Health and Safety Management

All companies manage safety, environmental protection or the health of their workers They do it if only by complying with applicable legislation or doing nothing, which is also a system (then of non management). Every enterprise, in the course of its development, has introduced risk control methods to avoid accidents, or environmental pollution. At some point in time, these methods, systems, and programmes of all sorts constitute an inextricable web whose complexity becomes counterproductive. Overlaps appear, relationships between the different elements in place are not clear.

There is, therefore, a need to put the system in order, and to structure everything so that every control measure regains its full meaning, and becomes framed in a complete and consistent set, the Management System.

This approach has proved useful in the area of Quality Management, which led to a definition of these systems in the ISO 9000 standard. A similar approach in environmental protection has led to the development of the ISO 14001 standard, which codifies environmental management systems in a spirit of continual improvement.

As regards safety, the structuring effort has been based on the ISO 14001 standard, transposing it in the realm of accident control, and introducing risk analysis as a central element. The product of this is the OHSAS 18001 specification, which for various reasons has not been taken as an ISO standard, but has nevertheless been widely adopted as the reference standard for safety and occupational health Management Systems.

A Management System can therefore be defined as a structured set of measures taken or recommended to achieve an initially defined result, guaranteeing stability of this result in order to be able to set even more stringent results, in other words implementing a process of continual improvement.

The management system is only a mechanism through which results may be guaranteed, as well as their continuous improvement.

However, two mechanisms ensure that this situation cannot last forever: first the need to comply with legislation, then commitment to a continuous improvement of results.

Safety Management Systems - Why do we need this?

As part of the work there are many different safety management systems (SMS) and nearly all of them, just aren't good enough to give you and your organisation the clear direction and protection , legally or otherwise. When we see a firm's SMS it is usually a collection of forms and documents.

It's not that organisations aren't doing most of the right things; they usually are, but the problem is it's not properly documented and they can't prove what they have done.

The characteristics of a good Safety Management System. It should:

- be in writing and fully documented
- state What is to be done, How it is done, When it is done and Who does it
- it will be a system and properly organised, not a bunch of unrelated documents
- be drafted in a recognised format
- as a minimum clearly demonstrate compliance with legislation
- demonstrate clearly to anyone that you've got safety under control
- be auditable

from **Face Book**.....

Why do we need HSE awareness?

Thousands of workers die every year during work or due to work! It's not a joke! **Every Minute there is an incident occurs.** Believe it, and many of them turn into fatal or some kind of permanent disability. The reasons may be many. But ..... you should agree, possibly the biggest reason is lack of HSE awareness among all (ranging from poor worker to the director of the project).

The point is that most safety systems fall far short of these requirements. In most cases there is no plan or method which describes how the organisation identifies and manages its hazards in accordance with standard safety procedures or the Hierarchy of Controls. Most systems are non-auditable and impossible to verify.

It is, therefore recommend strongly that your Safety Management System, which follows the recognised nationally acceptable and auditable system or format applicable to all. Such as ANSI Z10, Voluntary Protection Program, OHSAS 18001, BS 8800, CSA Z1000,

AS4801, ILO OSH 2001, SMS incorporating National Safety policy, etc.

The other important question to consider is why do you need a properly organised safety management system? Here are three reasons and there are plenty more:

- it will show clearly and concisely how your organisation manages safety
- demonstrates your Duty of Care
- assists in **defending yourself and your organisation against actions for Negligence**

Based on experience one of the first questions an inspector will ask you after an accident is, "**What did You do to prevent this accident from happening?"**

This can be a pretty challenging question if you don't have a sufficiently robust management system to demonstrate clearly what you, the people around you and your organisation have done. Saying things like, "I told them to be careful," or "they should have used their common sense," or "he/she is an experienced worker and should have known better" and other platitudes such as these won't impress the inspector.

However, with a properly designed and implemented safety system you will be able to demonstrate what you have done and, most importantly, you will have documentary proof to help you and your organisation avoid prosecution or an action for negligence. So your safety system must also include elements to enable you to protect yourself and your organisation.

A properly structured and documented Safety Management System should be seen as **one of the firm's most important strategic documents**.

Explaining Health and Safety Management System

Health and safety management is the process of:

- Policy setting;
- Organising;
- Controlling;
- Monitoring;
- Reviewing.

The efforts of the organisation and of using all other organisational resources to achieve stated goals of:

- Protecting people from injury and occupational ill-health - both employees and non-employees.
- Complying with legal requirement and avoiding prosecution.
- Managing health and safety in a cost effective way to achieve business objectives.

There are three main health and safety management systems available. Each has broadly the same principles:

- **ILO-OSH, 2001**: 'Guidelines on Occupational Safety and Health Management' Systems'. (ILO).
- **OHSAS 18001, 1999**: 'Occupational Health and Safety Management'. (BSI).
- **HSG 65, 2003**: 'Successful Health and Safety Management Systems'. (HSE).

The value of management systems is that they:

- Align health and safety objectives with business objectives;
- Establish a framework for delivering the intent of the safety policy;
- Establish a continuous improvement framework;
- Improve the management of health and safety risks;
- Establish systems to ensure legal compliance; and
- Provide an auditable baseline for performance.

Comparison between HSE Management systems and Quality Management systems

When we implement a quality management system, we manage the production directly.

Market feedback will also inform us authoritatively about success or failure of implementation of the quality management system.

Concerning occupational health, safety or environmental protection, there is no self correcting mechanism. HSE management is first a cost to the enterprise, benefits are only visible in the long run, even for enterprises such as oil companies who handle a hazardous product and for which sound HSE management is a key management driver. It can be more easily understood by looking at Accident Iceberg.

Fundamental characteristics of a HSE Management system

This means that any action in the area of HSE must find its place in the system. The management system acts thus as a system for classification of thoughts, actions and documents.

The management system is by definition a complete system, nothing within its sphere of relevance may remain outside the system. The system must therefore describe all elements and their interaction.

Documentation of the management system

The completeness of the HSE management system lead to the development of a management system manual and the HSE procedures dealing and detailing all HSE issues, which will describe all existing elements, as well as those which remain to introduce for sound HSE management, and their interactions.

This does not mean that a single document will include everything. A detailed document or sub document describing each and every HSE and related issue should be prepared.

Since the management system is a method to organise thoughts, actions and documents, the strict parallelism of the two systems is an essential advantage, which permits management of all HSE matters with only these two systems, one oriented towards accidental effects, the other towards continuous effects

1. POLICY

A health and safety policy is a business plan for safety. The health and safety policy is the starting point for the process of managing health and safety; an effective policy should set clear direction to achieve the goal of loss prevention and continual improvement.

2. ORGANISING

To make the health and safety policy effective it must be implemented. This requires a 'driving force' in the organisation, often referred to as health and safety 'culture'.

- Competence, e.g. recruitment, knowledge, ability, training, experience and qualifications of all staff.
- Commitment and control, e.g. allocating responsibilities, accountabilities, securing commitment and providing instruction and supervision to achieve control of health and safety within an organisation.
- Co-operation, e.g. internally between individuals, groups, departments including consultation with health and safety representatives, and externally between clients, suppliers, contractors, etc.
- Communication, e.g. oral, written, visual, example.

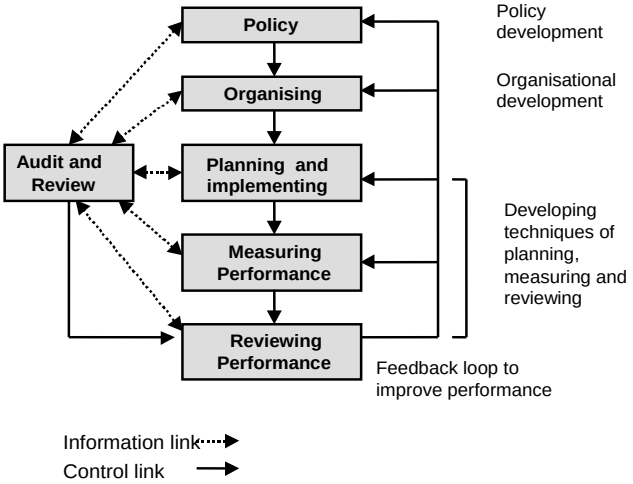

Figure - 1

3. PLANNING AND IMPLEMENTATION

Planning for health and safety involves setting objectives, identifying hazards, assessing risks and implementing standards of performance to achieve organisational goals. This stage requires organisations to:

- Set health and safety targets.
- Identify hazards, assess risks, and decide how risks can be eliminated or controlled.
- Set standards against which performance can be measured.
- Comply with health and safety laws.
- Design tasks, processes, equipment, products and services, safe systems of work to reduce risk.
- Develop a purchase and supply policy, which takes health and safety into account.
- Co-operate with contractors.
- Develop emergency procedures.

4. EVALUATION

Measuring performance is a key step in the management of health and safety.

"If you cannot measure your knowledge it's meagre and unsatisfactory" - *Lord Keivin*

"You can't manage what you can't measure" - Peter Drucker's 42),

is a reminder of the importance of measuring performance if objectives are to be achieved. It could be added that: *'What gets done should be measured'*, as a basis for further action.

There are two ways to generate information on performance:

- Active (Pro-active) Monitoring: monitors organisational achievements which aim to prevent accidents and ill-health, etc., e.g. achieving performance standards and annual plan targets, systematic inspection of equipment and premises, and the extent of legal compliance; and
- Reactive Monitoring: monitors management failures that have occurred, e.g. near misses, dangerous occurrences, accidents, ill-health, enforcement action, complaints by the workforce, etc.

5. REVIEWING PERFORMANCE

Reviewing performance is a process of analysing data gathered through monitoring techniques to make judgements about whether performance is adequate.

Reviewing the effectiveness of health and safety management enables organisations to pay particular attention to:

- The degree of compliance with health and safety performance standards (including legislation).
- Areas where standards are absent or inadequate.
- The achievement of stated objectives within timescales set.
- Injury, illness and incident data: analysis of immediate and underlying causes, trends and common features.

6. AUDITING

Organisations can maintain and improve their ability to manage health and safety by learning from experience through the use of audits and performance review. An audit is a critical examination of each stage of an organisation's management systems and procedures in order to establish whether or not systems exist, are adequate and are used.
It is a tool for use in improving:

- Efficiency, i.e. doing things right, and
- Effectiveness, i.e. doing the right things.

Audits may be internal or external, but should maintain some independence so that they are objective.

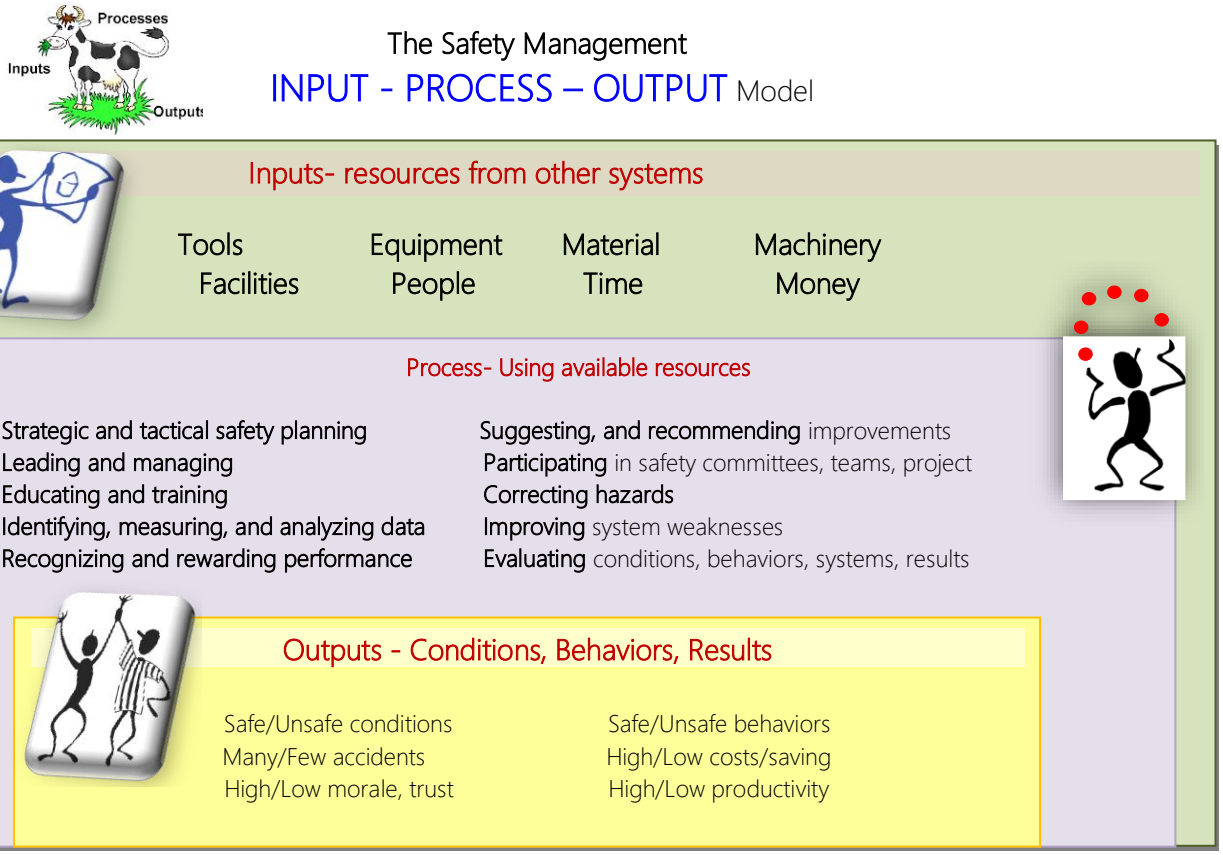

Figure 2

These standards represent inputs to the system and also antecedents/activators of behavior. Each employee must have a clear understanding of employer expectations, policies, and rules.

The Seven Critical Components and Characteristics of Safety management system

As highlighted in the figure (3), there are seven main components and characteristics in a health and safety management system. As a safety oriented, proactive and organized – safety concern organization, the management in action in the interest of the safety of its people, these are a must to do areas of concern.

COMMITMENT - A successful workplace safety and health program achieves and maintains a safe, healthful workplace. To accomplish this goal, the company needs to demonstrate commitment to safety and health with as much energy as required to any other important part of the business. What one say is important, but what one do is critical to organization's program's success. **Showing commitment to a safe, healthful workplace links what it says with what it does.**

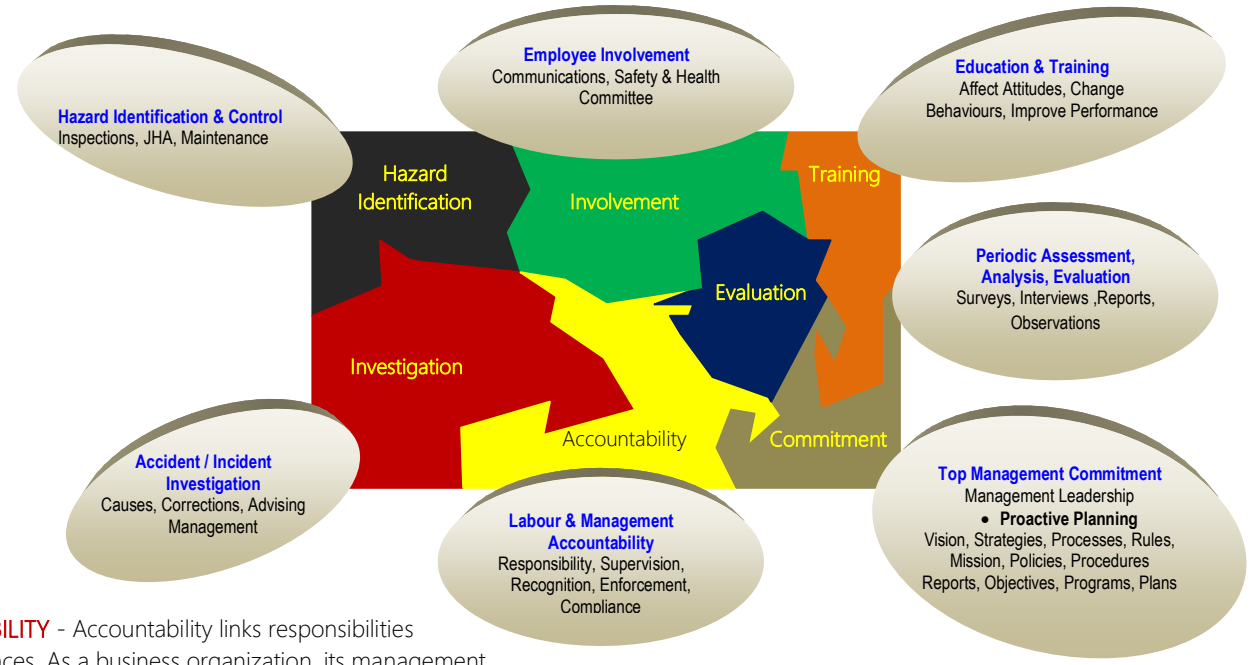

Figure - 3

ACCOUNTABILITY - Accountability links responsibilities to consequences. As a business organization, its management is responsible for making business a successful one. "Passing the buck" isn't an option. When Harry Truman said, "The buck stops here," he meant that he was responsible for his decisions and he accepted the consequences that followed them. Managers and employees are responsible and accountable for key behaviors and performance. Supervisors and managers are accountable to the law and obligated to employees to fulfill their responsibilities. Employees are accountable to the employer and obligated to coworkers to fulfill he meant that he was responsible

Why does the employer have more accountabilities than the employee?

Because the employer controls all aspects of the workplace while the worker generally (but not always) controls only his or her personal behavior. We need to be held accountable only for those responsibilities over which we have control. So, the first question we need to ask when considering discipline is to ask if the person had control over the performance being measured.

The employer is accountable to the law to provide resources. Employer has a legal obligation to each employee to make sure they are provided with safe tools, equipment, etc / or A SAFE PLACE OF WORK.

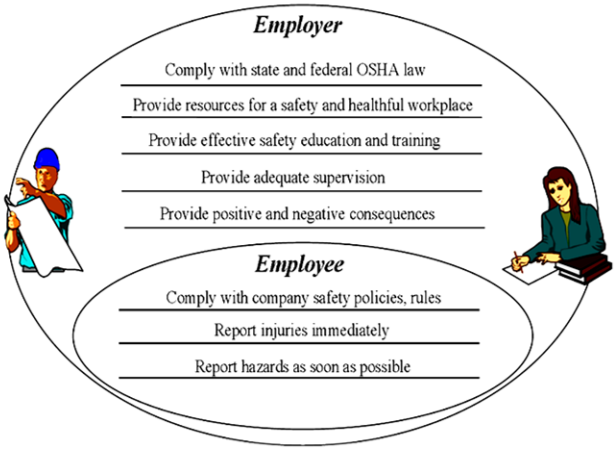

Figure 4- Accountability

EMPLOYEE INVOLVEMENT. Effective safety and health programs involve employees who have a stake in the program's success. One of the best ways to involve employees is through a safety committee: a group of employees — representing labor and management that is responsible for promoting workplace safety and health. Employees can volunteer to be part of the committee or their peers can elect them.

HAZARD IDENTIFICATION. Before you can control hazards, you need to identify where they are. There are many ways to identify hazards. If your business is a small one, you may be able to walk around the workplace and look for them. On the other hand, if you work in a large manufacturing plant — say you're the safety director — you may need to do a comprehensive workplace survey.

ACCIDENT INVESTIGATION. Despite your best efforts, you may not be able to prevent all workplace accidents and near-miss incidents. Many accidents and near-miss incidents have preventable, but underlying, causes. Examples include unenforced policies, lack of supervision, and inadequate training. By investigating all accidents and near-miss incidents, you reduce the chance that they'll happen again.

EDUCATION and TRAINING. Your employees need to know about the workplace hazards to which they may be exposed, how to recognize the hazards, and how to control their exposure. The best way for them to gain this knowledge is through education and training.

EVALUATION. At least once a year, take time to review your program's strengths and weaknesses. You might want to begin by gathering the information that will help you accomplish the review.

Reference

The following websites and books have been referred in compiling this topic. They are also suggested for further readings to increase and enhancement of knowledge in health and safety.

WEBSITES

1. http://en.wikipedia.org/wiki/Bhopal_disaster
2. http://www.cdc.gov/niosh/topics/highwayworkzones/BAD/imagelookup.html
3. http://www.cdc.gov/niosh/az/a.html
4. http://chemicalsafety.com/
5. http://www.clipartguide.com/_search_terms/safety.html
6. http://www.rospa.com/occupationalsafety/adviceandinformation/health-and-safety-careers.aspx
7. http://www.epa.gov/wastes/nonhaz/municipal/dmg2/
8. http://en.wikipedia.org/wiki/Emergency_management
9. http://fyi.uwex.edu/agsafety/osha-wi-dairy-farm-lep/
10. https://www.gov.uk/government/publications/emergency-preparedness
11. http://www.environment.gen.tr/what-is-environment.html
12. http://www.eionet.europa.eu/gemet/concept?ns=1&cp=2778
13. http://en.wikipedia.org/wiki/Environmental_management_system
14. http://www.scafftag.co.uk/
15. http://www-group.slac.stanford.edu/esh/eshmanual/
16. http://www-group.slac.stanford.edu/esh/hazardous_activities/fall_protection/\
17. https://www.gov.uk/workplace-fire-safety-your-responsibilities/fire-safety-advice-documents
18. http://www.safetyvideosnow.com/Gory_Safety_Videos_s/42.htm
19. http://xnet.rrc.mb.ca/rcharney/guidelines%20for%20access%20scaffolding.htm
20. http://www.hanford.gov/page.cfm/HoistingRiggingManual
21. http://www.legislation.gov.uk/ukpga/1974/37/contents
22. http://www.healthandsafetytips.co.uk/Toolbox_Talks.htm
23. http://www.nhscareers.nhs.uk/explore-by-career/wider-healthcare-team/careers-in-the-wider-healthcare-team/support-services/health-and-safety-officer/
24. http://www.scsaonline.ca/classroom/hoisting-a-rigging-safety-awareness
25. http://www.jump4biz.com/BSP_Health_and_Safety_Management_faq_Measuring_Health_and_Safety.php
26. http://www.lboro.ac.uk/admin/hse/fire/
27. http://www.ntnu.edu/hse/guidelines/d
28. http://www.hse.gov.uk/index.htm
29. http://epp.eurostat.ec.europa.eu/cache/ITY_SDDS/en/hsw_acc_work_esms.htm
30. http://aehap.org/
31. https://osha.europa.eu/en/publications/reports/TE3008390ENC_chemical_risks
32. http://www.hse.gov.uk/workplacetransport/safetysigns/banksman/banksman.htm#
33. http://www.trafficsign.us/index.html
34. http://en.wikipedia.org/wiki/List_of_environmental_issues
35. http://www.ask-ehs.com/animation/showcase.htm?goback=.gde_4006766_member_209398648
36. http://actrav.itcilo.org/actrav-english/telearn/osh/noise/nomain.htm
37. http://guide8.net/material-safety-data-sheet-e816.pdf
38. http://www.drs.illinois.edu/css/factsheets/msdss.aspx
39. http://www2.worksafebc.com/Portals/MetalMineral/General.asp?ReportID=32710
40. http://www.myfuture.edu.au/The%20Facts/Work%20and%20Employment/Occupations/Details.aspx?anzsco=251312A
41. http://www.bclaws.ca/EPLibraries/bclaws_new/document/ID/freeside/296_97_11
42. http://www.hse.gov.uk/waste/health.htm
43. http://www.hseaustralia.com.au/occupational-hygiene
44. http://www.ohsrep.org.au/hazards/chemicals/chemicals-management-in-workplaces/index.cfm
45. https://osha.europa.eu/en/topics/osm/reports/european_system_004.stm

46. http://www.medialabinc.net/osha-fire-safety.aspx
47. http://www.mysafetysign.com/osha-signs
48. http://www.safebottles.co.nz/News/Plastics+and+the+Environment.html
49. http://www2.worksafebc.com/Publications/OHSRegulation/Part14.asp?ReportID=18526
50. http://www.safetyrisk.com.au/safety-photos/
51. http://www.orchardhireandsales.ltd.uk/scaffold-ancillaries.htm
52. http://www.wisc-online.com/objects/MTL2702/mlt2702.htm
53. http://www.authorstream.com/Presentation/ashu912-661146-solid-waste-management/
54. http://infochangeindia.org/agenda/occupational-safety-and-health/status-of-occupational-safety-and-health-in-india.html
55. http://www.independent.co.uk/life-style/health-and-families/features/take-care-a-history-of-health-and-safety-in-the-workplace-2275437.html
56. http://ebookbrowsee.net/tbt-037-lifting-equipment-and-operations-pdf-d302813072
57. http://www.ehso.com/hmerg.php
58. http://www.toxicsaction.org/problems-and-solutions/waste
59. http://www.ehs.washington.edu/forms/index.shtm
60. http://www.didacindustrial.co.uk/courses/banksman/vehicle-banksman-training/
61. http://www.anr.state.vt.us/dec/wastediv/R3/decwpplan.htm
62. http://ehs.ucsb.edu/units/labsfty/labrsc/chemistry/lschemwhatmsds.htm
63. http://www.dec.ny.gov/chemical/8732.html
64. http://www.elcosh.org/document/1666/d000573/OSHA%2527s%2BApproach%2Bto%2BNoise%2BExposure%2Bin%2BConstruction.html?show_text=1
65. http://www.indohistory.com/the_first_factories_act.html

BOOKS AND ARTICLES

1. Investigation Guidance, PART 1 The role of the senior manager, .Guidance and examples of good practices in accident investigation in Britain's railway industry, www.rssb.co.uk
2. Investigation Guidance ,PART 2 Development of policy and management arrangements, Guidance and examples of good practices in accident investigation in Britain's railway industry, www.rssb.co.uk
3. Investigation Guidance, PART 3 Practical support for accident investigators, Guidance and examples of good practices in accident investigation in Britain's railway industry, www.rssb.co.uk
4. Expert forecast on emerging chemical, risks related to occupational, safety and health, EUROPEAN RISK OBSERVATORY REPORT, European Agency for Safety and Health at Work
5. Chemical safety in the workplace, HEALTH AND SAFETY AUTHORITY, Ireland, www.hsa.ie
6. Safety in the use of chemicals at work, ILO , Geneva
7. Emergency Response Guidebook, 2008, A GUIDEBOOK FOR FIRST RESPONDERS DURING THE INITIAL PHASE OF A DANGEROUS GOODS/ HAZARDOUS MATERIALS TRANSPORTATION INCIDENT
8. HOW DO I READ A MATERIAL SAFETY DATA SHEET (MSDS)? Produced by the University of California, Los Angeles, Labor Occupational Safety and Health (LOSH) Program, August 2003.
9. NFPA 704 – 2007, FAQs, nfpa704@nfpa.org
10. http://en.wikipedia.org/wiki/File:Nalgene_bottles.jpg
11. Your steps to chemical safety, A guide for small business, Health and Safety Authority, Ireland
12. Confined spaces, A brief guide to working safely, HSE, UK
13. IACS, CONFINED SPACE SAFE PRACTICE, www.iacs.org.uk
14. A guide to Safety in Confined Space, by Ted Pettit and Herb Linn, US Department of Health and Human Services, Public Health Service, Center for Disease control, National Institute of Occupational and Health
15. Electricity at work, Safe working practices, HSE, UK
16. Electrical Safety , Safety and Health for Electrical Trades, Students Manual, US Department of Health and Human Services, Public Health Service, Center for Disease control, National Institute of Occupational and Health
17. Electrical Safety and You , HSE , UK
18. http://www.samhsa.gov/csatdisasterrecovery/preparedness/disasterReliefGrantProgramEPP.pdf
19. http://emc.uoregon.edu/content/mission-objectives-and-strategic-plan (Photo)
20. http://www.safetyplanninggroup.com/services.php#FSP (Photo)

21. Principal Emergency Response and Preparedness - http://scholar.google.com/scholar?q=Principal+Emergency+Response+and+Preparedness&hl=en&as_sdt=0&as_vis=1&oi=scholart&sa=X&ei=XM4cUvHfIKGf0QW58YCoAw&ved=0CCYQgQMwAA
22. https://www.osha.gov/OshDoc/data_General_Facts/factsheet-workplaceevergencies.pdf
23. emergency-exit-routes-factsheet –OSHA
24. Conducting an Accident Investigation, Oregon OSHA,, Department of Consumer and Business Services
25. Health and Safety Executive -Accident Investigations in Practice
26. http://www.labtrain.noaa.gov/osha600/refer/menu16a.pdf
27. evacuating-highrise-factsheet- OSHA
28. Planning and Responding to Workplace Emergencies- OSHA Factsheet
29. Environmental Emergency Plan, Environmental Guidelines, Correctional Service, Canada
30. EMERGENCY MANAGEMENT PLAN, (revised June 2012), University of Regina
31. FRAMEWORK FOR MAJOR EMERGENCY MANAGEMENT, GUIDANCE DOCUMENT 2, A GUIDE TO PREPARING A MAJOR EMERGENCY PLAN, JANUARY 2010,Fire Services and Emergency Planning Section, Department of the Environment, Heritage & Local Government, Custom House, Dublin
32. Mongbwalu Project Emergency Preparedness and Response Plan, Ashanti Goldfields Kilo S.A.R.L., Author- Briony Liber (MPhil (Environmental Management); CEAPSA)
33. Landon Borough of Havering, Emergency Planning Handbook
34. Environmental Accident Management Plan, Gethyn Powell Skips
35. EMERGENCY RESPONSE PLAN, USC School Of Dentistry
36. EMERGENCY PLANNING , EXTRACTION FROM: SAFETY MANAGEMENT SYSTEM FOR MAJOR HAZARD FACILITIES - BOOKLET 3: Part 7.17
37. How to prepare an emergency response plan for your small business, Worksafe BC
38. EMERGENCY MANAGEMENT PLAN, Illinios State University
39. GRIFFITH UNIVERSITY, EMERGENCY MANAGEMENT PLAN
40. ENVIRONMENTAL HEALTH EMERGENCY RESPONSE PLAN, Georgia department of Public health, Environment Health Section
41. Implementation Guidelines for Part 8 of the Canadian Environmental Protection Act, 1999 – Environmental Emergency Plans
42. Emergency Planning , Guidance for Hazardous Industry, Australian and New Zealand, Hazardous Industry Planning Taskforce
43. Emergency Management Australia , EMERGENCY PLANNING, Australian Government, Attorney- General's Department,
44. THE LONDON BOROUGH OF HAVERING, EMERGENCY PLANNING AND BUSINESS CONTINUITY SERVICE, MAJOR EMERGENCY PLAN Jan 2012 Version 1.1
45. Environmental Management Guidelines for Small Businesses, Raising Environmental Awareness, Published by the Small Firms Association , Dublin
46. A COMPARATIVE STUDY ON ENVIRONMENTAL, AWARENESS AND ENVIRONMENTALLY BENEFICIAL, BEHAVIOR IN INDIA, CMS ENVIS Centre, Centre for Media Studies, New Delhi
47. CCC Environmental plan, TEP, Mauritania
48. Management of Noise and Vibration: Construction and Maintenance Activities , OPERATIONAL INSTRUCTION 21.7, Department of planning, Transport Infrastructure, Government of South Australia
49. ENVIRONMENTAL MANAGEMENT GUIDELINES, CONTRACTOR REQUIREMENTS, Nakheel
50. Chapter 11, Environmental Management Systems ,Indiana Small Business Guide to Environmental, Safety and Health Regulations
51. Manual for Implementing EMS in SME, http://www.ifc.org/ifcext/enviro.nsf/content/EMS
52. Second Edition, Environmental Management Systems: An Implementation Guide for Small and Medium-Sized Organizations , NSF International, Ann Arbor, Michigan
53. Standardizing Excellence: Working with Smaller Businesses to Implement Environmental Management Systems, Green Business Network , The National Environmental Education & Training Foundation
54. Construction Impact Mitigation, Best Practice #13 ,Best Practices for Sustainable Wind Energy Development in the Great Lakes Region | Great Lakes Wind Collaborative
55. BRITISH COLUMBIA , HAZARDOUS MATERIAL RESPONSE PLAN , Ministry of Environment
56. IEMA, Introduction to Environment management System,
57. What Is Integrated Solid Waste Management? United States Environmental Protection Agency, Solid Waste and Emergency Response
58. introduction_solid_waste_management_kfw_en[1]
59. Construction Site Safety , 31. Part 1. Waste Management , CITB
60. Construction Site Safety , 31. Part 2. Environmental Management, CITB

61. Module 17, Pollution Control, CHSS, NEBOSH , IGC, Course
62. Guidelines for the Treatment of Noise and Vibration in National Road Schemes, NATIONAL ROADS AUTHORITY
63. NOISE AND VIBRATION ASSESSMENT FACT SHEET – JUNE 2010, British Columbia, Canada
64. MRA – Helena West: Noise and Vibration Management Plan, Australia
65. Hazardous Materials Emergency Planning Guide , NATIONAL RESPONSE TEAM
66. Semporna Islands Project Educational and information materials produced in Bahasa Malaysia and English
67. Tool Kit for Solid Waste Management Intermountain Region - National Park Service
68. Solid Waste Management in Emergencies, www.iboro.ac.uk/wedc
69. EMERGENCY RESPONSE PLAN, MINISTRY OF THE ENVIRONMENT, Ontario
70. TCMT Environment Management CEMP, TEP, Mauritania
71. TECHNICAL NOTES ON DRINKING-WATER, SANITATION AND HYGIENE IN EMERGENCIES , WHO
72. DEVELOPING INTEGRATED SOLID WASTE MANAGEMENT PLAN TRAINING MANUAL, United Nations Environment Programme
73. Construction depots near sensitive water resources, Water quality awareness brochure no. 14 June 2008, Department of Water, Government of Western Australia
74. What a Waste: May 1999 , Solid Waste Management in Asia, Urban Development Sector Unit East Asia and Pacific Region, The International Bank for Reconstruction and Development/THE WORLD BANK, Washington, USA
75. Environment, Mayank Kumar
76. TRADES GUIDELINES – EXCAVATION AND TRENCHING, Construction Safety Association
77. TRENCHING SAFETY ,INTRODUCTION TO TRENCHING HAZARDS , Infrastructure Health & Safety Association, Canada
78. EXCAVATION SAFETY GUIDE & DIRECTORY , Pipeline Association for Public Awareness
79. A Guide to Safety in Excavations, Health and Safety Authority, Dublin
80. Excavation Safety SLAC National Accelerator Laboratory , Environment, Safety & Health Division
81. APPROVED CODE OF PRACTICE FOR SAFETY IN EXCAVATION AND SHAFTS FOR FOUNDATIONS, Published by the Occupational Safety and Health Service, Department of Labour, Wellington , New Zealand
82. A Guide to OSHA Excavations Standard, Occupational Safety and Health Division , N.C. Department of Labour
83. EXCAVATION WORK , Code of Practice, Safe Work Australia
84. Excavation Safety, Division of Workers' Compensation, Texas
85. Safety Manual for Excavation, Bureau of Workers Compensation, Ohio
86. Excavations, Occupational Safety and Health Administration, U.S. Department of Labor
87. Soil description and classification, Based on part of the GeotechniCAL reference package, by Prof. John Atkinson, City University, London
88. What is soil plasticity? B.C.'s Watershed Restoration Technical Bulletin
89. Controlling fire and explosion risks in the workplace, HSE, UK
90. EMPLOYEE FIRE AND LIFE SAFETY, National Fire Protection Association
91. FIRE SAFETY HANDBOOK, For Apartment Managers, Seattle Fire Department Fire Prevention Division
92. Fire & Life Safety Management Guide, www.hopkinsmedicine.org/hse/guidance
93. Fire safety in construction, HSE, UK
94. Fire Safety in workplace, OSHA Factsheet, OSHA
95. Workplace health, safety and welfare, Workplace (Health, Safety and Welfare) Regulations 1992, Approved Code of Practice, HSE, UK
96. Flame arresters, HSE, UK
97. Management of health and safety at work, Management of Health and Safety at Work Regulations, 1999, Approved Code of Practice & guidance, HSE, UK
98. A short guide to making your premises safe from fire, Regulatory Reform (Fire Safety) Order 2005, Chief Fire Officer's Association, HM Government
99. Safe handling of combustible dusts: Precautions against explosions, HSE, UK
100. Fire Safety for Wheelchair Users at Work and at Home, United Spinal Association, Jackson Heights, NY
101. Confined Space Guidelines, www.labour.gov.on.ca
102. Hot work safety guidelines 2011, The Federation of Finnish Financial Services, Bulevardi , Helsinki
103. Managing Hot Work, Workplace Health and Safety Bulletin, Alberta
104. UC Monthly Safety Spotlight, February 2012, Shop and Tool Safety, Electrical Safety, What is "EI-LOTO" and Why is it so Important?

105. Lockout/Tagout Manual, ENVIRONMENTAL HEALTH AND SAFETY, Iowa State University
106. PSU Lockout/Tagout Training for Authorized Employees, www.ehs.psu.edu
107. Introduction to principles and concepts of Effective Machine Guarding , OSTN Effective Machine Guarding
108. A Guide to Machine Safeguarding, Occupational Safety and Health Division , N.C. Department of Labor,
109. Code of practice on safety and health in the use of machinery, Programme on Safety and Health at Work and the Environment, INTERNATIONAL LABOUR ORGANIZATION
110. General Principles for Machine Safety: www.osh.govt.nz
111. Machine Guarding, Government of South Australia
112. Safeguarding Equipment and Protecting Employees from Amputations, OSHA
113. PRINCIPLES OF MACHINE GUARDING, NS Wales Gov.
114. Machine Safeguarding at the Point of Operation - A Guide for Finding Solutions to Machine Hazards , Oregon OSHA
115. NOISE AT WORK - Advice for employers, HSE, UK
116. Full-Body Safety Harnesses Installation, Operation, and Maintenance, AO Safety/SafeWaze User Instruction Harness Manual
117. A short guide to the Personal Protective Equipment at Work Regulations 1992, HSE, UK
118. OSHA GUIDANCE DOCUMENT, FALL PROTECTION IN RESIDENTIAL CONSTRUCTION
119. Falling Off Ladders Can Kill: Use Them Safely, OSHA
120. Nail Gun Safety A Guide for Construction Contractors , National Institute for Occupational Safety and Health, Department of Labor, Occupational Safety and Health Administration
121. OSHA Pocket Guide
122. Personal Protective Equipment, OSHA
123. Personal Protective Equipment, OSHA Factsheet
124. Personal Protective Equipment Selection Guide, Environmental Health & Safety Stony Brook University
125. OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION, SMALL ENTITY COMPLIANCE GUIDE FOR FINAL RULE FOR CRANES AND DERRICKS IN CONSTRUCTION
126. Worldwide Occupational Road Safety (WORS) Review Project, Department of Health and Human Services Centers for Disease Control and Prevention National Institute for Occupational Safety and Health,
127. Guidance on permit-to-work systems , A guide for the petroleum, chemical and allied industries, HSE UK
128. Permit to work systems, HSE UK
129. Guidelines on Permit to work ()PTW) systems, OGP
130. Temporary Structures Shoring, scaffolding, and underpinning, University of Washington, DEPARTMENT OF Construction Management
131. A Guide to Safe Scaffolding, N.C. Department of Labor Occupational Safety and Health Division