

## **Safety & Health Management Programs for the Mining Industry**

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Enforcement of safety and health standards by the Mine Safety & Health Administration (MSHA) is rapidly increasing and will likely get even more stringent in FY 2013, due to reprogramming of funding into enforcement areas. The agency has budgeted to add more inspectors and more funding for its enforcement programs, and is aggressively implementing Pattern of Violations (POV) sanctions against all categories of mine operators.

MSHA's current POV criteria require mine operators whose violation history as well as injury and illness rates trigger Potential Pattern of Violations (PPOV) status to meet with the District Manager, to discuss what mitigating factors could justify keeping the operator out of POV status. Among the factors considered is the presence – or new implementation – of a safety and health management program. This is also among the listed “mitigating factors” in MSHA's proposed rule to modify POV criteria. The rule was published for public comment in February 2011, and the most recent 2012 regulatory agenda called for finalization of the rule in spring 2012.

Because the POV stems from statutory language in the Federal Mine Safety and Health Act of 1977, and simply expands upon the current POV criteria codified at 30 CFR Part 104, a short implementation time frame for the new rule can be expected. In the proposed rule, MSHA stated that it would consider a safety and health management program to be a mitigating factor if it was approved by the District Manager, but it is unclear whether this approval will be required in the final rule.

In addition, both MSHA and its sister agency – the Occupational Safety and Health Administration (OSHA) – have safety and health management programs on their regulatory agendas, although the expected date for an MSHA rule is more than 12 months away at this writing. OSHA, however, is moving more quickly, and the OSHA safety and health management program rule (also known as “I2P2” – for Injury/Illness Prevention Programs) was to begin its small-business review in March 2012, which could clear the way for a final rule to be proposed this summer, with a final rule by the end of 2012.

The I2P2 initiatives for both MSHA and OSHA are the centerpiece of the U.S. Department of Labor's “P3” initiative (Plan, Prevent and Protect Workers) for the safety and health agencies. This would suggest that, regardless of the outcome of the 2012 elections, I2P2 will be one rulemaking that both OSHA and MSHA will try to complete on schedule.

## MSHA's I2P2 Rulemaking

MSHA published a request for testimony on September 9, 2010, to initiate its rulemaking on safety and health management programs. Public hearings were conducted that fall, and the record initially closed in December 2010, but was reopened when another hearing was held in November 2011. In the initial Federal Register notice, MSHA sought input from academia, safety and health professionals, industry organizations, worker organizations, and government agencies on the subject. ASSE did provide a presentation at one of the hearings, in support of the effort. In MSHA's view:

Model programs should be designed to prevent injuries and illnesses, maintain compliance with the Federal Mine Safety and Health Act, safety and health standards and regulations, and include participation of everyone from the Chief Executive Officer (CEO) to workers and contractors. Model programs should involve hazard identification and control and training and retraining of workers. The Agency will use information from the meetings to help develop a proposed rule for Safety and Health Management Programs for mines, which will allow miners and operators to be proactive in their approach to health and safety.<sup>1</sup>

In its preliminary activities to formulate a rule, MSHA looked at a variety of sources for guidance, including:

- The Occupational Safety and Health Administration's Voluntary Protection Program and its Safety and Health Program Management Guidelines;
- The American National Standards Institute's (ANSI's) and American Industrial Hygiene Association's (AIHA's) ANSI/AIHA's Z10- 2005, Occupational Health and Safety Management Systems;
- The International Standards Organization's (ISO's) ISO 9001:2008 (E), Quality management systems--Requirements; and
- The British Standards Institution's (BSI's) BS OHSAS 18001:2007, Occupational Health and Safety Assessment Series, Occupational health and safety management systems--Requirements.

Based on its review of these myriad guidelines, MSHA has made it clear that acceptable I2P2 programs will require the following components of effective safety and health management programs: Management Commitment; Worker Involvement; Hazard Identification, including workplace inspections for violations of mandatory health and safety standards; Hazard Prevention and Control; Safety and Health Training; and, Program Evaluation.

Mine operators in California are already required by law to have these programs because Cal-OSHA mandates them and has concurrent jurisdiction there with federal MSHA. In addition, it became clear during the public hearings that many of the larger mining companies have successfully

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<sup>1</sup> 75 Federal Register 54804, September 9, 2010.

implemented these programs voluntarily, demonstrating the feasibility of the rulemaking initiative, which is a statutory requirement.

Mining companies who have been through an MSHA “trial by fire” recently already know that proposed penalties on a routine (non-accident) inspection can top \$50,000 or more easily these days. The maximum penalty for a single MSHA violation can now reach \$220,000, and personal fines of up to \$70,000 are possible against both salaried and hourly “agents of management” in routine citation cases involving Section 104(d) “unwarrantable failure” allegations; no accident or injury is required for personal civil or even criminal action. That is why implementing an I2P2 program proactively can be useful in showing that there is a mechanism in place for assessing and mitigating hazards, to avoid “high negligence” or “reckless disregard” allegations.

In short, the stakes are higher than ever, and it pays to be prepared and try to get into compliance before MSHA darkens your door. Aside from relief from MSHA enforcement, safety and health compliance can pay big benefits in terms of reduced injuries, lower worker’s compensation costs, and improved worker morale. The question is, how can a small- or medium-sized mine operator get started on knowing what is needed and make sure that it can make a favorable impression on the MSHA enforcement personnel when they come to call, or on the District Manager if a PPOV threshold is crossed?

Implementing a safety and health management system is not terribly difficult to do if you approach it in an organized manner. But it must be comprehensive. Some have suggested that, if MSHA and OSHA adopt I2P2, they will never need to conduct another rulemaking, because all potential safety and health hazards would be encompassed. It could, in one sense, render the entire volume of safety and health standards in 30 Code of Federal Regulations redundant!

## **Prospective MSHA Enforcement of I2P2 and Use in POV**

One significant concern involves the issue of how MSHA may enforce I2P2 in the future, whether it will issue both citations for underlying regulatory violations and tack on a separate I2P2 citation for failing to identify and correct the problem in a timely manner, before the MSHA inspector discovered it. All too often, MSHA has had a practice of doing so under its “workplace examination standard” (e.g., 30 CFR § 56/56.18002) and its pre-operational equipment inspection standard (e.g., 30 CFR § 56/57.14100, which is one of the new “Rules to Live By” targeted for higher, specially assessed fines and heavier gravity/negligence classifications). When it finds multiple violations in the workplace, the “workplace exam” is viewed as being inadequate and a separate citation for that is issued frequently.

A typical citation issued to a cement plant, which was litigated recently, involved a Section 104(d) citation and alleged: “Persons conducting the workplace examinations were not reporting obvious hazards and the operator failed to initiate prompt corrective action. Hazards found during the inspection which were also cited during the past 2 years included: 56.11001, cited 22 times; 56.12018, cited 10 times; and 56.20003, cited 15 times. The mine operator has engaged in aggravated conduct constituting more than ordinary negligence by not ensuring an adequate examination was conducted for obvious and apparent hazards. This violation is an unwarrantable failure to comply with a mandatory standard.”

In that case, *Secretary of Labor v. Cemex Inc*<sup>2</sup>, the Administrative Law Judge vacated the citation. She held:

[C]ase law and the Secretary's Program Policy Manual further undermine the Secretary's position that the inadequacy of the examination alone justifies the § 56.18002(a) citation. As Judge Manning stated in a case essentially identical to this one, "that fact that five citations were issued citing visible safety problems is too slender a reed on which to hang a violation of section 56.18002(a)."

MSHA's Program Policy Manual specifically directs inspectors as follows:

Evidence that a previous shift examination was not conducted or that prompt corrective action was not taken will result in a citation for violation of §§ 56/57.18002(a) or (c). This evidence may include information which demonstrates that safety or health hazards existed prior to the working shift in which they were found. Although the presence of hazards covered by other standards may indicate a failure to comply with this standard, MSHA does not intend to cite §§ 56/57.18002 automatically when the Agency finds an imminent danger or a violation of another standard.<sup>3</sup>

In addition, such programs are already reviewed when a mine comes under PPOV criteria for scrutiny and must meet with the District Manager to see what steps must be taken to avoid a POV finding, under which every significant-and-substantial (S&S) citation/order serves as a withdrawal order for the affected equipment or area of the mine. Under pending legislation, H.R. 3698 and S. 1590, to revise the 1977 Mine Act, new POV criteria would be adopted under which any S&S citation/order issued to a POV status mine would become a withdrawal area affecting the entire mine until all identified hazards were abated.

MSHA's current POV policy about programs that could be considered "mitigating factors" indicates that a program must include:

- Corrective actions the operator intends to take, including benchmarks and milestones, to reduce the frequency of S&S violations;
- Specific changes the operator will make to improve the quality and/or increase the frequency of examinations conducted by qualified and competent personnel;
- Specific actions the mine management will take to provide greater attention in the review of the examination books and records and discuss the examination results with examiners;
- Frequency with which mine management will conduct unannounced examinations of the mine to audit mine examinations and compliance;
- Additional health and safety staff that will be added to assist in the daily auditing of compliance performance and the authority they will have to halt work if violations are identified;
- Specific training which miners will receive on miners' rights to report hazards and unsafe conditions and on protection against retaliation;

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<sup>2</sup> 32 FMSHRC 1897 (ALJ, December 2010). See also, *Secretary of Labor v. Dumbarton Quarry Association*, 21 FMSHRC 1132 (ALJ, October 1999); and *Secretary of Labor v. Lopke Quarries, Inc.*, 22 FMSHRC 899 (ALJ, July 2000).

<sup>3</sup> *Program Policy Manual*, Volume IV, Subpart Q, <http://www.msha.gov/reg/complain/ppm/pmvol14e.htm#77>.

- Training the mine operator will conduct for mine officials, mine examiners, competent persons and miners to address each of the conditions that caused the unacceptable levels of citations and orders issued during the screening period;
- Planned modifications or additions to engineering and/or administrative controls to address specific conditions or practices;
- Identification of the personnel who will be responsible for implementing and monitoring the corrective action program;
- Milestones and benchmarks for implementation of each component of the program, including dates by which they will be achieved; and,
- How the operator intends to ensure the program's milestones are achieved and the method by which the operator will update the District Manager on the program's progress.

It is reasonable to expect these criteria to be included in the revised POV rulemaking, as well as potentially in an MSHA I2P2 standard.

## **Development of an I2P2 Program for Mines**

One tool that companies can use to systematize their safety and health management activities is the ANSI Z10 standard, which is one of the guidelines referenced by MSHA in its initial rulemaking publication. Formatting a program according to a nationally accepted voluntary consensus standard lessens the likelihood that it would be arbitrarily rejected by an MSHA District Manager, if such a program was offered in mitigation of PPOV status.

ANSI Z10-2005, *Occupational Safety and Health Management Systems*, encourages employers to reduce the risks of injuries, illnesses, and fatalities in a cost-effective manner. It serves as a blueprint for widespread benefits in health and safety as well as in productivity, financial performance, quality, and other organizational and business objectives. It was designed to be a template for creating or improving occupational safety and health management systems for any organization, large or small.

ANSI Z10 is voluntary and is a performance standard, not a specification standard. The focus is on results, not on specific measurements or regulatory criteria. Moreover, as a national consensus standard, it serves as a tool to be used in addition to any regulatory requirements or guidelines. For OSHA-regulated businesses, it helps employers meet the intent of the General Duty Clause (Section 5(a)(1) of the OSH Act of 1970), which requires all employers to provide a workplace that is “free from recognized hazards that are causing or likely to cause death or serious physical harm.” As noted, for MSHA-regulated employers it can help satisfy mitigation requirements under POV and can also be used to defend against allegations that workplace examinations are inadequate or that the employer has failed to exercise due diligence in the case of contractor injuries, where tort liability considerations come into play.

The benefits of such programs are touted by OSHA in support of its rulemaking. The agency notes that, in researching state programs, OSHA found reductions in injury and illness from 9 to 60 percent by implementing an I2P2. Examples of state programs and their effectiveness include:

- Alaska, which experienced a 17.4 percent decline injuries after requiring an I2P2;
- California, which experienced a 19 percent decline in injuries after requiring an I2P2;

- Colorado, where employers witnessed cumulative annual reduction in accidents of 23 percent and a cumulative reduction in accident costs between 58 and 62 percent; and,
- Hawaii, which reflected a net reduction in injuries and illnesses of 20.7 percent.

According to federal OSHA, currently 34 states require or encourage employers to implement I2P2 programs.<sup>4</sup> However, other than entities covered by Cal-OSHA, none of these other state I2P2 programs are required at mine sites, and it does not appear that any state mining agency has a comparable requirement in place. In addition, many countries around the world also require employers to implement and maintain them, such as Canada, Australia, all 27 European Union member states, Norway, Hong Kong, Japan, and Korea.<sup>5</sup>

The five elements of the ANSI Z10 standard are:

1. Management leadership and employee participation;
2. Planning;
3. Implementation and operation;
4. Evaluation and corrective action; and
5. Management review

It is helpful, when planning a program, to examine these elements one-by-one.

- **Management Leadership:** Safety and health management systems focus on management spearheading safety efforts. Consequently, successful ANSI Z10 implementation requires strong leadership and a solid commitment from upper management. Management must establish a safety and health policy and communicate the information to all employees (preferably in writing, with dated/documented receipt).

- **Employee Participation:** Miners and other employees have personal responsibility to comply with all safety and health rules established by management, but they will not be aware of this unless it is communicated by management, through training and enforcement/disciplinary actions. However, there is more to the “employee” element than this. Employees must have opportunity to participate in safety-related planning, and provide input into the implementation, evaluation, and corrective/preventive actions geared toward addressing hazards in the workplace. They may have useful ideas on safety and health interventions that can reduce injuries, including those related to ergonomic conditions. Employee participation can be accomplished through use of safety/health committees. Some states already mandate that employers have such committees. In union workplaces, employee participation should be done through cooperative efforts with the union and in accordance with relevant provisions of collective bargaining agreements.

- **Planning:** The planning process is a key component in order to systematically prioritize safety and health management issues, to establish appropriate objectives, and to devise a plan to meet the established objectives. The planning process involves thoroughly documenting and reviewing all equipment and processes to determine risk factors (e.g., electrical lock-out programs, confined space entry, guarding of conveyors); conducting a hazard analysis to identify potential and existing hazards

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<sup>4</sup> See generally, OSHA White Paper, Injury and Illness Prevention Programs, January 2012. <http://www.scribd.com/doc/77924289/OSHAwhite-Paper-January-2012-Safety-Manual>. Of these, 15 states actually have regulations mandating I2P2 programs.

<sup>5</sup> *Id.* at 2.

and exposures and to evaluate the frequency employees will be exposed to the hazards, and identifying the hazard control measures/methods and evaluating the potential severity of the hazard.

• **Implementation and Operation:** The necessary competence in safety & health for each task should be defined, and include consideration of mandatory regulatory requirements. More than 50 OSHA standards have specific training mandates, and MSHA has mandatory training under 30 CFR Parts 46, 47 and 48. Employers must consider miner and supervisor competency for identification and elimination or control of work-related hazards and risks, and for implementation of their respective responsibilities under safety & health management system. Worker and supervisor training programs should address:

- Company policies and procedures;
- Appropriate PPE;
- Job Safety Analysis;
- Maintenance & housekeeping;
- Site-specific emergency & security procedures;
- Worksite evaluation, incident investigation, and audit procedures;
- Contractor utilization and safety oversight; and,
- Applicable MSHA regulations, and consensus standards that MSHA has incorporated by reference (e.g., specific ANSI, ASTM, ASME, SAE and NFPA requirements, as well as the ACGIH TLV levels adopted by MSHA, which are the 1972 versions for coal and the 1973 versions for metal/nonmetal mines).

Other actions to implement the safety and health management system include applying specific controls and applying risk-reducing methods. Actions may include hazard elimination; substitution of a less hazardous material, process, or equipment; use of engineering controls; warnings signs, sirens or labels; administrative controls (e.g., job rotation to reduce exposure to repetitive or noisy tasks and mitigate ergonomic or noise hazards); and finally use of appropriate personal protective equipment (PPE), which MSHA considers a “last resort” to be used only after all engineering/administrative controls have been implemented and where health or safety risk exposures cannot be further reduced. For noise, MSHA will still issue citations for exposures above 90 dBA, even where effective hearing protection is worn.

• **Evaluation and Corrective Action:** Regular and frequent evaluations of the safety and health management program should be conducted by management, as conditions, exposures or machinery and equipment may change over time. Audits, as well as corrective actions and follow-ups taken by the company in response to identified risks, should be documented. Also make sure there is management commitment of resources to address promptly any identified deficiencies. The audits/evaluations should identify areas not compliant with the ANSI Z10 standard and, if an audit reveals any MSHA non-compliance, the condition must be abated immediately or else MSHA may find evidence of prior management knowledge and use this to support a “flagrant violation” finding with a maximum penalty assessment. MSHA has been more aggressive in demanding audit reports in recent years, invoking its authority under Section 108(a)(1)(E) of the Mine Act, which permits MSHA to seek an injunction in U.S. District Court, if needed, when an operator “refuses to furnish any information or report requested by the Secretary ... in furtherance of the provisions of this Act.”

• **Management Review:** Management should annually review applicable MSHA standards, any new agency policy, as well as internal safety programs -- and compare them to the ANSI Z10 benchmarking standards to help identify and correct weak areas. This will improve the way processes and procedures are performed and should decrease the frequency and severity of injuries.

Management review provides a clear picture of the effectiveness of the system, as well as its impact on the business needs of the organization. If management support is somewhat weak, this may be helped by documenting cost savings associated with improved safety and health performance in the review process (e.g., worker's comp costs, property damage reduction from industrial accidents, reduction in MSHA citation penalties, and lower tort exposure from contractor accidents).

The ANSI Z10 standard is available through the American National Standards Institute ([www.ansi.org](http://www.ansi.org)). Once this system design has been obtained and reviewed, the next component is getting company personnel involved. First, identify a person with authority and responsibility for implementing the program, and include a system for ensuring that employees comply with safe and healthy work practices. Other things vital to the success of the program include:

- (1) A system for communicating with employees on matters relating to occupational safety and health;
- (2) Procedures for identifying and evaluating work place hazards, including periodic workplace inspections;
- (3) Procedures to investigate occupational injuries or illnesses;
- (4) Methods for correction of unsafe or unhealthy conditions in a timely manner; and,
- (5) Training in safe and healthy work practices for all employees.

## **Conclusion**

If you put a safety and health management system in place, you will – by going through the process thoughtfully and (if needed) with the assistance of a safety professional – address all significant hazards in your workplace, mitigate those risks appropriately, and train workers effectively so that the 80 percent of accidents that arise from “unsafe acts” may be averted as well as those other accidents that are due to “unsafe conditions.” It will also help mine operators and contractors get ahead of the curve in the event that a PPOV notice letter is received, and to prepare for the future I2P2 MSHA and OSHA standards.