



Example of a (safety) management system

Below is an example of the content and structure of a management system for high hazards industry. As you may see, each management activity area or element includes the structure suggested for each element. The example can be used for (i) developing a management system and (ii) setting up a (safety) management audit system.

ELEMENT	Element structure:
1. Leadership	1.1. <i>HSE Policy and Resources</i> 1.2. <i>HSE Management Team</i> 1.3. <i>HSE Committee</i> 1.4. <i>HSE Specialist Support & Coordination</i> 1.5. <i>Regulations, Codes and Standards</i> 1.6. <i>Permits to Operate</i> 1.7. <i>HSE Objectives and Targets</i> 1.8. <i>Written HSE System</i> 1.9. <i>Individual HSE Responsibility/Appraisal</i> 1.10. <i>Management Participation</i> 1.11. <i>Training</i> 1.12. <i>Communication</i> 1.13. <i>Program Monitoring</i> 1.14. <i>Review and Improvement</i>
2. Leadership Training	2.1. <i>Management Statement</i> 2.2. <i>Coordination</i> 2.3. <i>Regulations, Codes and Standards</i> 2.4. <i>Implementation Plan</i> 2.5. <i>Training Needs Identification</i> 2.6. <i>Senior Manager Program Orientation</i> 2.7. <i>Senior Manager Update Training</i> 2.8. <i>New Manager HSE Orientation/Induction</i> 2.9. <i>Formal Initial HSE Leadership Training</i> 2.10. <i>Update Training for Other Leaders</i> 2.11. <i>Implementation Team Training</i> 2.12. <i>Formal Training Program Coordinator</i> 2.13. <i>Instructor Training</i> 2.14. <i>Program Monitoring</i> 2.15. <i>Review and Improvement</i>
3. Action Plan	3.1. <i>Management Statement</i> 3.2. <i>Coordination</i> 3.3. <i>Regulations, Codes and Standards</i> 3.4. <i>Implementation Plan</i> 3.5. <i>HSE Performance Targets</i> 3.6. <i>Incidents</i> 3.7. <i>Occupational Health</i> 3.8. <i>Resource Consumption</i> 3.9. <i>Emissions</i> 3.10. <i>Discharges</i> 3.11. <i>Waste</i> 3.12. <i>Soil and Ground Water</i> 3.13. <i>Land use</i> 3.14. <i>Cost-Benefit Analysis</i> 3.15. <i>Employee Participation</i> 3.16. <i>Training</i> 3.17. <i>Data Collection and Analysis</i> 3.18. <i>Communication</i> 3.19. <i>Program Monitoring</i> 3.20. <i>Review and Improvement</i>



ELEMENT	Element structure:
4. Hiring and Placement	4.1. Management Statement 4.2. Coordination 4.3. Regulations, Codes and Standards 4.4. Implementation Plan 4.5. <i>Physical and Mental Requirements</i> 4.6. <i>General Orientation/Induction Program</i> 4.7. <i>Personnel Assignments</i> 4.8. <i>Physical or Mental Incapacitation</i> 4.9. <i>Employee Debriefing</i> 4.10. Employee Participation 4.11. Training 4.12. Data Collection and Analysis 4.13. Communication 4.14. Program Monitoring 4.15. Review and Improvement
5. Personal Communications	5.1. Management Statement 5.2. Coordination 5.3. Regulations, Codes and Standards 5.4. Implementation Plan 5.5. <i>Job Orientation/Induction</i> 5.6. <i>Task Instruction</i> 5.7. <i>Planned Personal Contacts</i> 5.8. Employee Participation 5.9. Training 5.10. Data Collection and Analysis 5.11. Program Monitoring 5.12. Review and Improvement
6. Technical Training	6.1. Management Statement 6.2. Coordination 6.3. Regulations, Codes and Standards 6.4. Implementation Plan 6.5. <i>Training Needs Analysis</i> 6.6. <i>Technical Training Program</i> 6.7. <i>Specialized Training Needs</i> 6.8. Employee Participation 6.9. Training 6.10. Data Collection and Analysis 6.11. Program Monitoring 6.12. Review and Improvement
7. Tasks and Operating Procedures	7.1. Management Statement 7.2. Coordination 7.3. Regulations, Codes and Standards 7.4. Implementation Plan 7.5. <i>Critical Task Identification</i> 7.6. <i>Critical Task Analysis</i> 7.7. <i>Critical task Procedures</i> 7.8. <i>Operating Procedures</i> 7.9. <i>Maintenance of Procedures</i> 7.10. <i>Critical Task Observation</i> 7.11. Employee Participation 7.12. Training 7.13. Data Collection and Analysis 7.14. Communication 7.15. Program Monitoring 7.16. Review and Improvement
8. Rules and Work Permits	8.1. Management Statement 8.2. Coordination 8.3. Regulations, Codes and Standards 8.4. Implementation Plan 8.5. <i>General HSE Rules</i>



ELEMENT	Element structure:
	<p>8.6. <i>Specialized Work Rules</i> 8.7. <i>Use of Signs and Color Codes</i> 8.8. <i>Work Permit & Specialized Procedures System</i> 8.9. <i>Compliance Efforts</i> 8.10. <i>Personal Protective Equipment</i> 8.11. <i>Site Security</i> 8.12. <i>Employee Participation</i> 8.13. <i>Training</i> 8.14. <i>Data Collection and Analysis</i> 8.15. <i>Program Monitoring</i> 8.16. <i>Review and Improvement</i></p>
<p>9. Hazard Identification and Analysis</p>	<p>9.1. <i>Management Statement</i> 9.2. <i>Coordination</i> 9.3. <i>Regulations, Codes and Standards</i> 9.4. <i>Implementation Plan</i> 9.5. <i>Methods and Approach</i> 9.6. <i>Establishing Baseline Information</i> 9.7. <i>Scope of Hazards Identification</i> 9.8. <i>Evaluation of Risks</i> 9.9. <i>Follow-up</i> 9.10. <i>Employee Participation</i> 9.11. <i>Training</i> 9.12. <i>Data Collection and Analysis</i> 9.13. <i>Communication</i> 9.14. <i>Program Monitoring</i> 9.15. <i>Review and Improvement</i></p>
<p>10. Engineering Controls</p>	<p>10.1. <i>Management Statement</i> 10.2. <i>Coordination</i> 10.3. <i>Regulations, Codes and Standards</i> 10.4. <i>Implementation Plan</i> 10.5. <i>Product Design</i> 10.6. <i>Site Location/Lay-out</i> 10.7. <i>Plant and Process Design Reviews</i> 10.8. <i>Process Design Standards</i> 10.9. <i>Ergonomics and Human Factors</i> 10.10. <i>Construction and Pre-Startup Reviews</i> 10.11. <i>Pollution Prevention</i> 10.12. <i>Employee Participation</i> 10.13. <i>Training</i> 10.14. <i>Data Collection and Analysis</i> 10.15. <i>Communication</i> 10.16. <i>Program Monitoring</i> 10.17. <i>Review and Improvement</i></p>
<p>11. Maintenance and Inspection</p>	<p>11.1. <i>Management Statement</i> 11.2. <i>Coordination</i> 11.3. <i>Regulations, Codes and Standards</i> 11.4. <i>Implementation Plan</i> 11.5. <i>Policies</i> 11.6. <i>General Inspections</i> 11.7. <i>Critical Inspections</i> 11.8. <i>Maintenance Programs</i> 11.9. <i>Quality Assurance Inspection and Testing</i> 11.10. <i>Follow-up</i> 11.11. <i>Employee Participation</i> 11.12. <i>Training</i> 11.13. <i>Data Collection and Analysis</i> 11.14. <i>Communication</i> 11.15. <i>Program Monitoring</i> 11.16. <i>Review and Improvement</i></p>
<p>12. Management of</p>	<p>12.1. <i>Management Statement</i></p>



ELEMENT	Element structure:
Change	12.2. Coordination 12.3. Regulations, Codes and Standards 12.4. Implementation Plan 12.5. <i>Change Criteria</i> 12.6. <i>Use of the Procedure</i> 12.7. <i>Temporary Changes</i> 12.8. Employee Participation 12.9. Training 12.10. Data Collection and Analysis 12.11. Communication 12.12. Program Monitoring 12.13. Review and Improvement
13. Product Stewardship	13.1. Management Statement 13.2. Coordination 13.3. Regulations, Codes and Standards 13.4. Implementation Plan 13.5. <i>Product Design</i> 13.6. <i>Procurement, Handling, Storage and Shipment of Products</i> 13.7. <i>Product Use and Disposal</i> 13.8. Employee Participation 13.9. Training 13.10. Data Collection and Analysis 13.11. Communication 13.12. Program Monitoring 13.13. Review and Improvement
14. Contractors Management	14.1. Management Statement 14.2. Coordination 14.3. Regulations, Codes and Standards 14.4. Implementation Plan 14.5. <i>Pre-Selection</i> 14.6. <i>Selection Process</i> 14.7. <i>Contractor Introduction to Work Site</i> 14.8. <i>On-Site Performance</i> 14.9. <i>On-Site Performance Evaluations</i> 14.10. Employee Participation 14.11. Training 14.12. Data Collection and Analysis 14.13. Communication 14.14. Program Monitoring 14.15. Review and Improvement
15. Occupational Health	15.1. Management Statement 15.2. Coordination 15.3. Regulations, Codes and Standards 15.4. Implementation Plan 15.5. <i>Health Hazard Identification</i> 15.6. <i>Health Hazard Control</i> 15.7. <i>Medical Assistance</i> 15.8. <i>Personal Hygiene</i> 15.9. Employee Participation 15.10. Training 15.11. Data Collection and Analysis 15.12. Communication 15.13. Program Monitoring 15.14. Review and Improvement
16. Internal Awareness	16.1. Management Statement 16.2. Coordination 16.3. Regulations, Codes and Standards 16.4. Implementation Plan 16.5. <i>Program Information Publications</i> 16.6. <i>Use of Performance Statistics</i>



ELEMENT	Element structure:
	16.7. <i>HSE Awareness Meetings</i> 16.8. <i>HSE Awareness Promotion</i> 16.9. <i>Promotion Campaigns</i> 16.10. <i>Recognition and Award Programs</i> 16.11. <i>Housekeeping Promotion</i> 16.12. Employee Participation 16.13. Training 16.14. Awareness Surveys 16.15. Data Collection and Analysis 16.16. Program Monitoring 16.17. Review and Improvement
17. External Communications	17.1. Management Statement 17.2. Coordination 17.3. Regulations, Codes and Standards 17.4. Implementation Plan 17.5. <i>Communication with Interested Parties</i> 17.6. <i>Complaints and Other Information</i> 17.7. <i>Promotional Activities</i> 17.8. <i>Off-the Job HSE</i> 17.9. Employee Participation 17.10. Training 17.11. Data Collection and Analysis 17.12. Communication 17.13. Program Monitoring 17.14. Review and Improvement
18. Emergency Preparedness	18.1. Management Statement 18.2. Coordination 18.3. Regulations, Codes and Standards 18.4. Implementation Plan 18.5. <i>Identification of Potential Emergencies</i> 18.6. <i>Emergency Plan</i> 18.7. <i>Specific Responses</i> 18.8. <i>Emergency Equipment and Facilities</i> 18.9. <i>Fixed Fire Water System</i> 18.10. <i>Mobile Equipment</i> 18.11. <i>Emergency Communications Equipment</i> 18.13. <i>Emergency Support</i> 18.14. <i>Public Relations</i> 18.15. Employee Participation 18.16. Emergency Training 18.17. Data Collection and Analysis 18.18. Communication 18.19. Program Monitoring 18.20. Review and Improvement
19. Incident Investigation	19.1. Management Statement 19.2. Coordination 19.3. Regulations, Codes and Standards 19.4. Implementation Plan 19.5. <i>Investigation</i> 19.6. <i>Reporting</i> 19.7. <i>Follow-up</i> 19.8. Employee Participation 19.9. Training 19.10. <i>Incident Report Maintenance</i> 19.11. <i>Property Damage Identification and Analysis</i> 19.12. Data Collection and Analysis 19.13. Communication 19.14. Program Monitoring 19.15. Review and Improvement
20. Monitoring and	20.1. Management Statement



ELEMENT	Element structure:
Assessment	20.2. Coordination 20.3. Regulations, Codes and Standards 20.4. Implementation Plan 20.5. <i>Occupational Health Monitoring and Medical Surveillance</i> 20.6. <i>Safe Behavior Monitoring</i> 20.7. <i>Environmental Monitoring</i> 20.8. <i>Assessment Activities</i> 20.9. Employee Participation 20.10. Training 20.11. Communication 20.12. Program Monitoring 20.13. Review and Improvement
21. Management System and Process Safety Audits	21.1. Management Statement 21.2. Coordination 21.3. Regulations, Codes and Standards 21.4. Implementation Plan 21.5. <i>Management System Audits</i> 21.6. <i>Process Safety Audits</i> 21.7. Employee Participation 21.8. Training 21.9. Data Collection and Analysis 21.10. Communication 21.11. Program Monitoring 21.12. Review and Improvement
22. Process Safety Information and Document control	22.1. Management Statement 22.2. Coordination 22.3. Regulations, Codes and Standards 22.4. Implementation Plan 22.5. <i>Information Accessibility</i> 22.6. <i>Document Control</i> 22.7. Employee Participation 22.8. Training 22.9. Data Collection and Analysis 22.10. Communication 22.11. Program Monitoring 22.12. Review and Improvement