

Safety and Health Practices in the Mining and Quarrying Industry: 2008

(Fourth of a series on Industrial Relations Practices)

The Bureau of Labor and Employment Statistics (BLES) in coordination with the DOLE Regional Offices conducted the 2007/2008 BLES Integrated Survey (BITS) covering 6,460 non-agricultural sample establishments employing 20 or more workers nationwide. The main objective of the survey is to generate integrated data sets on employment of specific group of workers, occupational shortages and surpluses, safety and health practices, occupational injuries and diseases and labor cost of employees.

This issue presents the survey highlights of the safety and health practices adopted and implemented by mining and quarrying establishments as of June 30, 2008. It provides information on the safety and health of persons at work, as well as on the protection of other individuals against risk to their safety and health in connection with or as affected by activities of persons at work.

OVERVIEW

Mining and quarrying had been identified as one of the high-risk industries. Workers are exposed to an inherently hazardous environment due to the existence of a variety of hazards. Hence, occupational safety and health concerns must be addressed in parallel with the various issues confronting the industry.

Under the Philippine Mining Act, mining and quarrying establishments are mandated to maintain safe and sanitary upkeep of the mining operations and achieve waste-free and efficient mine development.

Therefore, it is imperative that an effective accident prevention and industrial hygiene programs be instituted to prevent or mitigate any incident or accident, causing or creating the danger of loss of life or serious physical injuries.

SURVEY HIGHLIGHTS

The following are the observed occupational safety and health practices in the mining and quarrying industry:

... as to available facilities

All of the 60 mining and quarrying establishments had adequate lighting facilities and adequate space that allow employees sufficient freedom of movement to perform their duties.

In addition, large proportions of establishments had adequate supply of safe drinking water; proper ventilation in work areas; and well-maintained office building (96.7% each).

Majority of the establishments as well, had clean and hygienic comfort rooms; and available water tank and functioning fire extinguishers within reach (95.0% each). (*Table 1*)

... as to reasons for non-provision

Of the establishments that did not provide some of the facilities, mostly believed that the said safety and health facilities were "not needed/not necessary" (63.3%) and "not applicable/suitable" (58.3%).

Other establishments (16.7%) attributed the absence of legal requirement as a reason for the non-provision of the facilities.

A small proportion of establishments (3.3%) cited the non-availability of space and high costs as reasons for non-provision.

No Need/Not Necessary	63.3%
Not Applicable/ Suitable	58.3%
Not Required by Law	16.7%
Very Few Workers	8.3%
No Available Space	3.3%
Too Costly	3.3%

... as to programs implemented/ services provided

Nearly all mining establishments had available first-aid kits (96.7%). Also, a large proportion conducted regular inspection and maintenance of equipment (91.7%).

Four out of every 5 establishments implemented programs on accident prevention (81.7%) and emergency response preparedness (78.3%) while three-fourths had regular monitoring of hazards such as fumes, dust, noise level and heat in work areas (75.0%). (Table 2)

... as to preventive and control measures adopted

Availability of portable/built-in fire extinguishers was one of the common preventive and control measures adopted in almost all mining and quarrying establishments (96.7%). In addition, 9 out of every 10 establishments undertook regular maintenance of mechanical and electrical facilities (93.3%), properly posted safety signages (91.7%) and

observed proper operational procedures in doing the job (90.0%).

Though mining and quarrying is one of the high-risk industries, it was noted that 4 out of every 5 mining and quarrying establishments conducted training on health and safety (81.7%), provided information or advisory services on occupational safety and health (81.7%), instituted emergency evacuation plan, and conducted emergency drills (80.0% each). (Table 3)

... as to trainings and seminars conducted

Recognizing the role of workers' education and training as key factor in reducing accidents and in improving the health condition of workers in the mining and quarrying industry, about 4 out of every 5 establishments provided training on first-aid (81.7%) to their employees. Some establishments conducted safety drills (75.0%) and seminar on safeguarding the environment (73.3%). (Table 4)

... as to agencies involved

Nearly one-half of mining and quarrying establishments sought the assistance of DOLE Accredited Safety Training and Consultancy Organizations (46.7%) in the conduct of safety and health trainings. Two out of every 5 establishments availed the services of the Occupational Safety and Health Center (41.7%).

About 35.0% of all establishments tapped the services offered by the different DOLE Regional Offices.

DOLE Accredited Safety Training and Consultancy Organizations	46.7%
Occupational Safety and Health Center	41.7%
DOLE Regional Offices	35.0%
NGOs/Universities/ Academic Institutions	25.0%
Employers Association	23.3%
Association of Safety Practitioners of the Philippines, Inc.	23.3%
Bureau of Working Conditions	18.3%
Industry Associations	15.0%

... as to personnel who administered medical services

Trained first-aiders administered medical services in 3 out of every 5 establishments (61.7%). Almost the same proportion of establishments relied on the services of nearest clinic/hospital (56.7%) for the provision of medical services to their employees.

The services of physicians (41.7%) and registered nurses (38.3%) were available only in less than half of the establishments.

Trained First-Aider	61.7%
Nearest Clinic/Hospital	56.7%
Physician	41.7%
Registered Nurse	38.3%
Dentist	18.3%

... as to person responsible in the implementation/monitoring

The Human Resource Managers implemented the safety and health practices in more than two-fifths (43.3%) of the establishments.

However, in some establishments, its implementation was spearheaded and monitored by Production/Operations Manager and Health and Safety Committee/Officer at 38.3% each.

Human Resource Manager	43.3%
Production/Operations Manager	38.3%
Health and Safety Committee/Officer	38.3%
General Manager	28.3%
Health Professionals	28.3%
Pollution Control Officer	26.7%
Managing Proprietor/Owner	18.3%
Labor Management Committee	15.0%

... as to occupational safety and health records

Three out of every 5 establishments had record of Employees Work Accident/Illness Report (61.7%).

Almost half of establishments kept Annual Medical Report (48.3%).

Employees Work Accident/Illness Report	61.7%
Annual Medical Report	48.3%
Annual Work Accident/ Illness Exposure Data	30.0%
Minutes of Meeting of Health and Safety Committee	26.7%

... as to communication method used

Safety and health practices were disseminated principally to employees during general assembly/meetings (78.3%). Some establishments communicated such practices through posters in conspicuous places (55.0%) and newsletter/staff bulletin (50.0%).

General Assembly/Meetings	78.3%
Posters in conspicuous places	55.0%
Newsletter/Staff Bulletin	50.0%
Conduct of drills	41.7%
Quality Circles/Productivity Improvement Group meetings	25.0%
Labor Management Cooperation/Council meetings	18.3%
Daily "walk-through"	16.7%

... as to frequency of management consultation

With effective working relationship between the employers and the employees equally important in making the workplace safe, 4 out of every 5 establishments (83.3%) consulted with their employee representatives on matters related to safety and health. A large proportion of establishments "always" (68.3%) consulted with employee representatives while only 15.0% did it "sometimes". Such consultation was considered "not applicable" by a few establishments (16.7%).

Always	68.3%
Sometimes	15.0%
Not Applicable	16.7%

... as to ISO certifications held

Notably, only 1 out of every 5 establishments had certification on ISO 14001 - Environmental Management Standard (20.0%).

A few establishments had ISO Certification on Quality Management System - ISO 9001:2000 (13.3%) and on Occupational Health and Safety Management Standard - OHSAS 18001 (5.0%).

ISO 14001 (Environmental Management Standard)	20.0%
ISO 9001:2000 (Quality Management System)	13.3%
OHSAS 18001 (Occupational Health and Safety Management Standard)	5.0%

FOR INQUIRIES:

Regarding this report contact **LABOR RELATIONS STATISTICS DIVISION at 527-3000 local 319**

Regarding other statistics and technical services contact **BLES DATABANK at 527-3000 local 317**

Or Write to BLES c/o **Databank, 3/F DOLE Bldg. Gen. Luna St., Intramuros, Manila, 1002**

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TABLE 1 – Number and Percent Share of Mining and Quarrying Establishments Employing 20 or More Workers by Type of Facilities Available/Provided, Philippines: June 2008

FACILITIES AVAILABLE/PROVIDED	Number	% Share
Total	60	100.0
Adequate lighting including emergency lights	60	100.0
Adequate space that allow sufficient freedom of movement to perform duties	60	100.0
Adequate supply of safe drinking water	58	96.7
Proper ventilation in work areas	58	96.7
Well-maintained office building	58	96.7
Access to clean and hygienic comfort rooms	57	95.0
Availability of water tank and functioning fire extinguishers within reach	57	95.0
Parking space for employees' vehicles	56	93.3
Separate toilets for men and women	55	91.7
Adequate aisles/passageways	53	88.3
Unobstructed fire exits at the workplace	50	83.3
Pantry (small room used as eating area of employees)	50	83.3
Ergonomically designated seats/tools/machines	48	80.0
Designated smoking area/s	47	78.3
Adequate exhaust system	46	76.7
Proper waste disposal system	44	73.3
Comfortable rest area for workers	39	65.0
Clean canteen for employees	39	65.0
Washing facilities and facilities for changing/storing working clothes	38	63.3
Medical/dental clinic or treatment room	37	61.7
Separate locker rooms for men and women	30	50.0
Sports/recreational facilities	28	46.7
Elevator for building with at least four floors	19	31.7
Facilities for persons with disabilities	10	16.7
Pipe-in music at the workplace	8	13.3

Note: Details do not add up to total due to multiple responses.

Source of basic data: Bureau of Labor and Employment Statistics, 2007/2008 BLES Integrated Survey.

TABLE 2 – Number and Percent Share of Mining and Quarrying Establishments Employing 20 or More Workers by Type of Occupational Safety and Health Programs/Services Implemented Philippines: June 2008

OCCUPATIONAL SAFETY AND HEALTH PROGRAMS/SERVICES IMPLEMENTED	Number	% Share
Total	60	100.0
Availability of first-aid kits	58	96.7
Regular conduct of inspection and maintenance of equipment	55	91.7
Accident prevention program	49	81.7
Emergency response preparedness program	47	78.3
Regular monitoring of hazards such as fumes, dust, noise level and heat in work areas	45	75.0
Drug-Free workplace policy/program	39	65.0
Free/subsidized medical care other than those provided thru the HMO or private insurance (includes medicines, special laboratory exams for ancillary procedures on top of annual physical examination, hospitalization)	39	65.0
Free health and/or accident insurance by a private insurance company	39	65.0
Free health plan coverage by health maintenance organization (HMO)	35	58.3
Substance abuse and employee assistance program	32	53.3
Anti-sexual harassment program	29	48.3
Physical fitness program	25	41.7
Tuberculosis prevention and control policy	24	40.0
Random drug testing	21	35.0
HIV/AIDS policy/program	21	35.0
Family planning program	20	33.3
Other health programs/services relative to the maintenance or safety and health conditions at the workplace	2	3.3

Note: Details do not add up to total due to multiple responses.

Source of basic data: Bureau of Labor and Employment Statistics, 2007/2008 BLES Integrated Survey.

TABLE 3 – Number and Percent Share of Mining and Quarrying Establishments Employing 20 or More Workers by Preventive and Control Measures on Safety and Health Implemented, Philippines: June 2008

PREVENTIVE AND CONTROL MEASURES ON SAFETY AND HEALTH IMPLEMENTED	Number	% Share
Total	60	100.0
Portable/built-in fire extinguishers	58	96.7
Regular maintenance of mechanical and electrical facilities	56	93.3
Proper posting of safety signages	55	91.7
Observance of proper operational procedures in doing the job	54	90.0
Instruction/training on health and safety	49	81.7
Information or advisory services on occupational safety and health	49	81.7
Emergency evacuation plan	48	80.0
Conduct of emergency drills	48	80.0
Provision of adequate machine guarding/railing or casing on moving parts	47	78.3
Proper storage and labeling for chemicals, pesticides and hazardous materials	46	76.7
Appropriate number of trained health and safety officer	46	76.7
Correction action programs and performance audits	46	76.7
Security measures to reduce violence	45	75.0
Provision of protective clothing/equipment to employees (e.g., gloves, head gear, footwear, etc.)	44	73.3
Availability of safety manuals, labels or maintenance procedures	44	73.3
Regular pest control treatment	41	68.3
Institutionalization of health and safety committee	41	68.3
Availability of safety measures to reduce exposures to radiation and airborne contaminants	41	68.3
Conduct of process analysis for potential problems	39	65.0
Availability of Material Data Safety Sheets (MDSS) for chemicals	34	56.7
Use of video camera or alarm system	30	50.0
Sewage treatment plan	26	43.3

Note: Details do not add up to total due to multiple responses.

Source of basic data: Bureau of Labor and Employment Statistics, 2007/2008 BLES Integrated Survey.

TABLE 4 – Number and Percent Share of Mining and Quarrying Establishments Employing 20 or More Workers by Type of Occupational Safety and Health Trainings/Seminars Provided to Employees, Philippines: June 2008

OCCUPATIONAL SAFETY AND HEALTH TRAININGS/SEMINARS PROVIDED	Number	% Share
Total	60	100.0
First Aid	49	81.7
Safety Drills (e.g. fire, earthquake, etc.)	45	75.0
Safeguarding the Environment	44	73.3
Safety Work Procedures	41	68.3
Safety Management	41	68.3
Accident Investigation	41	68.3
General Safety and Health Provisions	39	65.0
Good Housekeeping (e.g. 5S + 1)	36	60.0
Prohibited Drugs	35	58.3
Handling of Hazardous Materials	34	56.7
Safety Audit	32	53.3
Health Hazard Evaluation	32	53.3
Emergency Preparation to Work Hazards	27	45.0
Prescribed Basic Occupational Safety and Health (BOSH) Training	27	45.0
Total Quality Management	21	35.0
Family Planning and Reproductive Health	20	33.3
Conflict Management	18	30.0
Principles of Ergonomics	16	26.7
Stress Management	14	23.3
Other OSH trainings/seminars on safety and health	6	10.0

Note: Details do not add up to total due to multiple responses.

Source of basic data: Bureau of Labor and Employment Statistics, 2007/2008 BLES Integrated Survey.