

November 17, 2000

Carol J. Jones, Director
Office of Standards, Regulations, and Variances
Mine Safety and Health Administration
U. S. Department of Labor
4015 Wilson Boulevard, Room 631
Arlington, VA 22203-1984

Dear Ms Jones:

The undersigned welcome the opportunity to submit comments on the interim final Hazard Communication (HazCom) rule published by the Mine Safety and Health Administration (MSHA) at 65 *FR* 59048 (October 3, 2000). The undersigned represent most facets of the U.S. mining industry, including the producers of most of the nation's coal, metals and nonmetallic minerals; more than 90% of the crushed stone and more than 70% of the sand and gravel produced today in this country; the manufacturers of mining and mineral processing equipment machinery and supplies; and several state mining associations.

The commitment of mine operators to a safe and healthful workplace for miners is unwavering. This commitment extends to customers and community as well. An essential component of the commitment is compliance with all laws and regulations. Further, we agree with MSHA that miners have a right to be informed about hazardous chemicals they work with, and to be instructed and provided with the means to protect themselves or otherwise avoid overexposure. Nevertheless, we take fundamental exception to this particular rulemaking, and offer detailed support of our position in the accompanying comments. Those exceptions, however can be briefly summarized as follows:

The agency's argument that a regulation is needed governing hazardous chemicals in the mining industry is not persuasive.

Significant risk has not been demonstrated.

Mandatory procedures stipulating how health and safety regulations are to be promulgated under the Mine Act have not been followed.

Stakeholders have not been given sufficient time to provide notice and comment, and essential information needed to fully analyze MSHA's rationale for this rulemaking has not been provided.

A provision in the rule incorporating future actions by entities with no authority to promulgate regulations under the Mine Act deprives the regulated community of due process guarantees in existing statutes, regulations and case law.

The agency's economic impact analysis is gravely flawed. We strongly believe that these infirmities in the rule argue against its implementation. Accordingly, given the 10-year gestation period of this rule, it should be remanded back to the agency and re-proposed. Once again, we appreciate the opportunity to comment, albeit in such an unnecessarily short time frame, and we look forward to working with MSHA in developing an approach that incorporates the views expressed in our comments.

Sincerely,

National Aggregates Association-
National Stone Association

Jennifer Joy Wilson
President and Chief Executive Officer

National Mining Association

Richard L. Lawson
President

The Sorptive Minerals Institute

Stephen L. Coogan
Executive Director

Construction Materials Association of California

Linda A. Falasco
Executive Director

Alabama Coal Association

William M. Kelce
President

Illinois Association of Aggregate Producers

John C. Henrickson
Executive Director

Coal Operators and Associates

David A. Gooch
President

North Carolina Aggregates Association

Frederick R. Allen, PE
Executive Director

Tennessee Road Builders Association

Kent D. Starwalt
Executive Vice President

West Virginia Mine and Reclamation Association

Benjamin C. Greene
President

Kentucky Crushed Stone Association

Don Walker
President

Nevada Mining Association

Russell A. Fields
President

Virginia Aggregates Association

Wayne T. Halbleib

Executive Director

SUMMARY OF THE INTERIM FINAL RULE

MSHA's interim final HazCom rule is described as an information collection and dissemination rule that requires the following:

- A written plan
- Labeling
- Material Safety Data Sheets
- Employee, employee representative/designee and government access to documents
- Training
- Record-keeping
- Trade secrets provisions

THE RULE IS NOT NEEDED

Program Information Bulletin 86-2M

Fourteen years ago, on April 7, 1986, MSHA issued Program Information Bulletin (PIB) 86-2M, entitled *Hazard Communication*, in which it voiced its opposition to issuing a HazCom rule. In MSHA's own words, the Agency offered this rationale for not promulgating a standard:

...MSHA has promulgated standards requiring miners to be trained in hazard recognition and avoidance including the hazards of handling chemical products. Moreover, warning and labeling requirements for metal and non-metal mines specifically require that hazardous areas be posted in order to warn miners and that toxic substances be labeled, both in a manner which identifies the hazard involved.

MSHA extended its argument in opposition to a HazCom rule by pointing out that state "right-to-know" laws offered further protection to miners (and the general public) against hazardous chemicals:

...section 506 of the Mine Act permits application of state laws that do not conflict with its provisions or regulations. State laws that are more stringent than MSHA standards, or cover health and safety in mines where MSHA has no such standards, are still applicable to mines. In general, state right-to-know laws address the threat to public health caused by workplace hazardous substances in the environment and they may require employers to label hazardous chemicals in their workplaces and inform community residents of the potential hazards and associated exposure. Education and training of employees may also be required under state laws.

A total of 39 states currently have “right-to-know” laws in effect, a number of which are enforced in the mining industry.

MSHA has never provided a rationale for first deciding against a rule and then, four years later, proposing one. Indeed, the Agency obviously is disconcerted by the PIB: it is silent on its very existence in the “Regulatory History” section of the *Preamble* to the interim final rule, despite the fact that the PIB represents a very real part of the history of this rulemaking proceeding. Nor has the agency explained why it took ten years to issue in “interim final” form. Clearly, however, it did not apply resources to finish the job sooner. We believe this is because considerable opposition existed within the agency for a rule at all, as evidenced by the PIB.

Existing Labeling Requirements Are Adequate

In an attachment to the PIB, MSHA cited eleven existing Agency regulations covering aspects of HazCom that negated the need for more regulation in this area. Two such regulations, in Parts 56/57, deal with container labeling as does a third (77.208) not even identified in the PIB:

- 30 CFR 56/57.16004 Containers for hazardous materials
Hazardous materials shall be stored in containers of a type approved for such use by recognized agencies; such containers shall be labeled appropriately.
- 30 CFR 56/57.20012 Labeling of toxic materials
Toxic materials used in conjunction with or discarded from mining or milling of a product shall be clearly marked or labeled so as to positively identify the nature of the hazard and the protective action required.
- 30 CFR 77.208 Storage of materials (para. c only)
Hazardous materials shall be stored in containers of a type approved for such use by recognized agencies; such containers shall be labeled appropriately.

The interim final rule would strike the labeling language after the semi-colon in Sec. 16004, remove Sec. 20012 altogether, and revise Sec. 77.208 to read identically to a revised Sec. 16004 as follows:

Containers holding hazardous materials must be of a type approved for such use by recognized agencies.

The changes are made to accommodate Subpart D of the interim final rule, which deals with container labeling. The difference is that Subpart D is more prescriptive than the existing requirements, as it details requirements that must be followed if the label is

missing or unreadable. A prohibition against defacing is also included, as is an updating provision. In addition, although the agency boasts that its HazCom rule is performance-oriented, it specifies label contents. It also allows for alternatives and contains a provision dealing with temporary, portable containers. Elsewhere in the rule “container” is defined and exceptions are provided.

In a nutshell, under existing rules, operators must label containers of hazardous materials “appropriately,” and, for “toxic” materials used or discarded in mining or milling, a clear label identifying the nature of the hazard and protective measures is required. The interim final rule incorporates most of these requirements but extends rules on labeling by providing for alternatives, mandating a cross-referencing requirement with other required documents, offering a portable container exemption, and providing for updating. The requirement in Sec. 20012, which would be deleted, actually drops the existing requirement that the label identify protective measures. We are unimpressed that these relatively minor differences justify additional rulemaking as far as labeling is concerned.

The PIB identifies a third regulation pertaining to warning signs which in MSHA’s view invalidates the need for further regulation:

- 30 CFR 56/57.20011 Barricades and warning signs
Areas where health and safety hazards exist that are not immediately obvious to employees shall be barricaded, or warning signs shall be posted at all approaches. Warning signs shall be readily visible, legible and display the nature of the hazard, and any protective action required.

In issuing its interim final rule, MSHA leaves this requirement unchanged. By doing so, the agency trumps any argument it might make that additional rules on labeling are justified because existing rules do not encompass facilities or equipment carrying or containing hazardous materials that are not immediately obvious as sources of potential risk to the miner. We believe Sec. 20011 satisfies this concern.

Existing Training Rules Are Adequate

In 1986, MSHA, in further justifying no need for a HazCom rule, cited eight training regulations:

- 30 CFR 48.5 Training of new miners
- 30 CFR 48.6 Training of newly employed experienced miners
- 30 CFR 48.7 Training of miners assigned to a task in which they have had no previous experience
- 30 CFR 48.8 Annual refresher training of miners
- 30 CFR 48.25 Training of new miners
- 30 CFR 48.26 Training of newly employed experienced miners

- 30 CFR 48.27 Training of miners assigned to a task in which they have had no previous experience
- 30 CFR 48.28 Annual refresher training of miners

All of these regulations remain in force and effect to this day. Additionally, however, MSHA promulgated in 1999 still more regulations that affect training in the aggregates, surface clay, colloidal phosphate, shell dredging, shale, feldspar, cement, lime, slate, marble, and kaolin mining categories; specifically:

- 30 CFR 46.5 New miner training
- 30 CFR 46.6 Newly hired experienced miner training
- 30 CFR 46.7 New task training
- 30 CFR 46.8 Annual refresher training

30 CFR 46 went into effect on October 2, 2000.

MSHA regulations under Part 48 and Part 46 specify a curriculum for miners that includes hazard recognition and avoidance, and mandatory health and safety standards. Additionally, the curriculum includes task training, which calls for training and demonstrated proficiency in the safety and health aspects of a task before the employee is permitted to engage in the task.

Sensitive to the argument that additional training is not needed for hazardous chemicals in light of Parts 46 and 48, the agency argues in the *Preamble* to the interim final rule that a separate training section is required not only as a way to emphasize the potential danger in hazardous materials, but also because training under the interim final rule specifies training topics, such as the mine's HazCom program, for which no current regulations exist. The agency states its rationale this way [p. 59069]:

We disagree with the recommendation that all HazCom training requirements should be incorporated under parts 46 and 48 and that the training should not be addressed independently. The number of chemically-related injuries and illnesses indicates to us that, industry-wide, training on chemical hazards may be inadequate. HazCom provides a new emphasis in miner training-hazardous chemicals- that can be incorporated into your existing program, but can stand alone as well. Training is one of several interdependent aspects of a HazCom program. If we were to promulgate HazCom without training provisions, it would lose an integral part of the program and reduce its overall effectiveness.

We believe that existing requirements to provide hazard awareness and avoidance and task training to miners render this training requirement redundant and therefore

unnecessary. No special emphasis is called for, any more than there should be separate comprehensive rules such as this for, say, fall protection or personal protection.

MSHA states in the Preamble [p. 59069] that it expects the interim final rule will have minimal impact on the mining industry regarding increased training and administrative burdens. That remark comes shortly after the agency makes what appear to be contradictory statements about the impact. “Your training and your approved training plan may have to be modified to add this new focus,.” MSHA says, then appears to back away from that comment a sentence later: “In most instances, however, you should not have to revise your training plan to conduct HazCom training.” The draft *Compliance Guide*, at p. 13, restates this doublespeak. Do training/training plans have to be modified or don’t they?

If training/training plans do need to be modified, we would take sharp exception to MSHA’s assertion that the effort will constitute a minimally increased training and administrative burden. Under Part 46, for instance, if a change such as this is made to the training plan, miners must be informed and permitted an opportunity to comment. Further, if an operator wants MSHA to approve the revised plan, it must be sent to MSHA for that purpose. Additionally training materials, including methods to evaluate the effectiveness of instruction, must be prepared.

While numerous off-the-shelf materials now exist, thanks in part to the existence of OSHA’s HCS rule, someone must devote time to collecting information on such materials, and reviewing them for suitability. They then must be ordered and, once received, incorporated into instruction. Additionally, instructors may need to be sent to training courses, a circumstance MSHA itself acknowledges (“We recognize that training in chemical hazards will present challenges and you may have to obtain special HazCom training for your trainer.” p. 59069]. The considerable effort described by these activities does not support the agency’s view that this burden is minimal.

Existing Requirements for MSDSs Are Adequate

HazCom requires the operator to have a readily accessible Material Safety Data Sheet (MSDS) for each hazardous chemical before the chemical is used by a miner. Additionally, the operator must prepare one for each hazardous chemical produced at the mine. MSHA prescribes the contents but not the format of the MSDS, requires that the most updated version be available and that miners be informed in advance when the MSDS is to be dropped from the MSDS inventory. If no MSDS can be obtained or produced for hazardous waste at the mine, the operator still must provide the miner with essential information about it.

MSDSs are widespread today in U.S. commerce, thanks to the pervasiveness of OSHA’s HCS and, to a lesser extent, to state right-to-know laws. For these reasons, mine operators already have MSDSs for their products. Therefore, a new requirement for operators to create MSDSs when they already exist is redundant and unnecessary. Moreover, operators who have made MSDSs available to miners report that only rarely

do miners ever ask for them. Before imposing this requirement on the mining community, MSHA has a statutory obligation to determine what the experience on this issue has been under OSHA's HCS. We submit that the most likely triggers for seeking an MSDS is *after* an accident has occurred, or in situations of labor-management unrest.

There Is No Need for a Written Program

One of the more onerous features of HazCom is the requirement that each operator develop a written HazCom program that must include a description of the operator's hazard determination methods and procedures, a list of all hazardous chemicals at the mine, a description of the labeling system, procedures for informing miners about unlabeled chemicals and the hazards of non-routine jobs, procedures for exchanging information on hazardous chemicals with contractors at the site, and information on training and on where the MSDSs are located for each hazardous chemical.

A written HazCom program represents a pointless paperwork exercise, an observation grounded in experience. As previously mentioned, a safety and health professional from among the undersigned has experience implementing an OSHA HCS program at multiple sites for a single employer, and that experience has underscored the meaninglessness of this aspect of HazCom. As part of an OSHA HCS compliance effort, a standardized written program was developed by the corporate safety staff from a template purchased from a union publication, and adapted with only minor changes to the employer's multiple worksites.

The written program was duly filed at each site and then promptly forgotten. It served no other purpose after it was prepared nearly a decade ago than to gather dust, and that remains the situation to this day. The only time anyone ever inquired about the program was when a corporate safety program auditor asked to see it, and in the extraordinarily rare instances when an OSHA inspector visited. The written program was universally neglected despite the fact that the program had the full and complete support of senior management, to the extent that a detailed corporate policy statement was prepared to underscore the importance that management gave to the program.

We have every reason to believe that the situation described above will be duplicated at most mine sites throughout the nation. A program will be written solely because the regulatory authority requires it, and will be made available for inspection and copying. But if MSHA thinks it will serve any obvious health and safety benefit, then the Agency simply has not done its homework; i.e., MSHA has not learned from the lessons offered by OSHA's HCS standard. This observation is more significant than it might first appear, for Sec. 101(a)(6)(A) of the Mine Act requires MSHA, in promulgating mandatory health and safety regulations, to consider "...the experience gained under this and other health and safety laws." MSHA has not demonstrated in its documentation that it has done any such thing with regard to OSHA's HCS or any state Right-To-Know law; this regulation should be set aside for that reason alone.

The written program under OSHA's HCS has had one very beneficial effect for the government: it is has been – and continues to be – a leading source of citations by OSHA inspectors who either do not find a written program present at all or are presented with one that is incomplete. We have no reason to doubt that the purely record-keeping aspects of MSHA's rule won't also be a constant source of citations as well. Meanwhile, limited resources are expended on this bootless documentation exercise when they could be applied to address real safety and health matters. It is difficult for industry safety and health officials to avoid the temptation to give in to the cold shadow of cynicism about the efficacy of government programs in circumstances such as this.

The written program requires development of a hazardous chemical inventory. Most operators now are fully aware of the hazardous chemicals at their sites, not only because awareness of its chemical inventory, like knowledge of the equipment inventory, represents good business practice. Additionally, a number of other incentives exist that encourage awareness of hazardous chemicals: existing MSHA regulations on labeling, training and storage; requirements of the operator's insurance carrier; state and community Right-To-Know laws; the needs of local fire and emergency response personnel; and miners themselves and their representatives.

One final point: it is unlikely that an operator would not have any hazardous chemicals at the mine site, as MSHA has defined the term, or would not have need of them there. Nonetheless, a HazCom rule might serve as an incentive to remove a hazardous chemical inventory from the mine site. That seems to be the thrust of section 42.21, which requires the implementation and maintenance of a HazCom program only "as long as a chemical is known to be at the mine." Yet the Preamble states, at 59059, that a written program is required regardless of whether or not such chemicals are present. MSHA must clarify that the rule does not apply unless it is warranted.

Existence of Right-to-Know Laws Further Minimizes Any Need for This Rule

In 1986, MSHA opined that state "right-to-know" laws further invalidated the need for HazCom, since many of these rules apply to mining, or, at least indirectly affect it. In its Regulatory Economic Analysis for the interim final rule, MSHA argues that the economic impact on mining from the interim final rule is less than might otherwise be expected because "OSHA's HCS has had widespread impact on State right-to-know regulations and, indirectly, on the mining industry." (p. 49).

Many state right-to-know laws are quite detailed and comprehensive. A case in point is a regulation of the State of Maryland regarding access to information about hazardous and toxic substances. Title 5, Subtitle 4 was passed in Maryland in 1984 and amended in 1990 to include provisions of OSHA's HCS. A summary of its provisions follows:

- Compile a chemical information list and submit it to the Maryland Department of the Environment.
- Obtain an MSDS for each hazardous substance on the chemical information list.
- Add new chemicals to the list within 30 days of introduction into the workplace.

- Alphabetize and submit a new chemical information list every two years.
- Maintain each chemical information list for at least 40 years.
- Ensure that each container of hazardous chemicals in the workplace is labeled, tagged or marked with the identity of the hazardous chemical and appropriate hazard warnings.
- Ensure that the chemical information list is accessible to employees and designated representatives within one work day of a request.
- Make MSDSs readily accessible to employees during their work shift.
- Provide employees with information and training on hazardous chemicals in their work area.
- Develop, implement and maintain at the workplace a written hazard communication program that including provisions for compiling and submitting a list of hazardous chemicals, collection and availability of MSDSs, container labeling, and an employee training program. The written hazard communication program also must describe the means the employer will use to inform employees of the hazards of non-routine tasks, and the hazards associated with chemicals in unlabeled pipes.

Additionally, manufacturers and importers must:

- Evaluate chemicals produced in the workplace to determine whether they are hazardous.
- Provide an MSDS to each purchaser of a hazardous chemical.
- Properly label each container of hazardous chemicals leaving the workplace.
- Maintain an MSDS for each hazardous chemical in the workplace and ensure that it is readily accessible to employees in their work areas during each work shift.

As can be seen, provisions of MSHA's HazCom rule are already covered in Maryland's 16-year-old Right-To-Know law, which while not directly applicable to mining in that state, most certainly has had an indirect impact on mining operations there, and, we submit, is representative of those in the 38 other states that have Right-To-Know regulations.

THE LEGAL TEST OF SIGNIFICANT RISK CANNOT BE MET

In justifying that it has met the test of significant risk necessary to promulgate the interim final rule, MSHA references the landmark Supreme Court decision pertaining to OSHA's attempt to regulate benzene (Industrial Union Dept. v. American Petroleum Institute, 448 U.S. 607, 642 (1980)). Quoting from the court decision, the agency says (p. 59089):

This finding [of significant risk], however, does not require mathematical precision or anything approaching scientific certainty if the "best available evidence" does not warrant that degree of proof [Id. at 655-656]. Rather, the agency must base its findings largely on policy considerations and has considerable leeway with the kinds of assumptions it

applies in interpreting the supporting data [Id. at 656].

MSHA later (p. 59090) states that because its HazCom rule was modeled after OSHA's HCS, and the Mine and OSH acts contain similar requirements for promulgation of mandatory health and safety standards, the agency has satisfied its "statutory threshold of significant risk."

We conclude that neither the record evidence nor policy considerations support the argument that we should apply HazCom only where chemical exposures pose known significant risks.

But MSHA's conclusions run counter to the very judicial decision the agency cites in support of its finding of significant risk. In fact, the benzene case is just part of a substantial body of judicial decisions, which hold that OSHA's authority, to regulate is limited to situations in which the existence of a significant risk of material harm has been adequately demonstrated. This judicial history has been summarized with respect to OSHA's HCS and it is relevant here as well:

In its landmark decision Industrial Union Department, AFL-CIO v. American Petroleum Institute (the Benzene case)¹, the United States Supreme Court held that the Occupational Safety and Health Act requires OSHA, "before issuing any standard, to determine that it is reasonably necessary and appropriate to remedy a significant risk to material health impairment."² The court termed this a "threshold"³ requirement, and OSHA had acknowledged that the Benzene case requires it to make a finding that workers face a significant risk under the status quo before it can promulgate or revise a standard.⁴ If OSHA cannot make this showing, the standard is invalid.

The "significant risk" threshold imposed by the Benzene decision has been widely recognized as an important limit on OSHA's standard-setting authority.⁵ The Supreme Court held explicitly that in order to justify new regulation OSHA must demonstrate "that the workplaces in question are safe."⁶ As the court explained:

But "safe" is not the equivalent of "risk free." There are many activities that we engage in everyday—such as driving a car or even breathing city air---that entail some risk of accident or material health impairment; nevertheless, few people would consider these activities "unsafe." Similarly, a workplace can hardly be considered "unsafe" unless it threatens the workers with a significant risk of harm.⁷

The Court also stated that the risk from a substance must be "quantified" sufficiently to enable [OSHA] to characterize it as significant in an understandable way," and indicated that this brake on OSHA's authority to regulate was necessary to preserve the Act's constitutionality.⁸

The case law has firmly established that OSHA must bear the “burden of establishing the need for a proposed standard.⁹ OSHA can carry this burden only by producing substantial evidence in support of each finding it is required to make.¹⁰ This “stringent”¹¹ substantial evidence requirement governs the determination that there is a significant risk of material health impairment,¹² and the determination that the standard is reasonably necessary and appropriate.¹³ It applies not only to factual determinations but to policy judgements as well.¹⁴ Further, OSHA’s determinations must be based on the best available evidence,¹⁵ and the agency must demonstrate through substantial evidence that the information it has relied upon is the best available.¹⁶ These requirements substantially increase the justification needed to support OSHA standards. Since, as MSHA itself acknowledges, statutory requirements are similar for both agencies, MSHA could expect to face similar barriers as well.

To support its finding of significant risk, MSHA cites a database it says contains over 2,500 chemical burns that have occurred in the mining industry between January 1990 through December 1999. The associated spreadsheets containing summaries of this information were released to the industry for the first time on or about September 30, 2000. Supporting incident reports were not made available, however, despite the fact that the National Aggregates Association-National Stone Association filed a Freedom of Information Act request on September 29, 2000 seeking any and all records related to this rulemaking.

Failure to provide this information has stymied industry efforts to independently evaluate it for the purpose of determining if the data support MSHA’s conclusion that a risk sufficiently significant exists to justify its interim final HazCom rule. The agency has set an additional obstacle in the path of industry’s ability to adequately and thoughtfully review the complete rulemaking record by denying written requests from the industry for a 60-day extension to the period in which to comment on the interim final rule.

Nevertheless, a review of this summary data throws into question the conclusion MSHA has reached regarding significant risk. In one instance from the lime industry, in which the hearing and decision record was available, the database entry fails to support the listing. In that incident, a lime worker was injured when he stepped into lime being added to a pond to neutralize acidic waters. The record reveals that relevant MSDSs were both available and accessible to the injured party. The evidence presented strongly supported the conclusion that the miner had worked with lime before and was fully cognizant of its hazards. The record indicated that the problem was not one of training, as the database appears to suggest, but of failure to provide a nearby water source and improper supervision. MSHA’s HazCom rule would not have prevented this incident from occurring.

References in the database to “poisonings” in the aggregates industry is another case in point. The systemic chemical poisonings database lists 362 incidents MSHA says have occurred in aggregates. Of these, insufficient information is available on approximately 100 to determine if a HazCom regulation would have prevented them. For example, fumes overcame and made an employee sick when he mixed toilet bowl cleaner and

Chlorox®. Indeterminable from the database is whether or not the containers were marked with appropriate warning labels prohibiting mixing, or if the employee had received appropriate training. Unless cause is established, the conclusion that prevention must take the form of a new regulation cannot be sustained.

Another approximately 60 incidents are listed that allegedly occurred due to equipment failure or lack of engineering controls. One involves an employee who operated a pickup with a leaky heater. This deficiency led to leakage of water and antifreeze into the cab, exposing the miner to antifreeze “fumes.” This is not a foreseeable emergency that would have been prevented by a HazCom regulation. In another incident, an employee was reported to have drunk from an unlabeled container which was thought to hold water, but instead contained antifreeze. This appears to be a violation of *existing* MSHA regulations requiring appropriate warning labels on containers. This incident cannot be offered as justification for new rulemaking.

The database also includes eight bee stings and snake bites, despite the fact that “biological” hazards are exempt from HazCom, and thus have no place in a database intended to support a rule which does not cover them. Of the entries in this database related to the aggregate industry, only approximately 15-20 might have been prevented by a new regulation, if that. To reach a definitive conclusion on the risk to aggregates workers, however, we would need to see all supporting incident reports and related documentation, information not made available to us during this comment period. Based on our analysis of incidents in this database reported for the aggregates industry, MSHA has failed to support its finding of significant risk.

Finally, while we fully support as both a matter of policy and practice, the health and safety of our workforce and the prevention of accidents, injuries and illnesses as an essential part of doing business, we do not believe MSHA has adequately documented the basis for its risk assessment. MSHA’s estimates that compliance will prevent one fatality every four years, beginning when the rule takes effect, and that HazCom will prevent 76 cancer deaths from year 11 through year 20 after promulgation and 13.8 cancer deaths every year thereafter appear to be offered without documentation. What is the basis for these estimates?

Nowhere in the documentation are figures given for the number of miners who have suffered fatal injuries due to exposure to hazardous chemicals or who have contracted cancer from such exposure. If fatalities and cancers cannot be quantified from the past or even in the present, it defies reason to expect they can be quantified in the future. MSHA’s estimates are totally unsupported, thus making imposition of the rule arbitrary and capricious.

THE 10-YEAR RULE-MAKING PERIOD REQUIRES THAT THE RULE BE REPROPOSED

In the 10-year period since the rule was first proposed, a number of legislative and regulatory initiatives have taken place that have impacted or have had the potential to impact MSHA's interim final rule.

Perhaps the most significant is the extension of OSHA's HCS to virtually all non-mining economic sectors. While this action was launched in 1987, three years before the interim final rule was proposed, OSHA did not codify it until 1994. More importantly, extension of the HCS would have required several years both to take hold and for its effects to be appreciated.

Other influencing or potentially influencing initiatives that have occurred during the 1990s are as follows:

- Paperwork Reduction Act of 1995
- Small Business Regulatory Enforcement Fairness Act of 1996
- Executive Memorandum on Plain Language in Government Writing
- Executive Order 12988: Civil Justice Reform
- Executive Order 13045: Protection of Children From Environmental Health Risks and Safety Risks
- Executive Order 13132: Federalism
- State Right-To-Know regulations

Another significant change has been the new Part 46 training regulation. As noted earlier, both Part 46 and Part 48 require training of miners before they start work on hazardous recognition and avoidance, mandatory health and safety standards and the hazards of new tasks. Moreover, both Part 46 and Part 48 require refresher training every 12 months, and Part 48 specifically requires that refresher training include mandatory health and safety standards; prevention of accidents, including a review of accidents and their causes and instruction in accident prevention; and health provisions of the Mine Act including warning labels. This requirement mandates that incidents involving chemical hazards be covered in training.

Except for changes that occur at the mine site, refresher training subjects are not mandated under Part 46. However, prevention of accidents and health are recommended topics, and MSHA expects the operator to include in this training health and safety topics relevant to the mine, including a review of accidents. Had Part 46 been in existence in 1986 when MSHA's PIB opposing a rule was written, Part 46 would most certainly have been the 12th regulation MSHA listed to justify its conclusion that no new HazCom rule was needed.

As previously mentioned, the rule must be repropose by MSHA for another reason: to meet its statutory obligation under Sec. 101(a)(6)(A) to ascertain the experience gained under other health and safety laws; specifically, OSHA's HCS and state Right-To-Know regulations.

In the present circumstance, MSHA has taken the unusual step of asking for comment *after* it issued a final rule, although the agency has dubbed the regulation “interim final.” This unusual procedure by MSHA is an admission by the agency of the need for further comment due to the 10-year lapse between the proposal and the interim final regulation. However, selection of the term “final” has the chilling effect of discouraging comment, since the interim final designation leaves stakeholders with the impression that the agency has made up its mind about the final content of this rulemaking. This conclusion is reinforced by MSHA’s issuance of the HazCom *Compliance Guide*, which explains how MSHA intends to enforce the rule, and by the uncommonly short 45-day comment period.

The conclusion that the agency has no real interest in having further industry input is further supported by its rejection of a request for extension of the comment by a mere sixty (60) days, a request we believe to be reasonable in light of the fact that it took the agency 119 months to finalize its proposal. Asking for a trifling 3 ½ months to review it, instead of the 1 ½ months given, hardly seems unreasonable. This is especially the case since not one association, but nine of them representing the vast majority of the industry sectors covered, along with numerous individual operators, requested the extension. It is clear that a majority of industry stakeholders, not just a few of them, believe additional time is needed.

Finally, as pointed out earlier, the National Aggregates Association-National Stone Association filed a timely Freedom of Information Act request for any and all information from the agency in support of this rulemaking, but received only a partial response. Even that response generated more than 150 pages of documentation on the agency’s so-called chemical poisoning list and injury/illness database, which requires detailed analysis, as does the 147-page *Final Regulatory Economic Analysis* MSHA has offered to support its conclusion that the rule will have an insignificant economic impact on the mining community.

We realize that MSHA opened the record for sixty (60) days in 1999 to take comment, but the agency’s expressed purpose for that action was limited; i.e., it was interested only in receiving comment on the impact on small business, the environment, the health of children, State, local or tribal governments, and to consider paperwork issues under the Paperwork Reduction Act of 1995. The limited subject matter that was covered under this action discouraged a response, as evidenced by the fact that only seven entities chose to comment.

INCORPORATION BY REFERENCE CONSTITUTES UNLAWFUL RULEMAKING

Section 47.11 of the interim final rule, specifically Table 47.11, provides that a chemical is hazardous for purposes of the rule “if any one of the following indicates that it is a hazard,” and goes on to cite, *inter alia*, “the American Conference of Governmental Hygienists (ACGIH) ‘Threshold Limit Values and Biological Exposures Indices’ (latest edition); the National Toxicology Program (NTP) ‘Annual Report on Carcinogen’ (latest

edition); and the International Agency for Research on Cancer (IARC), Supplement 7 'Overall Evaluations of Carcinogenicity: An Updating of IARC Monographs Volumes 1 to 42', or any subsequent IARC 'Monographs' or 'Supplements.'" 65 FR 59097.

This open-ended incorporation by reference of outside and unaccountable organizations constitutes an impermissible delegation of regulatory authority, a violation of the Administrative Procedure Act (specifically, § 552(a) of the Freedom of Information Act, 5 U.S.C. § 552(a)), and a violation of the rules governing incorporation by reference set forth at 1 CFR Part 51.

Under Section 101 of the Mine Act, only the Secretary can promulgate new mandatory safety and health standards; she cannot delegate that authority prospectively to non-governmental organizations such as ACGIH nor to governmental or quasi-governmental organizations such as the NTP or IARC, neither of which has any regulatory authority under the Mine Act. By referring to the "latest editions" of these various groups' listings of hazardous substances, the Secretary is impermissibly delegating such prospective authority. While the Secretary can incorporate by reference specific editions of these documents currently in existence, she cannot incorporate future editions without subjecting that process to the notice and comment procedures of the Mine Act.

Further, in Section 101(a)(6)(A), the Secretary is charged with developing mandatory health and safety standards in part based on "...the latest scientific data in the field..." No mention is made of *future* scientific data in the field; we must conclude, therefore, that framers of the Mine Act did not intend to include such data.

The point that future editions of NTP, IARC and ACGIH documents cannot be incorporated into MSHA regulations is further underscored by § 552(a)(1) of the Freedom of Information Act. That section provides in part:

Except to the extent that a person has actual and timely notice of the terms thereof, a person may not in any manner be required to resort to, or be adversely affected by, a matter required to be published in the Federal Register and not so published. For the purpose of this paragraph, matter reasonably available to the class of persons affected thereby is deemed published in the Federal Register when incorporated by reference therein with the approval of the Director of the Federal Register.

Section 552(a)(1) is implemented by regulations set forth at 1 CFR Part 51. Those regulations provide in relevant part:

§51.1(f) Incorporation by reference of a publication is limited to the edition of the publication that is approved. Future amendments or revisions of the publication are not included.

§51.9(a) The language incorporating a publication by reference shall be as precise and complete as possible and shall make it clear that the

incorporation by reference is intended and completed by the final rule document in which it appears.

§51.9(b) The language incorporating a publication by reference is precise and complete if it -

...

(2) states the title, date, edition, author, publisher, and identification number of the publication.¹⁷

§51.11(a) An agency that seeks approval for a change to a publication that is approved for incorporation must—

(1) Publish notice of the change in the Federal Register and amend the Code of Federal Regulations.

The Federal Register should not have accepted the interim final rule because it does not comply with 1 CFR Part 51, and MSHA cannot enforce the rule until it is brought into conformity with the Freedom of Information Act and the implementing regulations. In short, the agency may only incorporate specific existing editions of the publications in question and must resort to rulemaking when and if it wishes to incorporate by reference any future editions of the publications.

Section 4 of the APA requires that the notice in the Federal Register of a proposed rulemaking contain “either the terms or substance of the proposed rule or description of the subjects and issues involved.” 5 U.S.C. § 553(b)(3) (1982). The purpose of the notice and comment procedure is both “to allow the agency to benefit from the experience and input of the parties who file comments...and to see to it that the agency maintains a flexible and open-minded attitude towards its own rules.” National Tour Brokers Ass’n v. United States, 591 F. 2d 896, 902 (D.C. Cir. 1978).

The notice and comment procedure encourages public participation in the administrative process and educates the agency, thereby helping to ensure informed agency decision making. Spartan Radiocasting Co. v. FCC, 619 F.2d 314, 321 (4th Cir, 1980), cert. denied, 444 U.S. 1096 (1980). Thus when interested parties have not received meaningful notice of the substance of a proposed regulation and the rationale for its adoption, the courts have set the agency’s action aside.¹⁸

Regulatory history under the Mine Act clearly shows that MSHA is aware of its responsibilities under the Freedom of Information Act and the implementing regulations. In the early 1980’s the agency sought to unilaterally update the incorporation by reference of the American National Standards Institute’s specifications for roof bolting materials in underground coal mines but was rebuffed by the Director of the Federal Register and told that such an updated incorporation by reference would have to go through notice and comment rulemaking. Thus, when MSHA did finally update the reference, the agency stated:

The prior rule, 30 CFR 75.200-7(a) (1987), stated that roof bolt assemblies should meet American National Standards Institute's (ANSI) "Specifications for Roof Bolting Materials in Coal Mines." This rule, which was published in 1970, referred to the ANSI document in existence at that time. The 1988 ASTM standard, which is referenced in the final rule, is a more comprehensive and updated document which advances roof bolt technology."

Likewise, when the agency revised its standard for loading, hauling and dumping at metal nonmetal mines it incorporated by reference specific editions of the Society of Automotive Engineers' (SAE) and ANSI and standards for rollover protection and went on to state:

[I]n the event that major substantive changes are made or significant revisions are issued, MSHA would review the revised SAE or ANSI documents and consider whether the existing standard needed to be updated. *Any updating would be accomplished through the rulemaking process.* [Emphasis added.]

Incorporation of future reference levels totally defeats the due process provisions of the U.S. Constitution, since affected stakeholders cannot provide notice and comment under such circumstances. The Supreme Court has ruled that, under the Constitution, the Fifth and Fourteenth Amendments cannot be a mere formality, but " 'must be at a meaningful time and in a meaningful manner.' " Goldberg v. Kelly, 397 U.S. 254, 267 (1970) (quoting Armstrong v. Manzo, 380 U.S. 545, 552 (1965)). Essential to a meaningful opportunity to be heard is notice sufficiently precise to enable interested parties to determine the nature and impact of proceedings that may affect their interests. E.g., Brandt v. Hickel, 427 F.2d 53, 56 (9th Cir. 1970). See also 965 F.2nd 962 (11th Cir. 1992).

Under these principles, MSHA cannot lawfully promulgate regulations that apply to unknown substances based upon an unknown rationale. Yet MSHA would do precisely that if it interpreted HazCom to require, as part of rulemaking, automatic listing on MSDSs of substances listed by IARC, NTP and ACGIH into the indefinite future. Affected parties would have no opportunity to comment meaningfully upon this aspect of the regulations because the rationale for these agencies' designations could not have been anticipated. Accordingly, MSHA must strike this provision from HazCom. If the Agency refuses to do so, any attempt to link HazCom to future actions by IARC, NTP and ACGIH will be susceptible to invalidation by the courts on statutory and constitutional grounds.

Moreover, this provision runs counter to a long tradition by the agency of promulgating rules that are not subject to change by outside agencies. This tradition, which may not be overturned lightly, has provided certainty in rulemaking to the regulated community.

Lastly, by attempting to vest outside agencies with the authority to bind mine operators in the future without the notice and comment procedures of the APA and the Mine Act, MSHA is explicitly running afoul of the Federal Advisory Committee which sets strict procedural and substantive requirements for the utilization of consultative entities in the setting of mandatory standards.

MSHA'S REGULATORY ECONOMIC ANALYSIS IS FLAWED SINCE IT SERIOUSLY UNDERESTIMATES THE COST OF THE REGULATION TO INDUSTRY

MSHA's *Final Regulatory Impact Analysis* (RIA), dated September 2000, prolongs many of the inadequacies that were identified in industry comments filed on the "preliminary" regulatory impact analysis, dated August 1990. Moreover, the final RIA ignores the submission filed by industry commenters on June 1, 1999 in response to the "limited" request for comment that the agency published on March 30, 1999. In so doing, the final RIA significantly underestimates the economic impact of the proposal on the mining industry.

The final RIA has several major deficiencies that must be addressed by MSHA prior to finalizing its determination that the proposal and MSHA's actions in promulgating the interim final rule comply with the Regulatory Flexibility Act, the Small Business Regulatory Enforcement Fairness Act and Executive Order 12866. Among the deficiencies are: (1) the final RIA makes many assumptions and unsubstantiated statements; and (2) the time intervals used in calculating completion of specific tasks underestimate actual time required.

MSHA's Assumptions Are Faulty

MSHA has made a series of assumptions that are neither fully explained nor validated. Considered singularly they raise questions that defy logic. Considered in total, they undermine the validity of the RIA and the conclusions derived therefrom. Moreover, the RIA is inconsistent in presentation of factual data. For example, the RIA uses vastly different estimates of the number of miners and mines that will be covered by the standard (see number of miners as reflected in Tables II-1 through II-4 as contrasted with population at risk on page 28 and number of miners referenced on pages 50-51).

A further example is represented by footnote number 20, page 53, and the discussion on page 56. These references indicate MSHA has concluded that 50 percent of the mines are in compliance with the interim final rule by virtue of a comprehensive program or adoption of a voluntary program. While this may or may not be true, the document contains no justification or rationale for this determination. Rather, the RIA contains conflicting information that leads one to conclude that far less than 50 percent of the mines are in compliance with the interim final rule.

On page 49, the RIA statement that "...39 states have employee right-to-know laws" implies that mines operating in these states have, by virtue of state requirements, hazard communication programs. Yet, the information contained in Table IV-6, page 52, contradicts this by documenting the 44 "States WITHOUT Right-To-Know Laws Affecting Mines."

Moreover, as noted in Table IV-6, these states (without Right-To-Know laws) account for 99.80 percent of coal mines and 91.18 percent of metal/nonmetal mines, respectively. How MSHA concludes that 50 percent of mines are in compliance with the interim final rule is beyond comprehension. The agency's belief that voluntary compliance programs account for this compliance estimate is unsupported and without factual basis. Similarly unsupported is the agency's belief that companies have extended hazard communication programs to non-OSHA regulated facilities where companies operate OSHA regulated facilities. Even accepting for sake of argument that some contractors working at both MSHA- and OSHA-regulated facilities have implemented hazard communication programs, the agency has grossly over-estimated mining industry compliance with the interim final standard, and, in so doing, has dramatically underestimated industry compliance costs.

It is difficult to fathom the agency's belief that annual compliance costs, once the hazard communication standard is fully implemented industry-wide, will amount to only \$5.7 million annually. If correct, this would amount to annual expenditures of approximately \$270.00 per mine/per year ($\$5.7 \text{ million} \div 21,166 \text{ mines/contractors}$). Using MSHA's own average hourly compensation rates, Table IV-2, page 47, this would amount to little more than 5 hours/year of supervisor, manager, or foreman time. Yet, MSHA's analysis contained in Table VII-2 and VII-4 indicates that coal and metal/nonmetal operators would spend 164,780 cumulative hours/year complying with only the annual paperwork requirements of the interim final standard. Viewed from a different perspective, the paperwork requirement costs alone exceed the average time, in terms of annual dollars spent, for compliance with the entire standard.

Time Intervals Used for Task Completion Are Flawed

In sharp contrast to the preliminary RIA, MSHA, page 56, has doubled the period of time estimated to develop a hazard communication program. Yet the RIA continues the flawed belief that small mines will require one-half the time of large mines to develop such a program. Quite simply, it does not matter whether a mine has 20 or 200 miners; the written program will be virtually identical in all mines regardless of mine size. Recognizing that virtually all mines are small (<500 employees), the RIA has, in this respect, grossly underestimated the costs to implement the interim final rule. It should be noted that these faulty assumptions are extended into other sections of the RIA, rendering the conclusions of questionable validity.

As is the case with time estimates for developing a hazard communication program, the final RIA, as opposed to the preliminary RIA, doubles the projected amount of time required to update the program each year. Neither the preliminary nor final RIA

accurately reflects the time required to update a hazard communication program. As reflected in prior industry submittals, one coal mine estimates it spends six days per year updating the hazardous substances list alone. This is separate and apart from the time required to update the program once the hazardous substance determinations are made. Again, this flagrant misrepresentation of the time required to update a program results in an underestimation of the economic impact on the industry.

On page 68, the RIA states the agency's belief that small mines will be required to develop "an average of one MSDS at a small mine, two MSDSs at a large coal mine, and four MSDSs at a large M/NM mine." This statement is without supporting documentation and may well be a dramatic underestimation. To the best of our knowledge, MSHA undertook no investigation of the inventory of chemicals found at large and small mines and, as such, has no basis for the categorization identified.

Moreover, the agency's belief that "it will take a supervisor 2 hours to investigate a potentially hazardous mining chemical and to create the MSDS" (p. 69) is unsupported. It stands in sharp contrast to the statement immediately preceding it which recognizes that in some (not quantified) instances "a full day of research to develop an MSDS for a rarer, more complex chemical" may be required.

Finally, the agency's view that updating an MSDS will require one hour of a supervisor's time (p. 69) is sheer folly and without factual basis. Given the technical nature of the information sources cited by the agency - IARC, NTP and ACGIH - it is inappropriate to believe that an MSDS can be updated within the time allocated by the agency. As a result, costs computed for this task are useless. As established above, MSHA is prohibited from incorporating by reference future editions of documents developed by outside organizations. Nevertheless, for the sake of argument, ACGIH updates its Threshold Limit Values (TLVs) annually; therefore, to assure its chemicals are not listed in the TLV booklet, the mine operator will have to conduct a review each year, the costs of which are not adequately accounted for in the RIA.

The foregoing examples are intended to illustrate the pervasiveness of the assumptions, without any apparent foundation, throughout the RIA. They are not intended to be an all-inclusive review of the faulty assumptions contained in the document. Statements in the RIA without factual support are so numerous as to render the benefit and cost conclusions meaningless. MSHA's purported analysis lacks any connection with real world conditions, and is thus arbitrary and capricious. MSHA has an obligation to prepare an accurate representation of the anticipated economic impact of its proposal on the industry. The RIA fails to meet this fundamental tenet.

MISCELLANEOUS COMMENTS

The interim final rule requires operators to provide MSDSs to downstream customers when those customers ask for them. MSHA has no jurisdiction outside the mine site; therefore, this provision must be stricken from the final rule.

We are concerned with and believe there is a need for clarification of the designation of materials "produced" at the mine site. Materials that naturally occur and are "produced" only in the sense that they are excavated and moved, such as overburden and ore, should be excluded from such designation. General hazard training has proven to be an effective method to protect miners from hazards presented by these materials.

Any "products" not packaged, shipped or placed in commerce, in particular waste streams, should not be subject to the MSDS requirements set forth in the interim final rule. Although the Preamble identifies an extreme example of the consequences of exposure to materials discarded from mining operations for which no MSDS existed, this accident is atypical and it is unlikely that having an MSDS for this material would have prevented the miner's injuries. Again, hazard training is the logical, cost-effective approach that has proven to be most effective in protecting against injurious exposures. Inundating miners with paper and electronic warnings in the form of numerous MSDSs is not the way to make the miners' workplace safer.

MSHA's inclusion of office workers as miners and hence subject to HazCom is misguided. The risk these workers face from exposure to hazardous chemicals in an office setting is minuscule. They should be excluded from coverage.

We leave unspoken in the interests of brevity comments on specific provisions of MSHA's proposed rule that were submitted by signatories in previous calls for comment by the agency. However, we wish to incorporate them here by reference.

ENDNOTES

¹ 448 U.S. 607 (1980).

² Id. at 639 (plurality opinion) (emphasis added). See also id. at 614-15 (plurality opinion).

³ Id. at 614, 639 (plurality opinion).

⁴ 51 Fed. Reg. 22612, 22615 (June 20, 1986) (Preamble § III).

⁵ See, e.g., Texas Independent Ginners Association v. Marshall, 630 F.2d 398, 406-07 (5th Cir. 1980); B. Mintz, OSHA – History, Law, and Policy 281 (1984).

⁶ 448 U.S. at 642 (plurality opinion).

⁷ Id. (plurality opinion).

⁸ Id. at 646 (plurality opinion).

⁹ Industrial Union Department, AFL-CIO v. American Petroleum Institute, 448 U.S. 607, 653 (1980) (plurality opinion).

¹⁰ E.g., AFL-CIO v. Marshall, 617 F.2d 636, 648 n.43 (D.C. Cir. 1979), aff'd in relevant part sub nom. American Textile Manufacturers Institute v. Donovan, 452 U.S. 490 (1981); Texas Independent Ginners Association v. Marshall, 630 F.2d 398, 406 & n.27 (5th Cir. 1980). The "substantial evidence" standard is specified in § 6(f) of the Occupational Safety and Health Act, 29 U.S.C. § 655(f).

¹¹ AFL-CIO v Marshall, 617 F.2d 636, 648 (D.C. Cir. 1979), aff'd in relevant part sub nom. American Textile Manufacturers Institute v. Donovan, 452 U.S. 490 (1981).

¹² Industrial Union Department, AFL-CIO v. American Petroleum Institute, 448 U.S. 607, 653 (1980) (plurality opinion). See also American Textile Manufacturers Institute, Inc. v. Donovan, 452 U.S. 490, 522 (1981) (economic feasibility); Donovan v. Castle & Cook Foods, 692 F.2d 641, 647 & n.8 (9th Cir. 1982) (technological feasibility).

¹³ Texas Independent Ginners Association v. Marshall, 630 F.2d 398, 406 & n.27 (5th Cir. 1980).

¹⁴ AFL-CIO v. Marshall, 617 F.2d 636, 648 n. 43 (D.C. Cir. 1979), aff'd in relevant part sub nom. American Textile Manufacturers Institute v. Donovan, 452 U.S. 490 (1981).

¹⁵ Texas Independent Ginners Association v. Marshall, 630 F.2d 398, 413 n.48 (5th Cir. 1980) (discussing Industrial Union Department, AFL-CIO v. American Petroleum Institute, 448 U.S. 607 (1980)); B. Mintz, OSHA – History Law, and Policy 283-84 (1984).

¹⁶ Texas Independent Ginners Association v. Marshall, 630 F.2d 398, 406 & n.27 (5th Cir. 1980).

¹⁷ Section 51.5(a)(3) of 1 CFR Part 51 further provides that a publication will not be approved for incorporation by reference unless the agency seeking such approval “ensures that a copy of the publication is on file at the Office of the Federal Register.” Obviously, future copies of the publication at issue cannot be filed at this time.

¹⁸ For example, in Portland Cement Ass’n v. Ruckelshaus, 486 F.2d 375 (D.C. Cir. 1973), cert. denied, 417 U.S. 921 (1974), the court invalidated an EPA regulation because the scientific methodology on which the regulation was based had not been disclosed in time for comment by interested parties. The court emphasized that “[o]bviously a prerequisite to the ability to make meaningful comment is to know the basis upon which the rule is proposed.” Id. at 393 n.67 (emphasis added). See also Mobil Oil Co. v. FPC, 483 F.2d 1238, 1258-59 (D.C. Cir. 1973).

REFERENCES

Abrams, Adele L. Letter from National Stone Association to Patricia W. Silvey of the Mine Safety and Health Administration (comment on the proposed rule), April 5, 1991.

Falasco, Linda A., Construction Materials Association of California, et al. Letter to the Mine Safety and Health Administration Requesting 60-Day Extension to HazCom Comment Period, November 6, 2000 and November 14, 2000.

Garrett, Theodore L. *Petition to Clarify or Amend the Hard Communication’s Inapplicability to Crystalline Silica: OSHA Docket H-022*, 48 Fed. Reg. 53280 (1983), May 23, 1988.

Jones, Carol J., U.S. Department of Labor, Mine Safety and Health Administration. Letter to Linda A. Falasco, et al. Denying Request for Extension to Comment Period, November 9, 2000.

Mine Safety Associates, *Federal Mine Safety and Health Act of 1977: Public Law 95-164, November 9, 1977*, 1994.

Mine Safety Associates, *MSHA Administrative Requirements: 30 CFR Parts 40-50, 100 and 104*, 1st. Ed., 1995.

National Lime Association, *Comments of the National Lime Association on Mine Safety and Health Administration Interim Final Rule, "Hazard Communication (HazCom), October 3, 2000*, November 2000.

Sharpe, James. Letter to the Mine Safety and Health Administration, FOIA Operations Officer, September 29, 2000.

Sharpe, James. "NSA's Message to MSHA on Hazard Communication: 'Just Say No,'" *Stone Review*, Vol. 16, No. 1, January/February 2000.

State of Maryland, Maryland Occupational Safety and Health. *Access to Information About Hazardous and Toxic Substances "Right to Know,"* April 2000.

U. S. Department of Labor, Mine Safety and Health Administration. *Compliance Guide (Draft) for Hazard Communication in the Mining Industry (30 CFR Part 47)*. October 3, 2000.

U.S. Department of Labor, Mine Safety and Health Administration. *Final Regulatory Economic Analysis for Interim Final Rule: 30 CFR part 47, RIN: 1219-AA47, Hazard Communication (HazCom)*, September 2000.

U.S. Department of Labor, Mine Safety and Health Administration. Hazard Communication. *Federal Register*, Vol. 64. No. 60, March 30, 1999.

U.S. Department of Labor, Mine Safety and Health Administration. Hazard Communication. *Federal Register*, Vol. 65, No. 192, October 3, 2000.

U.S. Department of Labor, Mine Safety and Health Administration, *Systemic Chemical Poisonings*, August 2000.

Wilson, Jennifer Joy. Letter to Carol J. Jones of the Mine Safety and Health Administration (comment on limited reopening of the record), June 1, 1999.