TATA BUSINESS EXCELLENCE GROUP





TATA SAFETY & HEALTH
MANAGEMENT SYSTEM

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A division of Tata Sons Ltd.



Where a question of safety is concerned and there is a difference of opinion between yourselves and your executives or advisors, I think that your judgment should prevail only where it weighs on the side of still greater safety"

— J. R. D. Tata Chairman, Tata Sons (1938 - 1991)

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TATA SAFETY AND HEALTH POLICY

The Tata Group is committed to providing a safe and healthy working environment and achieving an injury and illness free workplace. Economic considerations will not have priority over implementation of safety and health protection measures. While safety is everyone's prime responsibility, senior leaders are expected to demonstrate visible commitment through their behaviour. To meet our commitment, we will;

- Recognise safety and health as an integral part of our operations; consider Safety and Health in every decision we make and in every activity we perform.
- Comply and endeavour to exceed applicable regulatory safety and health requirements and set the highest standards.
- Impart appropriate training and develop skills by engaging employees to help them work safely.
- Assess risks and provide controls for safety and health hazards in our operations and activities and use audits to check compliance.
- Promptly report incidents, investigate for root causes and ensure lessons learnt are shared and deployed across the Group companies.
- Influence our business partners in enhancing their Safety and Health standards.
- Set Safety and Health metrics as indicators of excellence, monitor progress and continually improve performance.

We aspire to become world leaders and be a benchmark in safety and health performance in our respective business sectors. The key is in internalisation of safety and engagement with our employees.

13th July, 2017 Mumbai

N Chandrasekaran Group Chairman

INTRODUCTION

The Tata Group through the Tata Code of Conduct has clearly stated that, "We shall not compromise safety in the pursuit of commercial advantage. We shall strive to provide a safe, healthy and clean working environment for our employees and all those who work with us." Our commitment to providing a safe and healthy working environment and achieving an injury and illness free workplace is also stated in the Tata Safety & Health Policy.

An integrated Safety & Health Management System will ensure a consistent approach to safety and health throughout the organisation and enable us to execute safety and health practice by building on existing management systems.

This document sets out guidelines on how Tata companies should manage safety and health. The system will help deliver greater consistency and a more rigorous approach to managing risks to safety and health within companies. This system addresses, in a holistic way, all aspects of Safety, Occupational Health & Process Safety which encompasses different aspects of business operations including factories, offices, warehouses, etc.

When fully implemented, it will ensure that operations remain safe and reliable. It has been created to enable companies to fulfil the aspiration of becoming world leaders and be a benchmark in safety and health performance in respective business sectors.

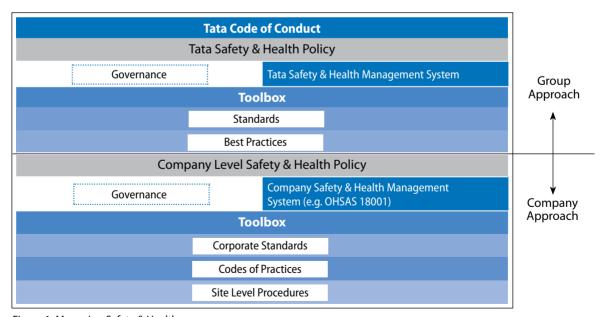


Figure 1: Managing Safety & Health

The Safety & Health Management System can be adopted by all Tata companies irrespective of size, scale or geography. The management system is the leadership team's primary tool to manage risks and drive improvements and will help eliminate fatalities and other serious injuries.

Figure 1 represents how Safety & Health may be effectively managed in a Tata company and the linkages to the Group's approach on Safety & Health.

Safety & Health Policy

The Tata Group has a Safety & Health Policy which is the guiding document for all Safety & Health related actions across Tata companies. It is an aspirational Statement of Intent and it sets a clear tone at the very top for it to permeate across Group companies. Each company is expected to have an individual company-level Safety & Health Policy reflecting a clear commitment to provide a safe and healthy workplace and how it will be implemented.

Governance

Ensuring that Safety & Health Risks within business are properly controlled, many world-class organisations have started to engage in the process of strengthening their corporate governance by explicitly including safety as their governance directive. Each company is encouraged to do this by putting in a system of rules, practices and processes to ensure that Safety & Health matters are directed, reviewed and controlled.

Safety & Health Management System

The Tata Safety & Health Management System has 13 elements. For each of the elements, a number of Expectations have been formulated

to structure a systematic approach to managing safety & health and preventing incidents.

Each company should use this Safety & Health Management System to improve their Safety & Health performance.

Toolbox

Corporate Level Standards: Safety and Health standards set out the level of control for specific hazards or risks (the 'what') and target best practice. The group level Safety standards provides a minimum expected set of requirements to tackle the risk effectively. Each company should refer to these standards while making individual company specific standards. These standards remain common through the different aspects of the operations of the company.

Codes of Practices & Site Level Procedures Codes of practice: Safety & Health codes of practice describe the good / best practice process or processes to achieve the requirements of policy or standards (the 'how').

Site-Level Procedures: Each site of a company can have site-specific procedures to effectively manage safety & health risks in compliance with respective company level Safety & Health Policy / Standards.

Best Practices

Group Safety & Health has a repository of good / best practices from group and other companies which may be referred to when creating the codes of practice & site-level procedures.

Companies are encouraged to contribute their good practices to the Safety & Health Best Practices Repository in order to promote sharing and adoption of lessons learned.

SYSTEM OVERVIEW

PLAN

- **Leadership & Accountability**
- Hazard Identification, Risk Assessment & Management
- **Compliance Assurance**
- **Design, Construction & Operational Control**
- **People, Competency & Behaviours**
- **Communication, Consultation & Empowerment**
- **Incident Reporting, Investigation & Learning**
- 8. **Asset Management**
- **Management of Change**
- 10. Working with Contractors
- 11. Emergency Preparedness, Response & Crisis Management
- 12. Document Control & Record Management

13. Measuring Performance, Audit & Review

DO

CHECK

ACT

The Safety & Health Management System describes how the 13 elements of the system interact in a continuous improvement process of PDCA (plando-check-act).

Planning (PLAN)

Planning is critical to the fulfilment of policies. Effective planning will help to focus resources on areas of importance. The information that is gathered at the planning stages will help to form processes for training, to establish operational control and to scope the measures required.

Implementation and operation (DO)

Business units, sites and functional organisations will provide resources, capabilities, structures and support mechanisms to deliver the policy objectives and areas identified through planning. Flexibility is required for the system to adapt to the changing demands of operations.

Checking and assurance (CHECK)

Management requires assurance through the appropriate ongoing measurement, monitoring and evaluation of performance to check the effectiveness of the management system. Correctly implemented, it gives the agility to identify noncompliance rapidly and take corrective action.

Audit and review (ACT)

Self-assessment, internal (corporate), Tata Group and external audit programmes will identify corrective actions and these will be inputs to the subsequent continuous improvement cycle. Additionally, all steps (plan, do, check, act) will be reviewed and improvements to the process implemented.



No business objective can be deemed more important than the physical safety of all our employees and associates. Each one of us should try and make it our personal mission to translate this belief into reality. Only if ensuring the safety of our people becomes a mission will it be possible for us to raise the bar on safety and reach standards that will be on par with the best companies in the world"

— Ratan Tata Chairman, Tata Sons (1991-2012)



ELEMENTS & EXPECTATIONS

















1. Leadership & Accountability

Good leadership provides the vision, perspective and scope for effective operations. It establishes the framework based on the organisation's expectations. It provides resources to succeed and aligns expectations through the business structure and engagement with employees. Planning identifies resources and assigns responsibility to meet the organisation's expectations. Leaders are expected to demonstrate visible commitment which is tangible and practical and 'walk the talk'. Leaders hold themselves and others accountable for safety. Leadership requires high standards of personal behaviour including openness, transparency and honesty. Line management is responsible for safety and health.

- 1.1. Leaders model positive behaviour by personal example at all times. They reinforce and reward commitment to good safety and health performance. They promote and demonstrate commitment visibly through the principles of openness, transparency and honesty.
- 1.2. Leaders engage in clear, two-way communication with employees, contractors and others on safety & health matters. Leaders provide employees a variety of means to communicate openly and freely on safety & health matters.
- 1.3. Leaders establish clear safety & health goals and objectives, and integrate safety & health targets into operations.

 They ensure that performance goals and measures are clearly communicated to the workforce and its representatives. Leaders allocate ownership and responsibility for implementation of all aspects of the Safety & Health Management System, ensure competent resources and, where necessary, specialist expertise is available, a supportive organisational structure is in place to ensure

- effective operation and sustainability of the management system.
- 1.4. Leaders integrate the safety & health requirements into business planning and decision-making processes, and ensure that documented systems are in place to deliver these requirements. A strategic planning process is in place which aligns with the Annual Business Planning Framework and sets out the long-term activities required to implement the Safety & Health Management System.
- 1.5. Leaders review the effectiveness of the Safety & Health Management System annually. A system is in place to ensure that the Safety & Health strategic plan progress is monitored and a process exists to allow its amendment. The strategic plan must be aligned to the company goals, values and long-term aspirations.
- 1.6. A site planning process is in place to deploy the short-term goals of the strategic plan. The process defines performance measures, roles and responsibilities, and includes monitoring,

- review and feedback to the strategic planning process.
- 1.7. Leaders' safety & health performance is assessed against their annual objectives. Leaders resolve conflicts between safety & health and other business objectives using the Tata Code of Conduct and Tata Safety & Health Policy.
- Leaders promote the sharing of safety & health lessons learned, inside and outside their businesses.
- 1.9. Leaders facilitate continuous improvement in Safety & Health performance by celebrating achievements, supporting Safety & Health initiatives, supporting internal and external Safety & Health networks.
- 1.10. Leaders apportion an amount of time, money and effort on Safety & Health matters appropriate to the level of risks.



2. Hazard Identification, Risk Assessment & Management

Risk Assessment & Management is a continuous process and the bedrock of Safety & Health and hazard identification is the starting point for effective risk management process. It is essential to anticipate and identify the hazards that can cause harm to people, damage to property, equipment, environment, or a combination of these due to our operations. Appropriate action is required to be taken to evaluate and control these risks on the principles of hierarchy of controls. Risk assessment is to be done on a periodic basis and actions taken to maintain the risk under control

- 2.1. A system is in place to ensure a comprehensive hazard identification process. The system must consider normal, abnormal and potential emergency situations. A written procedure is in place for the ongoing identification of hazards.
- 2.2. Potential hazards and risks to personnel, facilities, the public, customers and the environment are assessed for existing operations, products, business developments, acquisitions, modifications, new projects, closures, divestments and decommissioning.
- 2.3. The hazard identification process is undertaken by a team of competent persons and involving the workforce and / or its representatives. A hazard profile exists in the organisation's document control system. The review process considers the output of other element review processes and past impacts to business.
- 2.4. Hazard identification systems exist from a top-down approach via strategic management assessments and a bottom-up approach by front line people. High hazards

- are communicated to senior leaders based on the hazard profile.
- 2.5. As a minimum, identified high hazard installations are prioritised during the process of creating risk control systems. A written procedure is in place to set out the ongoing risk assessment and control in order to reduce safety & health risks to levels as low as is reasonably practicable.
- 2.6. Risk assessments are sufficient in relation to the nature and scope of the identified hazard. They are documented within the management system and are subject to review. Review periods are proportional to the scope and complexity of the risk.
- 2.7. The type of risk assessment techniques are used in proportion to the hazard profile and industry. Written procedures are in place describing the application of risk assessment techniques.
- 2.8. Assessments are undertaken by competent people and take into account specific legal requirements and mandatory company

- standards. Specialists are appointed to oversee the risk assessment process for identified high hazard facilities.
- 2.9. Risk control strategy follows established control hierarchy and aims first to eliminate the hazard and then seeks to reduce the potential consequence(s) or exposure frequency through the implementation of risk control systems.
- 2.10. Assessed risks are reviewed and addressed by levels of management appropriate to the nature and magnitude of the risk. Decisions are clearly documented and resulting actions implemented through local procedures.
- 2.11. Identified safe systems of work are owned by members of line management and are subject to periodic review. Clearly written management procedures exist to ensure the effective application of the risk control system.
- 2.12. Clearly defined communication lines exist to ensure that all relevant people who may be affected by the risk receive appropriate training and instruction resulting from the risk assessment. Follow-up systems are in place to ensure decisions taken as a result of risk assessments are communicated to all relevant people.
- 2.13. Identified high hazard facilities undertake task analysis to ensure human factors are effectively managed. An appropriate prioritisation methodology based on risk and the degree of man-machine interface is used.

- 2.14. Risk assessments are updated at specified intervals including after changes, and on an occurrence incident. In certain cases such as construction activities, risk assessments must be done more frequently.
- 2.15. Systematic reviews are undertaken to ensure that risk control systems are in place to manage the risk from hazards and aspects identified.



3. Compliance Assurance

Ever-changing demands on organisations by society lead to higher standards in safety & health. The effective result is reflected in a suite of laws, regulations and guidance notes with which organisations are expected to comply. Legislative requirements are identified and their likely impact assessed, so that plans to comply are enacted while maintaining a continuous improvement approach. While compliance to legislative requirement is mandatory, there is an endeavour to exceed applicable regulatory safety & health requirements, complying with group requirements and aligning to accepted industry standards and practices.

- 3.1. Understanding and identification of applicable safety & health regulatory requirements is done by sites and this information is kept up-to-date.
- 3.2. Information about regulations and industry codes and practices is communicated to appropriate people.
- 3.3. A system is in place to identify, assess and interpret regulatory impacts on the site in a way that ensures it remains compliant.
- 3.4. The system includes the identification of internal company standards that demand mandatory compliance and industry codes and practices to which the organisation subscribes.
- 3.5. A compliance register is kept and maintained. The register must list the site systems and processes that deliver compliance.
- 3.6. The system ensures that the site identifies and assesses its methods for remaining compliant and suitable improvement activities form part of the business and strategic plan.

- 3.7. A periodic compliance review must be in place and form part of the site risk management strategy. Process is in place to identify to ensure all amendments and changes to regulatory requirements (including new requirements) are identified and addressed.
- 3.8. Employees with responsibilities for reporting to authorities receive appropriate training and reporting requirements clearly defined and documented as procedures.
- 3.9. Sites undertake periodic compliance assessments against their identified priorities.



4. Design, Construction & Operational Control

New facilities and modifications to existing facilities will be designed, procured, constructed, commissioned and decommissioned to enable safe, secure, healthy and environmentally sound performance throughout their operational life, by assessing risks, using recognised standards, procedures and management systems. Safe design helps in preventing incidents and retrofit at later stage. To maintain safe operations, our underlying operational standards, procedures and information must be current, and they must be known, understood and effectively applied by every employee and contractor. Rigorous and effective application of safe systems of work must be a focus area in reducing operational risk.

- 4.1. Safety & health considerations are integrated into the planning and management of construction projects, from design concept onwards, to reduce the risk of harm to those that have to build, use, maintain and demolish plant and structures. Operational, maintenance and safety & health aspects are integrated early in the project / design stage.
- 4.2. Experience from previous projects and current operations is applied. The acquisition of new assets is subject to due diligence risk assessments and follows the Management of Change process set out in Element 9.
- 4.3. During design, construction and procurement operating units and facilities are to develop, maintain and use a set of engineering standards and procedures that covers the full life cycle of the unit.
- 4.4. Local regulatory requirements are met or exceeded. Where these are absent or inadequate, standards are set that protect people and the environment.
- 4.5. Operating units and facilities must develop,

- maintain and use a set of standard operating procedures for improving safety and integrity levels. Standard operating procedures include operating, maintenance and inspection practices and procedures.
- 4.6. Up-to-date sets of accurate, documented and approved standard operating procedures, engineering standards, codes of practice, process and instrumentation diagrams and as-built drawings covering the full life cycle of facilities, equipment, processes and the business are maintained and available.
- 4.7. Systems identifying equipment and processes requiring formal pre-start-up and shutdown safety reviews at each startup and shutdown must be implemented. Requirements to be clearly set out and documented in procedures. A register to be kept and maintained with the owner of such equipment listed by name and title. Reviews must be conducted and records kept of such systems to check effectiveness.
- 4.8. Operating sites and facilities have clearly documented procedures for isolation and

- immobilisation in order to render plant and equipment safe to work on. This applies to any situation in which the unexpected startup or release of stored energy, or substance, could cause harm to people.
- 4.9. Potential hazards are identified and safety & health risks assessed using appropriate risk assessment tools (e.g. quantified risk assessments, HAZOPs, and What-if reviews) at specific stages of a project from concept through to start-up, and risks are mitigated through risk management techniques. Formal design review, verification and validation studies are carried out based on risk assessment
- 4.10. A documented procedure exists for handover from the project team to the operation team with safety considerations validated and signed off. Specific controls are in place during the commissioning phase of the project to manage the additional risks of commissioning.
- 4.11. Operating units and facilities to implement competency-based, on-the-job training systems to ensure the effective and timely transfer of relevant process and operational information, knowledge and skills to standards or procedures.
- 4.12. In exceptional cases, where any deviations from design standards are required, then they are authorised at an appropriate level, with the reasons documented and retained.
- 4.13. Quality assurance and inspection systems are in place to ensure that facilities meet design

- and procurement specifications and that construction is in accordance with approved standards and equipment replacement or modification maintains operations integrity.
- 4.14. Risks introduced by simultaneous operations are assessed and managed.



5. People, Competency & Behaviours

Each person has a responsibility for their own safety and those working with them. People assigned work are trained, assessed, qualified and competent to undertake their jobs. The work required of an employee is within the physical and psychological capabilities of that employee. Their roles and responsibilities are clearly defined. Effective training at all levels of the organisation will deliver the skills, competence and behaviour to maintain operations that are safe, protect health and comply with laws and regulations. The requirement extends from recruitment through to leaving the organisation.

- 5.1. Safety and health role requirements, accountabilities and responsibilities are established based on business needs and form part of individual performance targets as applicable. Performance expectations are documented and form part of personal development plans and feedback process.
- 5.2. Individuals with core competencies essential for the safe and effective operation of the system are recognised, with succession plans in place. Their competence profiles are clearly defined and documented.
- 5.3. Training objectives, direction and focus are established in accordance with the Safety & Health plan and are reviewed annually. Systems are in place to identify specific training and competence needs for role and job profiles. Training needs are identified for business leaders.
- 5.4. Employees are physically and mentally fit to perform their duties and that their health is not adversely affected by occupational hazards. Health promotion initiatives are implemented to reduce the impact of lifestyle factors on health, safety and performance

- of employees. Employees will notify management when they become aware that their capabilities have been impaired. Rehabilitation programmes are in place to assist ill and injured people to return to work.
- 5.5. Each worksite has access to an appropriate level of medical support and to resources / facilities that promote health and wellness.
- 5.6. A defined process is in place for the development of competent safety & health practitioners to support the organisation in the delivery of its safety & health responsibilities, goals and objectives.

 Required competencies include technical expertise, managerial and leadership skills, and other abilities (coaching, influencing, communication skills, etc.).
- 5.7. New and reassigned employees receive site orientation induction, training on emergency procedures, and relevant safety & health rules, risk awareness training and work practices at the start of their work assignments or when operating process changes. On-the-job training and coaching is provided as necessary. Periodic refresher

- training is conducted including assessments of employee knowledge, skills and behaviour relative to job requirements.
- 5.8. Employees with identified critical safety & health responsibilities shall only assume their responsibilities on successful completion of the specified training requirement.
- 5.9. Systems are in place for the storage of training records, including the means used to verify the employee's understanding of the training. Records are updated following training programmes and linked to personal development plans.
- 5.10. Training systems are assessed regularly to ensure continued effectiveness. The output of assessment processes must be recorded.
- 5.11. Employees are expected to comply with the site / company rules and regulations. A system exists to continually improve safe behaviours through observation, recording, and coaching. In case of non-compliance to site / company rules progressive discipline process of the company takes effect.
- 5.12. Systems are in place that allow for the recognition of exceptional group and individual performance. Appropriate communication using the established channels are used to communicate exceptional performance.



6. Communication, Consultation & Empowerment

The aim of communication is to maintain the engagement and motivation of all employees. Safety & Health matters to be adequately and appropriately communicated to relevant stakeholders. Arrangements to be in place to ensure effective two-way communication throughout the company, and systems to be in place for the communication of health and safety matters to and from external parties. Employees at all levels are consulted and empowered about safety & health matters.

- 6.1. Clear and established information flow networks and communication channels exist that allow top-down and bottom-up communication.
- 6.2. Core management meeting structures exist that are linked from the highest level to work group level. The scope is set out in proportion to the size of the site. An appropriate leader chairs meetings. Front line supervisors participate in management meetings at the appropriate level.
- 6.3. Work group meetings with representation from workforce take place at an operational level and ensure that operational staff have the opportunity to raise concerns and issues that can be fed into the management meeting structure.
- 6.4. Safety & Health committee meetings established as core meetings within the management system are reviewed periodically to ensure continued effectiveness.
- 6.5. Incidents and outcomes of investigations are appropriately communicated via the established channels within the unit and across the company (refer to Element 7).

- 6.6. Systems are in place to ensure that communications regarding operational activities take place externally where appropriate.
- 6.7. Promotion campaigns and varied communication channels should be used to promote Safety & Health improvement in a fresh and interesting way.
- 6.8. Involvement and participation of all employees in Safety & Health is essential. Employees at all levels are empowered to stop work which can put oneself and others at risk of illness and injury. When confronted with an unsafe or unhealthy work condition, employees are expected to take immediate and personal action to address the condition. At minimum, the person in charge of the area is informed and is expected to mitigate the situation.



7. Incident Reporting, Investigation & Learning

Incidents will be reported in a transparent manner without fear. These incidents must be investigated and analysed to prevent recurrence. Investigations must focus on identification of root causes, corrective and preventive actions. The recommendations arising out of these investigations will be implemented and shared with other operations, group companies and the wider industry to avoid recurrence of incidents else where.

- 7.1. All safety, health, asset integrity, process and environmental incidents, including near misses, are openly reported, investigated, analysed and documented.
- 7.2. Defined and documented procedures are in place which set out internal and external reporting requirements following the occurrence of incidents. Legal reporting and response requirements are met as a minimum, to include satisfying insurance requests.
- 7.3. Systems are in place to ensure incidents are classified and investigated (which includes identification of root causes), analysed, corrective & preventive actions are identified, documented and closed out.
- 7.4. Investigation levels, criteria and roles and responsibilities are clearly defined. Rigour of incident investigation reflects the potential consequences of the event. Major incidents are investigated by a multi-function / level team with participation from outside the business unit.
- People required to participate in incident investigations receive appropriate training.

- 7.6. Systems are in place to ensure investigation reports are fit for purpose and are reviewed by appropriate levels of management. The records of investigations are kept appropriately.
- 7.7. Information gathered from the investigation of incidents is analysed to identify and monitor trends and to develop prevention programmes. Facts and findings are clearly communicated at appropriate levels for evaluation.
- 7.8. The effectiveness of the incident investigation system is evaluated, with recommendations made to ensure its continuous improvement.
- 7.9. Lessons learned from the investigations of incidents are shared within the same company in different businesses and employees in leadership roles take appropriate action on receiving such information. These actions are tracked till completion.
- 7.10. Mutual sharing of lessons learned is encouraged within the Tata Group and the wider industry.



8. Asset Management

Asset management is the systematic process of maintaining and upgrading the configuration and capability of equipment and facilities assuring integrity. It is based on clear identification of assets, prioritising on criticality of the equipment and control of the hazards attributed to them. Facilities will be operated and maintained within the current design envelope to ensure safe, secure, healthy and environmentally sound performance.

- 8.1. A comprehensive register exists for physical assets and asset register is kept up-to-date and maintained. The asset register (or its equivalent) clearly identifies safety-instrumented functions and control systems where applicable.
- 8.2. Systems are in place to ensure that legal requirements concerning the operation of physical assets and facilities are assessed and maintained. The competence of people required to undertake maintenance on physical assets form part of the assessment process as referred to in Element 5.
- 8.3. Ownership and responsibility for physical assets at a local level is given to appropriate members of the line management team.

 Changes and modifications to assets is authorised by the asset owner and follow the Management of Change process set out in Element 9.
- 8.4. Assessments on asset maintenance requirements are made using recognised methods, allowing the development of appropriate programmes of maintenance.
- 8.5. A system is in place that identifies specialist

- equipment requiring inspections and maintenance at specific intervals. Inspection and maintenance requirements clearly sets out and is documented in procedures. A register is kept and maintained with the owner of equipment listed by name and title.
- 8.6. A system is in place to ensure effective maintenance planning, scheduling and execution. Maintenance programmes take into account the physical environment in which the asset operates and are risk-based. Written procedures are in place that describe the hand over and hand back of plant and facilities during the execution of maintenance.
- 8.7. A pre-start-up safety review is undertaken to confirm that plant and equipment is safe to operate prior to energising a new or significantly modified facility for the first time.
- 8.8. Post-start-up safety reviews are carried out for all newly installed or modified equipment to confirm that construction is in accordance with design, all required verification testing is complete and acceptable, and all recommendations / deviations are closed and approved by the designated technical authority.

- 8.9. Equipment that has been out of service for maintenance or modification is subject to documented inspection and testing prior to use.
- 8.10. Reliability and availability of protective systems are maintained by appropriate testing and maintenance programmes, including management of temporary disarming or deactivation.
- 8.11. A quality assurance programme exists to ensure that equipment replacement or modification maintains operations integrity.
- 8.12. Decommissioning, remediation and restoration plans are established using risk-based studies for end of life equipment / facilities and the results communicated to internal and external stakeholders.



9. Management of Change

Temporary and permanent changes that have the potential of invalidating the risk management process such as organisation, personnel, systems, procedures, equipment, products, legislative requirements, materials or substances will be evaluated and managed to ensure that safety & health risks arising from these changes remain at an acceptable level. Systems must be in place to recognise and control changes that can impact the safety & health of people and compromise operational integrity.

- 9.1. The health, safety, security, environmental, technical, legislative and other impacts of temporary and permanent changes are formally assessed, managed, documented and approved. Each unit defines, through a risk assessment process, the scope of plant, organisation, work processes and systems, to which change control applies.
- 9.2. People recognise what constitutes change and the importance of change management to the safe and reliable operation of facilities.
- Effects of change on the workforce / organisation, including training requirements, are assessed and managed.
- 9.4. Where the need for change control has been identified, each unit must have a system in place for the management of both temporary and permanent changes.
- 9.5. An appropriate organisation structure allows for the effective review and authorisation of changes, and ensures the appropriate allocation of technical specialists to change reviews.

- 9.6. New facilities design and project management teams apply the change control system at design phase and whenever the need to deviate from the design intent may arise.
- 9.7. Periodic reviews of the management of change system are undertaken to ensure compliance and its continual effectiveness. The use of appropriate performance measures should be considered.
- The original scope and duration of temporary changes are not exceeded without review and approval.
- Any changes to business processes or operations are subject to risk assessment and appropriate communication.



Contractors providing services that can impact our operations and reputation must perform in a manner consistent with the company's policy and business objectives. There must be effective systems in place to ensure that the safety & health values, behaviours and approaches are applied to contractors. We will monitor contractors' performance and ensure our processes contain the rigour to deliver our expectations. Contractors and suppliers are accountable for their safety performance.

- 10.1. Systems are in place to ensure pre-qualification, 10.8. selection, retention and tender assessments take place. Assessments are appropriate for the scope of work requirements.
- 10.2. Written procedures exist that clearly define the scope and requirements of the selection process.
- 10.3. Safety requirements are clearly identified and defined as conditions of contract in the agreement document.
- 10.4. Hazards and risks associated with contractor activities in our businesses are identified. managed and communicated.
- 10.5. Safety induction training covering key risks is imparted to contractor employees and if necessary specific training is given.
- 10.6. An appropriate senior leader has overall responsibility for contractor / supplier activities and appropriate number of coordinators are available to monitor contractor activities.
- 10.7. Work control requirements and expectations (eg. Method Statements) are clearly set out in written procedures that include supervisory requirements where appropriate.

- Systems are in place to ensure the effective management of interfaces between contracted services and company's operations.
- 10.9. Internal information flow channels exist to ensure appropriate communication takes place between contracted service providers and the company at periodic intervals.
- 10.10. Systems are in place to enable local operations teams to provide feedback on contractor performance.
- 10.11. Contractor and supplier performance is periodically evaluated through audits by both parties to ensure partnership expectations are continually met and identified deficiencies are corrected.
- 10.12. Purchased products and services are, where possible, verified as meeting national / international safety & health standards.
- 10.13. Systems are in place to ensure safety & health in supply chain activities such as transportation, warehousing etc.
- 10.14. Efforts are made to positively influence the safety & health performance of other business partners.

11. Emergency Preparedness, Response & Crisis Management



Emergency planning and preparedness identifies arrangements in place to protect the employees, customers, public, assets, environment and our reputation in the event of an incident. Plans must be in place to effectively manage different emergency scenarios.

- 11.1. Emergency plans are based on the significant hazards and risks that potentially can impact the business. The identification of potential emergency scenarios includes internal, external and natural disasters. Emergency plans and procedures are documented, accessible and clearly communicated.
- 11.2. Creation of emergency plans involves the local communities, authorities and relevant stakeholders as appropriate.
- 11.3. A designated authority is responsible for ensuring that adequate emergency plans, programmes and procedures are in place.
- 11.4. Equipment, facilities and trained emergency response teams required to respond to an emergency situation are identified, tested, maintained and available. Compatibility with necessary outside resources is ensured. Adequate first aid and medical support should be available to cater to medical emergencies.
- 11.5. All people are informed and trained to understand emergency plans, their roles and responsibilities, and how to respond in an emergency situation.
- 11.6. A system is in place to ensure adequate communication and follow-up with external parties and the media. Appropriate people are

- trained to interact with media.
- Communication protocols are documented and communicated to appropriate people.
 Employees with relevant communication responsibilities receive appropriate training.
- 11.8. Assessments are made to establish the potential for emergency scenarios to be escalated into a crisis.
- 11.9. Drills and exercises are well planned, risk assessed, undertaken periodically and address all aspects of the emergency plans. As a minimum, one exercise based on the hazard profile is completed on an annual basis (or more in accordance to local requirements).
- 11.10. Appropriate consultation for safe commencement of operations post an incident is required.
- 11.11. Emergency plans are periodically assessed for continued effectiveness and are reviewed following a serious incident, execution of the plan, any drill or exercise where improvement opportunities have been identified or when significant changes have been made to site and facilities.
- 11.12. Changes or modifications to emergency plans and scenarios are communicated to relevant stakeholders.



12. Document Control & Record Management

Safety & Health Management System practices are documented to support consistent and uniform application in workplace. Records are maintained to retain knowledge, provide evidence and historical data of Safety & Health performance. Leaders ensure that suitable safety & health management systems are developed, documented, implemented and supported throughout the organisation.

- 12.1. Systems are designed and implemented for creating, reviewing, approving, distributing, controlling and managing documents and records prepared in support of Safety & Health requirements.
- 122 Documents are defined as written standards, procedures, work instructions, etc., that describe intended actions. Records are defined as written documentation of activities that have taken place such as training records, meeting minutes, risk assessments, permits to work, audit findings etc. A system is in place to securely manage drawings, design data and other documentation, including definition of responsibilities for maintaining this information. Applicable regulations, permits, codes, standards and practices are identified. The resultant operating requirements are documented and communicated to the workforce as described in Flement 3.
- 12.3. Pertinent records are maintained, available and retained as necessary. Obsolete documentation is identified and removed from circulation.

- 12.4. Whenever changes are made the drawings and other relevant documents are updated and communicated to concerned stakeholders.
- 12.5. Scope and format of technical documentation will be agreed for each facility and will form part of the design input for new facilities and modifications.
- 12.6. Employee health, medical and occupational exposure records are maintained with appropriate confidentiality and retained as necessary.
- 12.7. A suitable IT system helps in effective management of safety & health data to ensure documents are traceable, easily retrievable and there is no loss due to deterioration.



13. Measuring Performance, Audit & Review

Performance needs to be measured to maintain and improve the effectiveness of the Safety & Health Management System and requires a combination of proactive and reactive measures (leading and lagging indicators). The safety & health system and performance is monitored, reviewed and evaluated for effectiveness and continuous improvement. It is essential to conduct site level self-assessments, corporate audits and appropriate group level audits to assess the effectiveness of the Safety & Health Management System. Identify improvement actions and feedback into the strategic business planning process.

- 13.1. Progress on the implementation of the Safety & Health Management System is measured against the site plan and as set in Element 1. This is established, communicated and understood throughout the organisation.
- 13.2. Performance measures include the undertaking of internal and external benchmarking activity against established best practices.
- 13.3. Risk control systems established within Element 2 are subject to periodic monitoring by leading and lagging performance indicators. The output of monitoring activity is captured in appropriate reports and data is kept within the site's documentation system.
- 13.4. Performance data and trends are collected and reported, and are made available for review at all levels. This enables segmentation and analysis of data, helping to identify patterns and trends and ensures proactive management of emerging risks. Management meeting structures include performance measurement applicable to the meeting level.

- 13.5. Systems are in place to ensure sites are audited to establish the level to which the expectations in the Safety & Health Management System are met.
- 13.6. A documented, risk-based programme to conduct audit or assessment exists to evaluate progress towards safety & health targets, regulatory compliance, other requirements such as business standards and the effectiveness of the Safety & Health Management System.
- 13.7. An annual site level Safety & Management System self-assessment is conducted and used to drive continuous improvement.
- 13.8. A system is in place to engage and involve employees in the audit process and to contribute to continuous improvement of their process.
- 13.9. Audit training is provided to all audit team members.
- 13.10. The effectiveness of the Safety & Health
 Management System and the audit process
 is reviewed periodically and findings are
 used to make improvements. Reports

- on the effectiveness of the management system are available to stakeholders. Audit reports are reviewed by the site leadership team.
- 13.11. A process is in place whereby assurance is regularly provided by a corporateled audit team to the company's chief executive, demonstrating adequacy and effectiveness of the operation and implementation of the Tata Safety and Health Policy and the Tata Safety & Health Management System requirements.
- 13.12. Findings from learning processes (e.g. audits, incident investigations, near misses, safety observations, HAZOPs, etc.) are prioritised, tracked and used to systematically improve the Safety & Health Management System.

GLOSSARY OF TERMS

Element - An essential building block when combined together with the other elements form a coherent management system.

Expectation - Examples of the auditable behaviours, processes and activities which would demonstrate compliance with the intent of each element

Management of change - The organised riskbased approach taken to control the activities undertaken before and while a change is carried out to minimise adverse effects of that change.

Management system - Management systems are the integration of people and processes to deliver expectations. Management systems are controlled by the sites which have the authority to use existing systems, processes and programmes (e.g. ISO, BS, OHSAS-18001), provided that the expectations are met and can be demonstrated.

Operations - Various activities a company does to fulfill business requirements such as manufacturing, warehousing, offices, supply chain, business travel, etc.

Policy - A document setting out the key activities that a given site will undertake in order to achieve its vision. It is typically signed by the highest authority within that site organisation to demonstrate commitment and leadership.

Regulations – A statutory rule or condition imposed on an organisation by the law of the country.

Risk - A measurement of incident likelihood and magnitude of loss in the event of occurrence of that incident.

Risk control system - A systematic application of management procedures, practices and tasks to protect the site and mitigate the impact of the risk.

Stakeholder - Anyone with an interest in the relevant activity. Stakeholders may include employees, contractors, suppliers, customers, communities neighbouring our facilities and non-government organisations, depending on the nature of the relevant activity.

Site - In the Tata Safety & Health Management System, 'site' refers to an operating organisation led by a management group with operations responsibility and accountability for a facility, plant, factory, operation, office, warehouse, distribution centre or marketing centre.



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