provide you and other small entities with ways to reduce/eliminate MSD injuries effectively? *For example, would guidance on how to set up a safety and health program be an effective approach?*

I would like to offer these four suggestions. First, I think OSHA should encourage the development of voluntary, educational programs that could help achieve OSHA's goal of reducing work-related musculoskeletal injuries. This would be a realistic non-regulatory alternative especially for very small businesses that are represented by national trade associations. Second, the adoption of any standard with as many ambiguities as this one should be tied to changes in the law that would permit OSHA to issue warnings, rather than penalties. Third, development of this standard should go hand in hand with a substantial increase in OSHA's consultation services to help very small employers comply. Fourth, OSHA should pilot an ergonomics program and use the data gathered from the pilot program to decide whether a general industry approach is really needed.

4. Are you aware of any regulations that duplicate the requirements of this regulation? If so, what is that regulation(s)? *No, I am not aware of any regulations applying to my dental office that duplicate the requirements of this regulation.*

5. Do you foresee any difficulty in implementing the employee participation element of the proposed rule? For example, do you believe that it will raise labor/management issues? If so, why? Would implementation of the draft ergonomics standard be easier or more difficult depending on whether you have a union shop?

My employees are very much involved in OSHA compliance in my dental office. I think that's true of most dental offices, where dentists and their employees work side-by-side. Although we work as part of a team, OSHA holds me ultimately responsible for compliance with its standards. The concept of employee participation in the proposed standard is a good one, but care should be taken not to raise unreasonable expectations. The reality is that employee participation must stop with advice and input. As the employer, I have the ultimate authority to make decisions about compliance.

6. Do you have a safety and health program? If yes, does it include ergonomics? What costs or benefits, if any, would this rule add that are not already addressed by your safety and health program? *I do have a program for the safety and health of my employees, but I do not know to what extent it meets OSHA's particular definition of a safety and health program.*

7. What kinds of compliance assistance materials would assist you in assessing ergonomic hazards? For example, would a checklist be helpful to identify ergonomic hazards?

It would be helpful to small businesses if OSHA would delay any ergonomics standard at least until the agency's consultation program is fully prepared to handle the anticipated volume of requests for help. Beyond that, OSHA should look to the ADA to develop any dental-specific materials such as checklists. OSHA and the ADA have collaborated successfully on educational and compliance materials in the past; one good example is a booklet on post-exposure evaluation and follow-up requirements under OSHA's Bloodborne Pathogen Standard.

8. In your opinion, does this rule create a disincentive to hire, retain, or provide insurance to persons who might be perceived as being pre-disposed to ergonomic injuries? If so, please explain. *I don't know.*

9. If you already have an ergonomics program in place, how many hours did it take for you to set the program up initially? Have you seen measurable results? If so, what are they? To the degree your program was ineffective, do you know why it was ineffective? *While I carefully monitor the working conditions in my office and encourage my staff to discuss any problems, I do not have a formal ergonomics program in my dental office. There doesn't appear to be any need for one.*

10. With whom do you currently consult or obtain guidance on workplace safety issues? Safety and health professionals? Your insurance carrier? Trade associations? OSHA consultation program? Your lawyer? Others? Do you feel there will be a need for outside consulting in order to come in compliance with this proposed rule? How much do you think any necessary outside assistance will cost?

I usually hire consultants because they are equipped to consolidate information from several sources. In addition, I have used the ADA as a source of information and assistance. Because I am not an ergonomics expert, I would need to hire a consultant to implement the proposed OSHA standard. My best guess is that a consultant would probably charge \$1,500 to \$2,000 to establish a program, an additional monthly fee of \$50 to \$100, plus an annual training

fee of \$250 to \$400. OSHA needs to remember that micro-employers such as dentists, unlike large employers, don't have safety and health officers on staff.

11. How do you currently identify work-related MSD hazards in your business and how might this change as a result of this rule?

My dental practice, as I've said, is very small (eight employees) and most dental offices are even smaller (four employees, on average). As far as musculoskeletal injuries are concerned, I keep up with the scientific literature. In addition, I have encouraged my employees to come to me with whatever occupational health concerns they may have, including, of course, any concerns about musculoskeletal injuries. Finally, I emphasize the importance of good posture and comfortable positioning. I tell my staff that performing tasks and procedures properly—as they were taught in their dental hygiene and dental assisting programs—is probably the best defense against fatigue, error and musculoskeletal injuries. I would expect to continue this type of open communication and informal teaching, with or without an OSHA ergonomics standard.

12. What is your experience with workers' compensation premiums in the last few years? If you have a safety and health program that includes ergonomics, have you seen any impact of the program on your premiums? *During the ten years that I have been practicing dentistry, I never have had a workman's compensation claim of any kind. My premiums have remained stable.*

13. Do you have any questions about how OSHA will enforce this rule? If yes, what are they?

I'm most concerned about the ability of OSHA compliance officers to properly screen and investigate complaints under the standard. The draft standard will be a new departure for them, as well as for employers. I urge OSHA to make comprehensive training for its employees who will be enforcing the standard a major part of its planning for the standard. Otherwise, I see a return to the days when dentists routinely experienced inspections that were extremely disruptive to patient care.

COSTS AND ASSUMPTIONS

1. How many hours do you estimate it will take to comply with each of the rule's program elements? What do you estimate the costs of "controlling ergonomic hazards" will be? What is the basis for this estimate? *(See answer to Question #1 below and the cost breakdown for dental offices, attached.)*

2. Are you aware of your safety and health obligations with respect to ergonomics under the General Duty Clause of the OSH Act, which requires employers to provide their employees with a work-place that is free of recognized hazards that are causing or are likely to cause death or serious physical harm? If yes, how did you become aware of your General Duty clause obligations? Has this awareness led you to develop measures addressing ergonomic hazards?

I am aware that I have a general duty to provide my employees with a workplace that is free from recognized hazards that cause, or are likely to cause, death or serious physical harm. I am not aware of any musculoskeletal disorder that is a recognized hazard—as this term is defined—under the General Duty clause.

3. Will you be able to pass on to your customers any associated costs of controlling hazards related to MSDs? Provide the basis for your answer, please.

No. I will not be able to pass on to my patients the costs of complying with OSHA's proposed ergonomics standard. I am the only pediatric dentist in my area, and I have a very large Medicaid practice. This means that all of my patients are children, and most of them are poor children. I cannot raise fees to Medicaid patients: Medicaid fees are set by the state governments, and health practitioners may not charge Medicaid recipients more than the amount allowed by law. Although I am not involved in any managed care plans, other dentists are. Managed care contracts usually limit the amount that participating practitioners may charge covered patients. Quite frankly, I would hope that any federal ergonomics program would not increase the cost of providing dental services. Any program that raises the price of dental care will very likely result in fewer people seeking care when they need it. Because dental care is so prevention-oriented, anything that discourages people from seeking preventive care is not in the best interest of anyone—the dental profession, their patients or the general public.

4. Table I of the Preliminary Initial Regulatory Flexibility Analysis provides a list of assumptions OSHA used to estimate regulatory costs. Do you agree or disagree that carrying out each regulatory activity indicated in the table will take about the amount of time indicated? Are the employees identified in the Table the employees who would carry out these activities in your firm? Are the costs for medical removal protection and controlling ergonomics hazards reasonable averages, given that individual cases can vary widely in costs?

I strongly disagree with OSHA's assumptions. Time and costs are very much underestimated. In my dental office, I serve as the Occupational Safety and Health Manager. I would be responsible for implementing this standard. The time required to do so would take me away from providing dental care, and this, in turn, would penalize my patients and place a burden on my practice.

Each clinical position in a dental office is highly specialized, requiring specialized education and training. In addition, these clinical positions require licensure. If one person is absent in a small office of four or five staff members, then the entire operation is jeopardized. If one of my staff members is absent for six months, then I will be profoundly affected. A temporary replacement must be identified and hired, and unfortunately, dental hygienists and dental assistants are not easily found. Costs not included in OSHA's calculations include: lost revenues from non-coverage for a clinical position, advertising for a temporary replacement, paying a premium salary because of hiring a person into a temporary position, and finally, non-productive time due to training. Realistically, I may not even be able to find a clinician to temporarily replace an injured staff member, thus leading to a loss of tens of thousands of dollars.

My estimates of the costs of compliance with OSHA's draft ergonomics standard are as follows:

<i>Cost to dentist/owner regardless of WMSD experience</i>	<i>\$ 5,490.</i>
<i>Additional costs incurred by one "recordable" WMSD</i>	
<i>Initial</i>	<i>\$ 5,855.</i>
<i>Months (12)</i>	<i>\$ 900.</i>
<i>Annual</i>	<i>\$ 1,605.</i>
<i>Records</i>	<i>\$ 655.</i>

My cost estimates, including those for "medical removal protection," are far above OSHA's estimates for dental practices. This is not surprising to me. Years ago, OSHA's estimate for implementing the Bloodborne Pathogens Standard in the average dental office was \$872. Later, a survey of actual cost experiences of dental practices

found that the true average cost was \$23,713. I will be pleased to make a detailed analysis of my cost estimates available to panel members, along with my written comments, on or before April 1.

5. In this preliminary analysis, OSHA's cost and benefits analysis are dependent on several key estimates. OSHA has relied on BLS data concerning rates for MSDs; those for your industry are given in the one-pager showing impacts for your industry. OSHA has also estimated that there will typically be 1 to 2 additional jobs that will require correction when an MSD occurs because they are "similar" to the job in which the MSD occurred. OSHA also estimates that ergonomics programs can reduce the incidence of MSDs by 25% to 75%. How do these estimates compare with your experience?

The industry data you gave me (Standard Industrial Classification 80) does not pertain specifically to dental offices (SIC 8021) but, rather, to health care settings generally. In some of these other health care settings, employees do a lot of patient transport and lifting. Dental team members are very specialized in their job duties, with little overlap. Little is known about the relationship between the tasks that dental workers perform and musculoskeletal disorders. OSHA's estimate of a 25 percent to 75 percent reduction in such injuries very likely will not apply to dental offices.

6. OSHA proposes to offer some regulatory relief to entities with fewer than 10 employees, but provides no cost or benefits data for this group. Do you believe firms with fewer than 10 employees have different economics than firms with 10-19 employees, and if so, do you believe OSHA should provide a data breakdown on both of these elements of the "very small business" sector?

I believe that the impact of additional costs will be disproportionately severe on dental offices. For example, costs for "medical removal" of a hygienist would be about \$28,000 minimum. This would have a significant impact on the bottom line of an average dental practice and it doesn't even take into account the costs of the other aspects of a full program

7. Do you believe that OSHA should consider whether the ergonomics coverage implicitly provided by the safety and health programs regulation that the Agency is considering proposing is sufficient without also having an ergonomic program standard? *I can tell you that an ergonomics standard is not needed for dental offices. But I'm not really in a position to comment on OSHA's proposal for a Safety and Health Programs Standard or its implied ergonomics coverage*

SPECIFIC QUESTIONS - Sections of the Standard

1910.500 - Does this Standard Apply to Me?

1. After reading this section, do you understand whether this standard applies to your business? Are the definitions of manual handling and work related MSDs clear? Do you think some employees in your business engage in manual handling? Could you describe the nature of the jobs that you consider manual handling?

In my response to your very first question, I addressed issues of clarity and applicability. Strictly speaking, dental offices would not be covered under this standard unless and until a triggering incident—a "recordable" WMSD—occurred to a dental employee. As I have suggested elsewhere, it would be helpful if the triggering incident were tied to an objective criterion, such as medical diagnosis. I know that some small-business representatives have

suggested linking the triggering incident to lost work time, and I like that idea, too. Dental workers do not engage in manual handling as defined in the standard

2. Do you think that a small business within your industry will have difficulty determining if their business has a "problem job?"

I expect to have some difficulty determining whether or not a particular job in my dental office is a "problem job." There really aren't enough good studies about ergonomics problems among dental workers. For example, there are no good studies on prevalence, yet prevalence data are necessary to begin to determine the "excess risk" presented by any particular job.

3. Do you feel confident in your ability to identify whether a particular injury (an MSD) is "work related" as defined by the proposed rule?

No. I am not confident that I, or most dentists, will be able to determine whether or not a particular musculoskeletal injury in a dental worker is truly "work-related." The complex etiology of these disorders makes it very difficult to pinpoint cause. Often, personal or individual risk factors play a part in the development of musculoskeletal injuries. Risk factors unrelated to work are not under the control of the dentist/employer during work hours, of course, but they may well be under the voluntary control of the worker during off-work hours.

4. Are you required to keep OSHA 200 logs? If not, are you aware of the criteria involved in recording injuries and illnesses for the OSHA 200 log? *No. I'm not required to keep OSHA 200 logs, and I understand that won't change.*

5. The proposed rule used the occurrence of a recordable MSD as a trigger for further action. Instead, should the rule use signs and symptoms of MSDs that are not yet recordable as a trigger? Or should OSHA use at least two MSDs to trigger employer action?

What should trigger the standard is job-relatedness. It's essential to keep in mind that the problem may well be with the individual, not with the job, when there has been no history of ergonomic injuries. Employers should not be expected to make job modifications when the job is not the problem.

For this reason, and given the state of our knowledge about MSDs, using vague signs and symptoms to trigger the rule would be a very bad idea. Again, I would suggest that an individual medical diagnosis be required before a musculoskeletal disorder would trigger coverage of the standard. The diagnosis should include an assessment of whether the employee's condition is, in fact, job-related. Otherwise, employers could spend a lot of time and money trying to solve a problem that they did not create. In addition, OSHA should figure out a way to introduce a time factor. For example, if a dental office has been operating for five years with no reported WMSDs and no change in work procedures, then the occurrence of one WMSD should not trigger the full program. The office could go another five or more years without another occurrence.

6. Is the definition of an MSD clear? OSHA's list includes several musculoskeletal diagnoses; however, determining whether or not a given MSD is work-related is the problem.

L 0284

7. Should the draft standard cover all of general industry? Alternatively, should it be restricted to manufacturing operations and manual handling only? *Any ergonomics standard should be restricted to manufacturing operations or manual handling jobs where MSDs have been shown, through competent research, to be work-related*

1910.501-502 Purpose & Basic Obligation

1. Have there been work-related MSDs within your workplace in the last three years? Do you feel that this standard, if it had been in place prior to those injuries, would have eliminated or substantially reduced the number or severity of those WMSDs?

In ten years of practicing dentistry, no one in my dental office ever has experienced what would be considered a recordable musculoskeletal problem, i.e., one necessitating any restricted activity, lost work-time or medical treatment.

2. If you already have an ergonomics program, does it comply with OSHA's requirements under .502(e)? Do you understand what the 'purposes of each requirement' are within this standard, so that you may determine if each differs from those of your current program? Is the rule flexible enough to accommodate your program, or other effective programs? *As I mentioned in a previous response, I do not have a formal ergonomics program in my dental office*

3. Is a basic program necessary in any firm? Alternatively, should the basic program requirement be extended to all firms? If yes to either question, what elements should be in the basic program?

No. I believe that OSHA's ergonomics program should be implemented only in workplaces where a history of ergonomic injuries is evident from OSHA 200 logs or other documents. Because dental offices are so small and differ so much from other health care settings, the best approach here would be to encourage the development of a model voluntary educational program specific to dentistry.

4. Are all of the elements of a full program necessary? Are there elements that should be added? If so, what are they? *No. See above*

5. What is your view of the draft provision that you could avoid most of the rule's requirements if there are no MSDs for 3 years? Does it provide appropriate relief for employers who have successfully controlled their ergonomic hazards?

This provision does not offer adequate relief. If there have been no work-related musculoskeletal injuries for a period of three years, then there should be NO requirements under the standard. Remember, another such injury, should one occur, would require full compliance with the standard.

1910.504-505 Hazard Identification, Analysis & Control

1. How often do you feel it would be necessary to identify ergonomic hazards within your business? Where would you turn for information on "how to recognize signs and symptoms," what is causing the problem, and what are the 'reporting signs,' so that you can provide information to your employees?

In a small dental office like mine, it might be helpful to try to identify potential ergonomic problems initially, and then again if there are significant changes in work practices. For information and guidance, I would look to the ADA and to my outside program consultant.

2. The standard requires you to ask employees in jobs that are similar to an identified 'problem job' if they are experiencing MSD symptoms. How will this approach work in your business? Please provide the reasons for your answer.

Generally speaking, this part of the OSHA standard would not apply at all to dental offices. Remember, the average dental office is very small, with only four employees. This means that there is only one clinical professional in each job category—one dentist, one dental hygienist, one dental assistant, etc.

3. Do you believe that you will be able to 'evaluate the job factors' and determine which ones are 'likely to be causing or contributing to the problem?' How often will you need outside assistance to make such evaluations?

No. I am not trained to evaluate specific job factors and determine which ones, if any, may be causing a problem. Again, I would need to rely on outside consultants or the ADA or both.

1910.506 Training

1. Please describe any ergonomics training that you already provide to your employees. How many hours of training is provided, how often? Would this rule require you to provide additional training to your employees? If yes, what additional training is needed, and what costs do you anticipate? How often is retraining needed? Is retraining needed at least every three years?

At present, I don't provide any formal ergonomics training. The professional schools and programs do provide such training, however, and so new clinicians beginning work in private dental offices arrive "pre-trained." This is why I tell my staff to remember the ergonomics tips they learned in school, and to practice them on the job.

1910.507 Medical Management

1. Should OSHA require medical removal protection for employees who are injured or made ill by ergonomic hazards? Are there less expensive alternatives that would achieve the goals of medical removal protection?

OSHA needs to rethink either the "medical removal protection" provision, or the scope of the standard, or both as they apply to very small employers. It is not an overstatement to suggest that this requirement alone could mean the difference between success and failure for very small dental practices. I am particularly concerned about new dentists just graduating from school and trying to set up practices with crushing debt loads, or dentists like me, who serve large populations of poor patients. The very small employer's obligations should be limited to existing insurance coverage.

2. How will the medical removal protection provision affect your business, in your opinion? Do you provide for any of the elements of the medical removal protection provision as part of your existing personnel policies? What is the basis for your projection of the impact on your business?

For dental offices, "medical removal protection" is, by far, the single most burdensome provision of this standard. The economic impact on a dentist/owner with ten or fewer employees will be devastating. The requirement to maintain salary and benefits for an injured employee for up to six months is extreme. Dental offices do not have the staffing flexibility that OSHA seems to envision; they cannot legally rotate licensed clinicians through different jobs. Neither the hygienist nor the dental assistant can perform a root canal, and the bookkeeper cannot clean a patient's teeth. This means that a replacement for an injured employee must be hired and paid, while salary and benefits for the injured employee must also be paid. This is what it would cost to maintain salary and benefits for an injured dental employee for six months:

Dentist/employer:	\$46,000.
Dental hygienist:	\$28,000.
Dental assistant:	\$12,500.
Bookkeeper	\$21,500.
Secretary/receptionist:	\$13,600.

1910.509 Record Keeping

1. Do you know if your firm will be exempt from the proposed rule's record keeping requirements? If so, do you foresee keeping records anyway?

Virtually all private dental practices, including mine, will not be required to keep records under OSHA's proposed ergonomics standard. Still, some dental employers will want to keep records anyway, in the belief that this might be the only way to demonstrate "compliance" to OSHA's satisfaction. Learning how to use the OSHA 200 log or its replacement will, of course, increase costs for any dentist/owner making this choice.



Winston W. Wood, D.D.S.
Connie M. Verhagen, D.D.S.

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DATE: 1 April 1999

TO: Marthe Kent
Chair
Small-Business Review Panel for OSHA Ergonomics Standard

FROM: Connie M. Verhagen, D.D.S.

The attached document provides additional information in support of the cost estimates provided on pages 4 and 9 of my completed questionnaire.

L 0288

Cost Estimation for the Proposed OSHA Ergonomics Standard

BACKGROUND

At the Association's 1992 annual session, the House of Delegates approved funding for a comprehensive study to determine the costs associated with infection control guidelines and compliance with regulations for Occupational Safety and Health Administration's (OSHA) bloodborne pathogen (BBP) standard. The basic goal of the study was to assess the financial impact that compliance with federal and state regulations would have on dental practice. RRC, INC., a Texas-based independent health economics research and consulting firm, administered the *Survey of Infection Control and OSHA Compliance Costs*. The questionnaire was mailed to a random sample of private practitioners from across the country.

The time requirements listed in the Final Report to the 1994 House of Delegates, *Analysis of Infection Control and OSHA Compliance Costs*, were used to estimate the cost of the newly proposed OSHA ergonomics standard. Time requirements for compliance with OSHA's BBP standard can be used for the proposed OSHA ergonomics standard because many elements of the BBP are applicable to the proposed ergonomics standard, particularly the elements related to education, training and record keeping. Since the pre-standard level of knowledge about sterilization and BBP transmission was significantly greater than the current level of understanding by dentists of ergonomics, if there is any variation between the two standards, the BBP costs are more likely to be low in the cited areas. Therefore, it is likely that more educational and training effort will be required to comply with the proposed ergonomics standard.

TOTAL HOURS AND ESTIMATED DOLLAR VALUE OF HOURS

The cost of hours required for the proposed OSHA ergonomics standard for the year 2000 was estimated as follows:

✓ Expenses Incurred by All Dentists as a Result of the Ergonomics Standard

Hours and Value of Hours Spent by Dentists Studying to Comply with OSHA: According to the *Analysis of Infection Control and OSHA Compliance Costs* report, dentists on average spent 26.32 hours reading and studying OSHA materials, 20.53 hours reading and studying other materials, and 9.03 hours taking course work to help with OSHA compliance.

According to the 1997 *Survey of Dental Practice - Income from the Private Practice of Dentistry*, the net income of owner dentists was \$135,870 in 1996. The net income of owner dentists has increased an average of 6% per year since 1990. Increasing the 1996 net income by 6% for 4 years, we estimate the 2000 net income of owner dentists to be \$170,948. In 1996, owner dentists spend roughly 1800 hours per year in the office, this translates into a \$94.97 per hour rate (i.e., \$170,948/1800 hours). Multiplying this hourly rate by the required number of hours yields the estimated cost associated with studying to comply with OSHA. (See Table 1)

Table 1: Total Hours and Value of Hours Spent by Owner Dentists Studying to Comply with OSHA

Item	Hours (from the 1994 ADA OSHA report)	Estimated Value of Hours in the Year 2000
OSHA material	26.32	\$2,499.61
Other materials	20.53	\$1,949.73
Course work	9.03	\$ 857.58

➤ **Additional Expenses Incurred by Dentists Following a Reported WMSD**

Hours and Value of Hours Spent Providing OSHA Ergonomics Training: In the 1994 ADA OSHA compliance report it was indicated that for initial Bloodborne Pathogen (BBP) training, dentists spent an average of 7.99 hours. Dentists spent an average of 2.25 hours for procedure change follow-up training, and 3.32 hours for annual BBP follow-up training. These same average hours were assumed to be necessary for providing OSHA ergonomics training. Multiplying the \$94.97 hourly rate of owner dentists in the year 2000 by these time requirements yields the value of hours spent by owner dentists providing OSHA ergonomics training. (See Table 2.)

Table 2: Hours and Value of Hours Spent by Owner Dentists Providing OSHA Ergonomics Training

Item	Hours (from the 1994 ADA OSHA report)	Estimated Value of Hours in the Year 2000
Initial training	7.99	\$758.81
Procedure change follow-up training	2.25	\$213.68
Annual follow-up training	3.32	\$315.30

Staff Hours of Initial and Annual Follow-up Ergonomics Training: Dental practices incur costs not only in the development of training programs, but also in the amount of time spent by staff members receiving training. The 1994 report, *Analysis of Infection Control and OSHA Compliance Costs*, lists the initial BBP training hours by staff position as follows: 8.39 hours for dentists, 9.60 hours for chairside assistants, 5.53 hours for dental hygienists, 5.07 hours for secretaries, and 1.72 hours for bookkeepers. Annual follow-up BBP training hours were specified as follows: 2.73 hours for dentists, 4.18 hours for chairside assistants, 2.50 hours for dental hygienists, 2.33 hours for secretaries, and 0.77 hours for bookkeepers. These same average hours were assumed to be the staff hours for initial and annual follow-up ergonomics training.

According to the 1997 *Survey of Dental Practice - Income from the Private Practice of Dentistry*, the mean net income of employee dentists was \$69,170 in 1996. The mean net income of employee dentists has increased an average of 7% per year since 1990. Increasing the 1996 net income by 7% for 4 years, we estimate the 2000 net income of employee dentists to be \$91,548. In 1996, employee dentists spend roughly 1600 hours per year in the office; this translates into a \$57.22 per hour rate (i.e., \$91,548/1600 hours).

According to the 1997 *Survey of Dental Practice - Employment of Dental Practice Personnel*, the hourly wage of chairside assistants (as reported by owner dentists) was \$11.70 in 1996. Since 1987, the hourly wage of chairside assistants has increased an average of 5% per year. Increasing the 1996 hourly wage of chairside assistants by 5% for 4 years yields an estimated hourly salary of \$14.07 in the year 2000.

The average salary of dental hygienists was \$24.80 in 1996. Since 1987, the hourly wage of dental hygienists has increased an average of 6% per year. Increasing the 1996 hourly wage of dental hygienists by 6% for 4 years yields an estimated hourly salary of \$31.41 in the year 2000.

Secretaries/receptionists earned an average hourly salary of \$12.80 in 1996. Since 1987, the hourly wage of secretaries/receptionists has increased an average of 5% per year. Increasing the 1996 hourly wage of secretaries/receptionists by 5% for 4 years yields an estimated hourly salary of \$15.45 in the year 2000.

The average hourly wage of bookkeepers/business personnel was \$19.10 in 1996. Since 1987, the hourly wage of bookkeepers/business personnel has increased an average of 6% per year. Increasing the 1996 hourly wage of bookkeepers/business personnel by 6% for 4 years yields an estimated hourly salary of \$24.45 in the year 2000.

Multiplying these estimated hourly salary rates of dental practice personnel in the year 2000 by the required hours for initial ergonomics training and annual follow-up training yields the estimated dollar cost ergonomics training. (See Tables 3 and 4.)

Table 3: Hours and Cost of Initial Ergonomics Training for Dental Practice Personnel

Item	Hours (from the 1994 ADA OSHA report)	Estimated Value of Hours in the Year 2000
Employee dentist	8.39	\$480.08
Chairside assistant	9.60	\$135.07
Dental Hygienist	5.53	\$173.70
Secretary/receptionist	5.07	\$ 78.33
Bookkeeper/business personnel	1.72	\$ 42.05

Table 4: Hours and Cost of Annual Ergonomics Training Follow-up for Dental Practice Personnel

Item	Hours (from the 1994 ADA OSHA report)	Estimated Value of Hours in the Year 2000
Employee dentist	2.73	\$156.21
Chairside assistant	4.18	\$ 58.81
Dental Hygienist	2.50	\$ 78.53
Secretary/receptionist	2.33	\$ 36.00
Bookkeeper/business personnel	0.77	\$ 18.83

Hours and Value of Hours Spent Setting Up or Modifying Employee Files: In order to meet OSHA guidelines many practices were required to setup or modify their employee files. The impact of this on dental practices in terms of mean hours spent by dentists and various staff members was reported as follows: 5.93 hours for dentists, 3.41 hours for secretaries/receptionists, and 1.62 hours for bookkeepers/business staff. These same average hours were used in estimating the cost of the proposed OSHA ergonomics training in terms of setting up or modifying employee files. The estimated hourly rates of owners/dentists (\$94.97), secretaries/receptionists (\$15.45) and bookkeepers/business personnel (\$24.45) for the year 2000 were multiplied by the required hours to estimate the cost of setting up or modifying employee files as a result of the proposed OSHA ergonomics standard. (See Table 5.)

Table 5: Hours Spent and Cost of Setting Up or Modifying Employee Files

Item	Hours (from the 1994 ADA OSHA report)	Estimated Value of Hours in the Year 2000
Owner dentist	5.93	\$563.17
Secretary/receptionist	3.41	\$ 52.68
Bookkeeper/business personnel	1.62	\$ 39.61

Projections for the costs to utilize an ergonomics consultant were made from estimates of current average costs for consultants. They may vary from area to area.

Table 5: Cost of Ergonomics Consultant

	Cost in Dollars
Initial cost to establish program	\$1500-\$2000
Monthly fee	\$50-\$100
Annual training fee	\$250-\$400

➤ **Additional Expenses for Medical Removal Requirement**

- As explained above, the estimated annual salary of a non-owner (i.e., employed) dentist for the year 2000 is \$91,548. The estimated 6-month salary is, therefore, \$45,774
- As explained above, the estimated hourly wage of chairside assistants in the year 2000 is \$14.07. According to the 1997 *Survey of Dental Practice – Characteristics of Dentists in Private Practice and their Patients*, owner dentists worked an average of 47.6 weeks per year and an average of 37 hours per week. Multiplying the hourly wage of chairside assistants by these weeks and hours (i.e., $\$14.07 \times 47.6 \text{ weeks} \times 37.0 \text{ hours}$) yields an estimated annual salary \$24,774 for chairside assistants in the year 2000. Their estimated 6-month salary is, therefore, \$12,387.
- As explained above, the estimated hourly wage of dental hygienists in the year 2000 is \$31.41. According to the 1997 *Survey of Dental Practice – Characteristics of Dentists in Private Practice and their Patients*, owner dentists worked an average of 47.6 weeks per year and an average of 37 hours per week. Multiplying the hourly wage of dental hygienists by these weeks and hours (i.e., $\$31.41 \times 47.6 \text{ weeks} \times 37.0 \text{ hours}$) yields an estimated annual salary \$55,322 for dental hygienists in the year 2000. Their estimated 6-month salary is, therefore, \$27,661.
- As explained above, the estimated hourly wage of secretaries/receptionists in the year 2000 is \$15.45. According to the 1997 *Survey of Dental Practice – Characteristics of Dentists in Private Practice and their Patients*, owner dentists worked an average of 47.6 weeks per year and an average of 37 hours per week. Multiplying the hourly wage of secretaries/receptionists by these weeks and hours (i.e., $\$15.45 \times 47.6 \text{ weeks} \times 37.0 \text{ hours}$) yields an estimated annual salary \$27,207 for secretaries/receptionists in the year 2000. Their estimated 6-month salary is, therefore, \$13,604.
- As explained above, the estimated hourly wage of bookkeepers/business personnel in the year 2000 is \$24.45. According to the 1997 *Survey of Dental Practice – Characteristics of Dentists in Private Practice and their Patients*, owner dentists worked an average of 47.6 weeks per year and an average of 37 hours per week. Multiplying the hourly wage of bookkeepers/business personnel by these weeks and hours (i.e., $\$24.45 \times 47.6 \text{ weeks} \times 37.0 \text{ hours}$) yields an estimated annual salary \$43,065 for bookkeepers/business personnel in the year 2000. Their estimated 6-month salary is, therefore, \$21,533.