North Asian International Research Journal Consortium

North Asian International Research Sournal

Chief Editor

Multidisciplinary

Dr. Nisar Hussain Malik

Publisher

Dr. Bilal Ahmad Malik

Associate Editor

Dr.Nagendra Mani Trapathi



Welcome to NAIRJC

ISSN NO: 2454 - 2326

North Asian International Research Journal is a multidisciplinary research journal, published monthly in English, Hindi, Urdu all research papers submitted to the journal will be double-blind peer reviewed referred by members of the editorial board. Readers will include investigator in Universities, Research Institutes Government and Industry with research interest in the general subjects

Editorial Board

Euitoriai Doaru		
J.Anil Kumar Head Geography University of Thirvanathpuram	Sanjuket Das Head Economics Samplpur University	Adgaonkar Ganesh Dept. of Commerce, B.S.A.U Aruganbad
Kiran Mishra	Somanath Reddy	Rajpal Choudhary
Dept. of Engligh,Ranchi University,	Dept. of Social Work, Gulbarga	Dept. Govt. Engg. College Bikaner
Jharkhand	University.	Rajasthan
R.D. Sharma	R.P. Pandday	Moinuddin Khan
Head Commerce & Management Jammu	Head Education Dr. C.V.Raman	Dept. of Botany SinghaniyaUniversity
University	University	Rajasthan.
Manish Mishra Dept. of Engg, United College Ald.UPTU Lucknow	K.M Bhandarkar Praful Patel College of Education, Gondia	Ravi Kumar Pandey Director, H.I.M.T, Allahabad
Tihar Pandit Dept. of Environmental Science, University of Kashmir.	Simnani Dept. of Political Science, Govt. Degree College Pulwama, University of Kashmir.	Ashok D. Wagh Head PG. Dept. of Accountancy, B.N.N.College, Bhiwandi, Thane, Maharashtra.
Neelam Yaday	Nisar Hussain	M.C.P. Singh
Head Exam. Mat.KM .Patel College	Dept. of Medicine A.I. Medical College	Head Information Technology Dr C.V.
Thakurli (E), Thane, Maharashtra	(U.P) Kanpur University	Rama University
Ashak Husssain	Khagendra Nath Sethi	Rama Singh
Head Pol-Science G.B, PG College Ald.	Head Dept. of History Sambalpur	Dept. of Political Science A.K.D College,
Kanpur University	University.	Ald.University of Allahabad

Address: -North Asian International Research Journal Consortium (NAIRJC) 221 Gangoo, Pulwama, Jammu and Kashmir, India -192301, Cell: 09086405302, 09906662570, Ph. No: 01933-212815, Email: nairjc5@gmail.com, info@nairjc.com Website: www.nairjc.com



A STUDY ON SAFETY MANAGEMENT

S.B.ARUN*

*PG Scholar-MBA, Anna University Regional Campus, Madurai

E.SANGEETHA**

**PG Scholar-MBA, Anna University Regional Campus, Madurai

ABSTRACT

A Safety Management System (SMS) is a systematic approach to managing safety, including the necessary organizational structures, accountabilities, policies and procedures. As per ICAO requirements, service providers are responsible for establishing an SMS, which is accepted and overseen by their State. The purposes of defining safety management, safety can be defined as:

Safety Management Systems, including Process Safety Management, are a fairly recent introduction to our efforts to improve the Environment, Health and Safety. Safety Management Systems were developed based on the concepts of systematic improvement used in Total Quality Management, the Malcolm Baldrige National Quality Award, and Dr. Deming teachings. As these more scientific systems were being implemented in the early nineties, some companies set goals to reduce the number of accidents by 90% in ten years. To accomplish these accident reduction goals, these companies new they had to improve their accident and incident investigation processes to reduce the number of repeat accidents. Therefore, many adopted advanced root cause analysis techniques as part of their Safety Management Systems. *Key Words:* Safety management, Health and safety, Adopted.

INTRODUCTION

The Workplace (Health, Safety and Welfare) Regulations 1992 cover a Occupational health and safety (OHS) is a cross-disciplinary area concerned with protecting the safety, health and welfare of people engaged in work or employment. The goals of occupational safety and health programs include fostering a safe and healthy work environment. OHS may also protect co-workers, family members, employers, customers, and many others who might be affected by the workplace environment wide range of basic health, safety and welfare issues and

apply to most workplaces (with the exception of those workplaces involving construction work on construction sites, those in or on a ship, or those below ground at a mine). They are amended by the Quarries Regulations 1999, the Health and Safety (Miscellaneous Amendments) Regulations 2002, the Work at Height Regulations 2005, and the Construction (Design and Management) Regulations 2007. Occupational health and safety can be important for moral, legal, and financial reasons. All organizations have a duty of care to ensure that employees and any other person who may be affected by the companies undertaking remain safe at all times. Moral obligations would involve the protection of employee's lives and health. Legal reasons for OHS practices relate to the preventative, punitive and compensatory effects of laws that protect worker's safety and health.



SAFETY MANAGEMENT PLANS

A work health and safety (WHS) management plan is a documented health and safety plan for a specific construction workplace. According to current laws, before work begins the builder (i.e. the principal contractor) must prepare a WHS management plan for any workplace where the value of construction work exceeds \$250,000.Although not legally required for projects under \$250,000, WHS management plans are recommended for use by builders as written evidence of how risks are being managed on site. The Master Builders Commercial WHS Management Plan is available via Master Builder's eDocs system and was developed to help builders meet their obligations and allows you to:

- Have 24/7 access to your documents
- Be able to easily and quickly distribute the completed plan to subcontractors and clients in 'real time'
- Ensure you are using a compliant and up-to-date plan



- Save time by re-using information from previous plans to create new, similar plans
- Have access to a competitively priced, quality product that you can trust
- Gain exclusive access to Master Builders' dedicated eDocs service desk to assist with any queries.

The Commercial WHS Management Plan is the must-have product to help expand your business, allowing you to spend more time on your business than in it.



SAFETY MANAGEMENT SYSTEM POLICY

Safety Management Systems provide a formal, organized process whereby people plan, perform, assess, and improve the safe conduct of work. The Safety Management System is institutionalized through Department of Energy (DOE) directives and contracts to establish the Department-wide safety management objective, guiding principles, and functions.

The DOE safety management system consists of six components:

- Objective
- Guiding principles
- Core functions
- Mechanisms
- Responsibilities
- Implementation



2016 WORKPLACE SAFETY PREDICTIONS: AN OUTLOOK ON MANAGING RISKS

There continues to be a growing demand for identifying new and creative ways to mitigate hazards in the workplace. In fact, workplace health and safety risks not only have a tremendous impact on the livelihood and well-being of employees across a variety of industries, but also they are very costly to companies needing to address on-the-job injuries once they occur. Some industry stats even show that 1 million Americans suffer from a slip, trip, or fall injury every year, costing employers up to \$40,000 for each incident.

It's also important to consider the fact that the landscape of issues impacting workplace safety is constantly changing year to year. For example, earlier this year, new regulations launched requiring companies to now assume work comp risks for their contract/temp employees. In addition, with the ongoing labor shortage crisis and the legalization of certain drugs, it's no wonder that companies need to equip themselves now for what lies ahead in 2016.

To assist companies with addressing some of the most prevalent workplace concerns that will impact safety in the New Year, below are four key trends that organizations need to be aware of.

1. Psycho-social, depression, and obesity issues

The ongoing and emerging trend of psycho-social, depression, and obesity issues will continue to impact safety in 2016. And while many organizations typically address psycho-social issues after an employee is depressed about being injured, in 2016 it will be even more vital for employers to identify employees who bring depression and other social issues to the job day to day -- before an incident occurs.

It's no surprise that if an employee is dealing with depression, experiencing marital issues, or just lost a loved one, this will affect his or her mental capability of performing a job. In fact, studies show that in a given year, 18.8 million American adults (9.5 percent of the adult population) will suffer from a depressive illness. In addition, studies show that depression is a major cause of disability, absenteeism, lack of presenters, and productivity loss among working-age adults. That's why it's critical for managers to identify these issues early on and to offer solutions that will help employees to cope with their issues so that they don't impact the workplace or escalate into a claim.



In addition, because obesity is now covered under workers' compensation, if employees are challenged with obesity and their obesity is impacting their job performance, it's important for employers to offer fitness and wellness solutions to help the employees on their journey to recovery.

2. Opioid addiction

In 2016, drug abuse and addictions will continue to be a growing concern in the United States. There are 1.9 million Americans now living with prescription opioid abuse or dependence. Moreover, CDC researchers this month reported that 28,647 Americans died of opioid-related drug overdoses in 2014. And a growing concern is how pain killer addiction is being driven by the tremendous amount of workers' compensation injury claims hitting the system each year. This is why it's essential for organizations to take on even more prevention programs in 2016 to stop the addiction cycle by preventing the injury from occurring in the first place.

Simple prevention solutions such as work site evaluations, on-the-job fitness solutions, functional job analysis, and on-site ergonomics training can significantly reduce workplace injuries and break the addiction cycle from starting. Moreover, it's important to remember that "an ounce of prevention is worth a pound of cure." This is especially significant if you consider that doing a \$165 pre-work screen on a candidate is a small prevention investment, as compared to having to pay a \$50,000 medical bill for an injured worker or even paying hundreds of thousands of dollars in ongoing disability costs if the worker never returns to the workplace.

3. Predictive analytics and Big Data

In 2016, we will start to see even more of a shift toward organizations using Big Data and predictive analytics to help injured workers return to work more efficiently. Predictive analytics uses technology and statistical methods to search through massive amounts of information, analyzing it to predict outcomes for individual patients. That information can include data from past treatment outcomes, information on pre-injury conditions, and insights on an individual's anticipated reaction to prescription drugs based on his or her bio makeup and even determining the likelihood of diseases, helping physicians to predict future wellness.

4. Temp and contractor liabilities

In 2016, it's imperative for companies to start investing in workplace safety and prevention solutions for their temporary and contract employees. Some companies may not be aware of the fact that they now need to be

prepared to take on workers' compensation costs for their independent contractors in addition to their permanent employees since the National Labor Relations Board now views temporary workers to be essentially the same as regular employees. With this in mind, it's critical that organizations take more time on the front end to ensure they are hiring the right contractors to fill positions and to train them on the right way to perform job duties.

Instead of rushing to hire temp workers, it's important that organizations take their time and not skip over some key steps, such as doing background checks or pre-work screenings on potential candidates. A pre-work screen allows companies to identify an applicant's ability to perform the physical demands of a specific job. If the test shows that a temp employee cannot perform the physical requirements of the job, the hiring manager may want to consider him for another position or explore other options.

By factoring in these latest trends into workplace safety strategies for 2016, companies will be better equipped at mitigating business liabilities and other risks. The good news is, there will be new and innovative solutions launching that will help organizations to address these pressing concerns in the new year and in the years ahead.

6 ELEMENTS OF AN EFFECTIVE SAFETY MANAGEMENT SYSTEM

There are so many aspects to creating and maintaining a safe working environment that sometimes it's easy to get lost in it all. To truly succeed in creating a safe place of work, the key is to develop and implement an effective safety management system. A safety management system combines all the different elements in your workplace that need attention to ensure you provide a safe working environment for everyone who enters it. Safety management systems make health and safety an integral part of your business's core operations. By designing, developing and implementing an effective safety management system, you will have methods for managing reporting, responsibilities, planning and resourcing to create a safer workplace.

Safety management systems have six elements:

- A Safety Plan;
- Policies, Procedures And Processes;
- Training And Induction;
- Monitoring;
- Supervision; And

🕐 North Asian International research Journal consortium www.nairjc.com 🐋

• Reporting.

CIF IMPACT FACTOR: 4.465

Remember, it is not enough to simply adopt a satisfactory safety management system. You must also actively implement that system in your workplace. To do this, you must ensure that:

- workers comply with procedures and instructions;
- workers are appropriately trained; and
- workers are subject to ongoing supervision.

1. Safety plan

A safety plan is a strategic action plan that forms part of the business plan. It analyses the current and prospective risk for a company and charts how the risks will be eradicated and controlled over a calendar period (the safety plan must have a budget).

This plan will ensure that there is a governance structure within your company that ensures every worker clearly understands their safety obligations (and how to comply) and is accountable to carry out those obligations.

2. Policies, procedures and processes

Policies, procedures and processes include all safety paper infrastructures within your company. This paperwork will describe all safety behaviour, expectations, record-keeping, incident reporting, and incident notification documentation.

3. Training and induction

Depending on the nature of your workplace (whether it is low-risk or high-risk), everyone who enters your workplace should receive training on:

- The Rules Of Your Company
- The Rules Of The Site; And
- The Rules Of The Location They Are Visiting.

The training content will depend on the level of risk the person is exposed to.



4. Monitoring

Your obligations to monitor your workplace depend on circumstances and need. Always consider the level

of risk. The higher the risk, the more frequent and detailed the monitoring needs to be.

Other times when monitoring will be necessary include:

- To Ensure That All Risk Has Been Covered By A New Risk Assessment That Has Been Carried Out Due To A Change In Process, E.G. The Installation Of New Workstations; And
- When An Investigation Takes Place Following An Incident.

5. Supervision

The only way to ensure your workers are carrying out their safety obligations is to have adequate supervision. The level of supervision required in your workplace will increase if the level of safety control put in place to reduce a risk is low, i.e. the less effective the control measure used, the higher the level of supervision necessary.

6. Reporting

The governance structure of your company needs safety reporting at all levels, not just at the board level. Your workers need to know what safety looks like – what's going right and what's going wrong. This can only occur when they receive safety feedback from you, e.g. how many hazards were identified, the risk levels associated with those hazards and what control measures were implemented.

SMS COMPONENTS

The four components of the SMS combine to create a systemic approach to managing and ensuring safety. These components are:

• Safety Policy: The documented organizational policy that defines management's commitment, responsibility, and accountability for safety. Safety Policy identifies and assigns responsibilities to key safety personnel.



• Safety Risk Management (SRM): A process within the SMS composed of describing the system; identifying the hazards; and analyzing, assessing, and controlling risk. SRM includes processes to define strategies for monitoring the safety risk of the NAS. SRM complements Safety Assurance.

• Safety Assurance: A set of processes within the SMS that verify that the organization meets or exceeds its safety performance objectives and that function systematically to determine the effectiveness of safety risk controls through the collection, analysis, and assessment of information.

• Safety Promotion: The communication and distribution of information to improve the safety culture and the development and implementation of programs and/or processes that support the integration and continuous improvement of the SMS within the ATO Safety Promotion allows the ATO to share and provide evidence of successes and lessons learned.

SMS Continuous Improvement

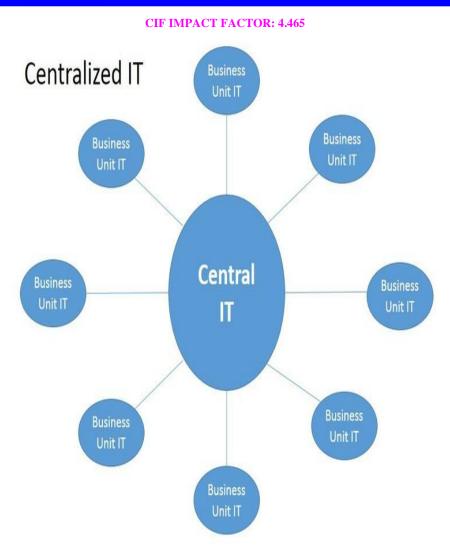
The SMS is the framework that the ATO uses to measure and help ensure the safety of its operations. In an evolving NAS, it is necessary to continuously seek improvement in ATO processes and policies that support ATO safety efforts and, by extension, support the SMS. The ATO and external organizations conduct audits and assessments to measure and determine compliance with the policies and procedures used to manage safety in the NAS. By assessing SMS maturity, the ATO is able to identify gaps in SMS performance, opportunities for improvement, and areas in which to focus new policy development.

SAFETY MANAGEMENT STRUCTURE

Management Structure

Senior departmental staff and unit managers/supervisors have responsibility for Health and Safety management in the Department. Departmental Safety Officers have responsibility for monitoring the implementation of Departmental health and safety policy and reporting their findings to the Head of Department:





GUIDING PRINCIPLES OF INTEGRATED SAFETY MANAGEMENT

LINE MANAGEMENT RESPONSIBILITY FOR SAFETY.

Line management is directly responsible for the protection of the workers, the public, and the environment.

CLEAR ROLES AND RESPONSIBILITIES.

Clear and unambiguous lines of authority and responsibility for ensuring safety are established and maintained at all organizational levels within the Department and its contractors.

CIF IMPACT FACTOR: 4.465 COMPETENCE COMMENSURATE WITH RESPONSIBILITIES.

Personnel possess the experience, knowledge, skills, and abilities that are necessary to discharge their responsibilities.

BALANCED PRIORITIES.

Resources are effectively allocated to address safety, programmatic, and operational considerations. Protecting the workers, the public, and the environment is a priority whenever activities are planned and performed.

IDENTIFICATION OF SAFETY STANDARDS AND REQUIREMENTS.

Before work is performed, the associated hazards are evaluated and an agreed-upon set of safety standards and requirements is established which, if properly implemented, will provide adequate assurance that the workers, the public, and the environment are protected from adverse consequences.

HAZARD CONTROLS TAILORED TO WORK BEING PERFORMED.

Administrative and engineering controls to prevent and mitigate hazards are tailored to the work being performed and associated hazards.

OPERATIONS AUTHORIZATION.

The conditions and requirements to be satisfied for operations to be initiated and conducted are clearly established and agreed upon.

SMS BENEFIT

- Provide a common framework to proactively and reactively identify and address safety hazards and risks associated with NAS equipment, operations, and procedures;
- Encourage intra-agency stakeholders to participate in solving the safety challenges of an increasingly complex NAS;
- Reduce isolated analysis and decision-making using integrated safety management principles;

- Improve accountability for safety through defined managerial roles and responsibilities and SRM processes;
- Integrate Safety Assurance processes that enable the ATO to effectively measure safety performance

REFERENCES

- Berry, A. The importance of SMEs in the economy. ITD Global Conference on Taxation of Small and Medium Enterprises, Argentina; 2007.
- Dağdeviren, M., Yüksel İ. Developing a fuzzy analytic hierarchy process (AHP) model for behaviorbased safety management. *Inform Sci.* 2008;178:1717–1733.
- Beriha, G.S., Patnaik, B., Mahapatra, S.S., Padhee, S. Assessment of safety performance in Indian industries using fuzzy approach. *Expert Syst Appl.* 2012;39:3311–3323
- Lu, C.S., Yang, C.S. Safety leadership and safety behavior in container terminal operations. Safety Sci. 2010;48:123–134
- Didonet, S.R., Díaz, G. Supply chain management practices as a support to innovation in SMEs. J Technol Manag Innov. 2012;7:91–108
- De Dobbeleer, N., Beâland, F. A safety climate measure for construction sites. J Safety Res. 1991;22:97–103.
- Cooper, M.D., Philips, R.A. Validation of a safety climate measure. in: Annual occupational psychology conference. British Psychological Society, Birmingham (UK); 1994 January.



Publish Research Article

Dear Sir/Mam,

We invite unpublished Research Paper, Summary of Research Project, Theses, Books and Book Review for publication.

Address:- North Asian International Research Journal Consortium (NAIRJC) 221, Gangoo Pulwama - 192301 Jammu & Kashmir, India Cell: 09086405302, 09906662570, Ph No: 01933212815 Email: <u>nairjc5@gmail.com, info@nairjc.com</u> Website: www.nairjc.com

