

TopChem¹

**Description of Corporate OHS system
according to OHSAS 18001/2**

¹ “TopChem” as intended here includes all subsidiaries in which TopChem has a controlling interest.

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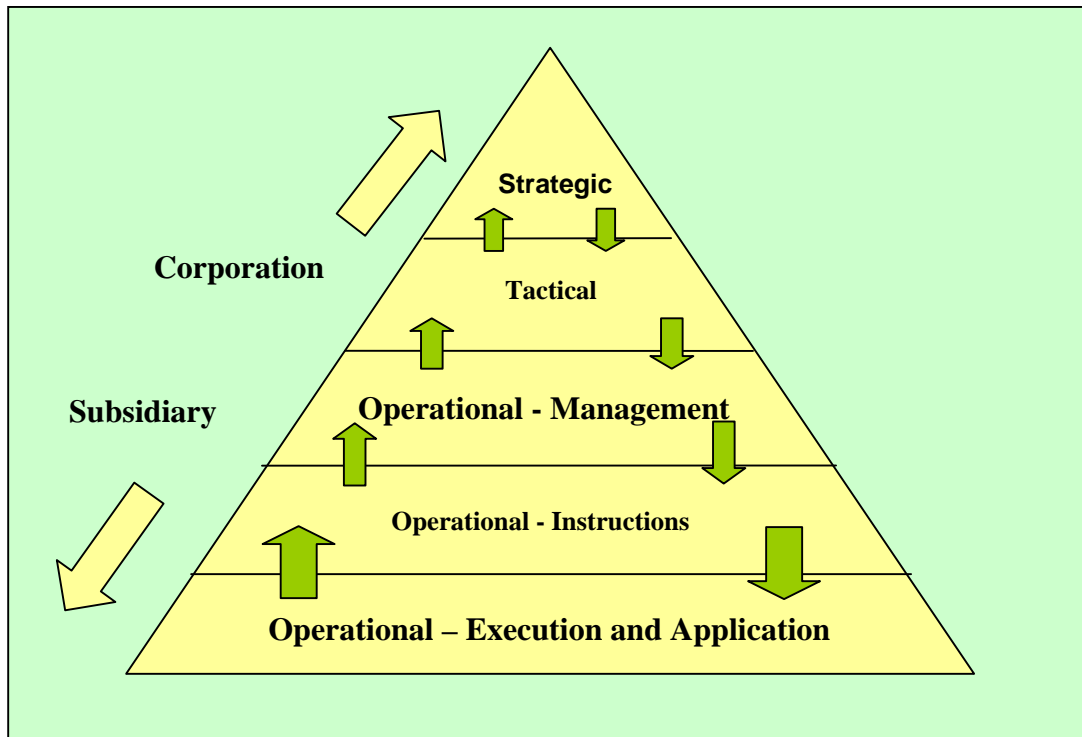
1 INTRODUCTION AND PURPOSE

This document describes the basis of the TopChem OH&S system. The objective of this system is to control the occupational health and safety risks - to people, property, products, and the environment - that are associated with the activities of TopChem and improve its related performance.

This document does not include specific OH&S performance criteria that are laid down in other documents that together form part the OH&S system of TopChem Company.

The TopChem OH&S system includes the following levels with related documents:

Level	Name and short description
1. Strategic	<p>1. System Description (this document)</p> <p>Describing the structure of the total system to obtain desired objectives. This description follows the structure of OHSAS 18001 and 18002, the international reference for Occupational Safety and Health Systems. It forms the basis of the TopChem OH&S system and is used to communicate the related TopChem efforts to interested parties such as: clients, personnel, shareholders, authorities, certification bodies, insurers and others. The structure described in this document has been selected to facilitate inclusion of other Risk Management aspects when and if needed.</p>
2a. Tactical	<p>2a. M4A Manual (TopChem OH&S Management Manual)</p> <p>This is the level that forms a major connection between the strategic level as described under point 1 above and the operational levels that follow below. The system's main elements (Management Activity And Attention Area or M4A's) are described in management terms to determine <u>what</u> shall be done, <u>when</u> and by <u>whom</u> in order to obtain the results wanted. While the Corporate OH&S Management manual is still rather generic, the subsidiary level manuals will be more specific in line with the needs of the subsidiary concerned. Subsidiary OH&S systems and their related manuals will, however manuals follow the Corporate structure outlined in this document</p>
2b.Operational - Management	<p>2b. TopChem Good Management Practices (GMP)</p> <p>The TopChem GMP's describe in more detail <u>how</u> the activities indicated in the TopChem M4A Manuals are to be carried out. While the GMP's are linked to the M4A's described in the M4A Manuals, they are provided as separate documents to allow for adaptation to local situations within the subsidiaries.</p>
3. Operational - Instructions	<p>3. Work Instructions</p> <p>Work instructions detail how specific assignments are to be carried out. Their development follows management work (levels 2 and 3 above) and typically come out of risk assessment processes identifying so-called "critical" tasks or jobs. As work instructions for similar tasks will often involve similar risks and controls, these instructions are provided to potential users as part a Corporate database for reference, use and – where necessary - adaptation at the place of application.</p>
4. Operational - Execution	<p>4. Operational execution and application</p> <p>The main purpose of the TopChem OH&S system is the proper execution of activities at all levels in the organization. Such activities are not limited to actual the production facilities but include all other aspects that are contributing to a "safe to operate" status such as design, purchase, maintenance, personnel hiring, training etc.</p>



The TopChem OH&S management system

Purpose of this document:

- To establish the TopChem OH&S system to eliminate, minimize and control risk to:
 - employees and others who may be exposed to risks associated with activities, products and services of TopChem;
 - property belonging to TopChem or to others as long as that property is in the custody of TopChem;
 - the environment;
 - TopChem business.
- To implement, maintain and continually improve the TopChem OH&S system;
- To assure conformance with the TopChem OH&S policy;
- As applicable, to demonstrate such conformance to others;
- As applicable, to allow recognition of the TopChem OH&S management system by third parties or allow self-assessment and declaration of conformance with this document.

The requirements described in this document are and will be incorporated into the OH&S systems of all TopChem subsidiaries (in which TopChem has a controlling interest). The specific way and detail of the application may vary per subsidiary, depending on the nature of the activities and the risks and complexity the operations being carried out.

NOTE: This document is not the TopChem OH&S management system itself. Rather it tries to put into perspective the various parts ("levels") of the OH&S management system (levels 2a, 2b, 3 and 4) and forms a window through which third parties can take a look at the OH&S system of the TopChem organization. In particular, this document tries to put levels 2a and 2b at the heart of the system.

2 TERMS AND DEFINITIONS

For the purposes of this and related documents the following terms and definitions apply:

2.1. - accident

An undesired event giving rise to death, ill health, injury, damage or other (business) loss

2.2. assessment

The periodic evaluation of activities being carried in comparison to those contained in the of the standing plans that form part of the TopChem OH&S system, in particular the part that is related to levels 2 and 3 of the 4 level TopChem OH&S system.

2.3. - audit

A systematic examination to determine whether activities and related results conform to planned arrangements and whether these arrangements are implemented effectively and are suitable for achieving the policy and objectives of TopChem Company.

2.4. continual improvement

The process of enhancing the TopChem OH&S system, to achieve improvements in overall occupational health and safety performances, in line with the TopChem OH&S policy

2.5. – hazard

A source or situation with a potential for harm in terms of human injury or ill health, damage to property, damage to the (workplace) environment, loss of business objectives or a combination of these

2.6. - hazard identification

The process of recognizing that a hazard exists and defining its characteristics

2.7. - incident

An undesired event giving rise to an accident or that has the potential to lead to an accident

NOTE. An incident where no ill health, injury, damage, or other loss occurs is also referred to as a “near-miss”. The term “incident” includes “near-misses”.

2.8. - interested parties

The individual or group concerned with or affected by the OH&S performance of TopChem.

2.9. – management programs

The identified and structured management activities making up the TopChem OH&S Management Manual (Level 2 of the TopChem ‘H&S management system, the M4A Manual). These programs or elements are ongoing activities with the purpose of eliminating or the risks associated with TopChem activities. While these programs are part of the larger OH&S system, they are more or less standing alone , each with their own objectives. These programs include the “standing plan” which will remain active during the lifetime of the operation involved.

2.10. - non-conformance

Any deviation from work standards, practices, procedures, regulations, management system performance etc. that could either directly or indirectly lead to injury or illness, property damage, damage to the workplace environment, business loss or a combination of these

2.11. - objectives

The broader long term goals, described in terms of overall OH&S performance, that TopChem has set itself to achieve through implementation of its OH&S management system and related “standing plans”.

2.12. - occupational health and safety

The conditions and factors that affect the well-being of employees, temporary workers, contractor personnel, visitors and any other person in the workplace

2.13. - OH&S management system

Part of the overall management system that allows and assists TopChem management to control the OH&S risks associated with its business. This includes the organizational structure, planning activities, responsibilities, practices, procedures, processes and resources for developing, implementing, achieving, reviewing and maintaining TopChem’s OH&S policy. The TopChem OH&S Management System includes all 4 levels depicted on page 3 of this document.

2.14. – performance

The measurable indicators of the OH&S management system related to TopChem’s control of health and safety risks, based on its OH&S policy and objectives

NOTE. Performance of the OH&S management system is measured both by input (pro-active measurement) as well as output (reactive measurement or results).

2.15. review

The periodic evaluation of the TopChem OH&S efforts and results in relation to changing societal, political, industrial and environmental conditions and the obligations – be it voluntary or imposed – that those changes will put on the TopChem organization.

2.16. - risk

The combination of the likelihood and consequence(s) of a specified hazardous event occurring

2.17. - risk assessment

The overall process of estimating the magnitude of risk and deciding whether or not the risk is tolerable

2.18. - safety

The freedom from unacceptable risk of harm

2.19. – single-use plan

An identified set of specific activities (sometimes also called “project”) to arrive at a specific goals or targets, with a determined budget and within a determined (mostly limited) time period. Single-use plans are often used to cope with certain problems or to reach specific objectives. While these plans are limited in time and scope, they often contain issues that should be considered for inclusion in the management system (or “standing plan”) to prevent re-occurrence of the same or similar problems or to maintain performance at a desired level.

2.20. – standing plan

An identified set of more generic activities to arrive at broad rather general goals or objectives, not having a specific budget and without a determined time period. Standing plans (essential parts of a “management system”) are used to reach strategic objectives. Rather than being directed at particular issues or problems, these standing plans are intended to both prevent specific issues through risk or (potential) problem identification as well as uncover those at an early stage of development. These plans are not limited in time and will normally exist during the life time of the related activity or organization and beyond that as applicable. They will be adapted over time depending on results obtained as well as due to changes in industrial, social, political and environmental conditions.

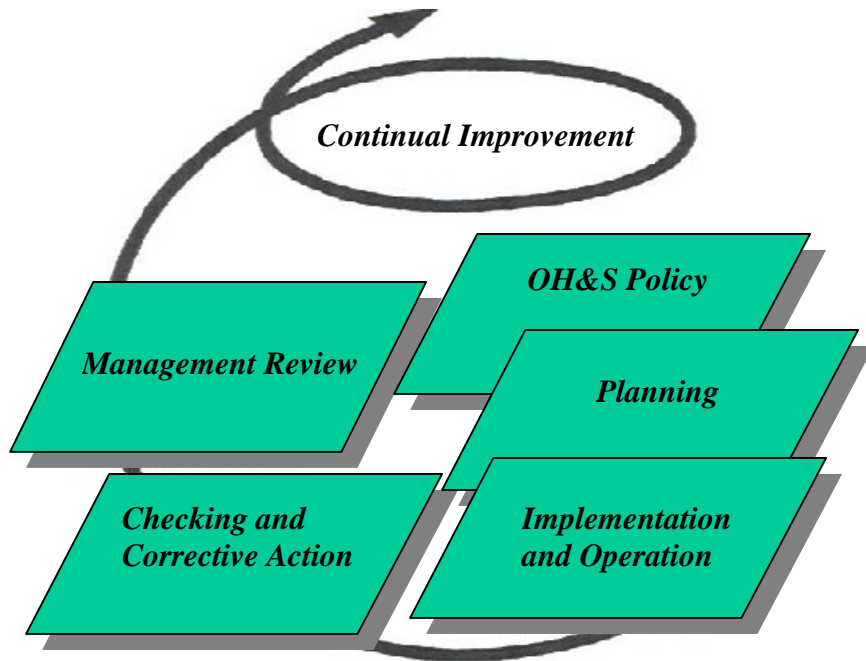
2.211. – target

The specific short term goals, described in terms of specific OH&S performance, that TopChem has set itself to achieve through implementation of specific OH&S “single-use plans” that are either directed at solving identified problems or at reaching short term performance goals.

2.22. - tolerable risk

The risk that has been reduced to a level that can be endured by the organization having regard to its legal and societal obligations and its own OH&S policy. Care should be taken as to not have the change of occurrence factor overshadow the potential consequence factor.

3. OH&S MANAGEMENT SYSTEM ELEMENTS



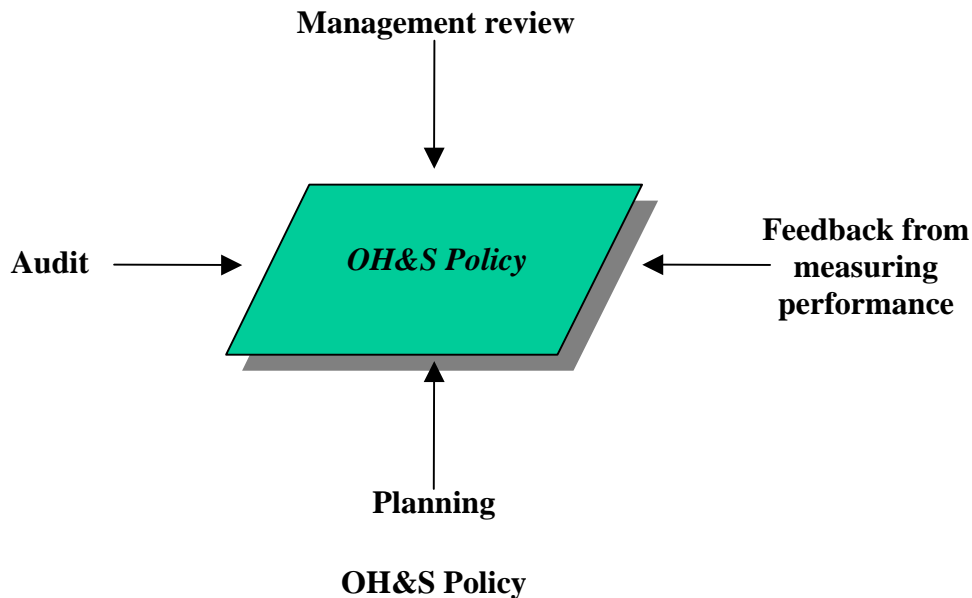
Elements of successful OH&S management

3.1 General requirements of the TopChem OH&S Management System

This chapter describes the TopChem OH&S Management System M4A's (level 2 of OH&S system as further detailed in the Management Manual) which forms the heart of the TopChem OH&S efforts.

The TopChem OH&S management system, as being applied in and by all TopChem subsidiaries will include the elements as described in this chapter.

3.2. TopChem OH&S Policy



It is the policy of the TopChem management to carry out the company activities such that:

- No undue negative OH&S risks will be caused to any party with whom TopChem and its subsidiaries have or will have a relation, business or otherwise. Such parties to include, but are not limited to: employees, clients, shareholders, authorities, neighbors and the public at large;
- Ongoing improvement will occur to maintain OH&S performance at a level commensurate with local and international legislation and other requirements to which TopChem or its subsidiaries subscribe and with locally and internationally accepted industry practices,

The OH&S system, through which TopChem will obtain these objectives, is and will be documented and implemented and will be maintained and improved as necessary and include all 4 levels as indicated in chapter 1 “Introduction and purpose” of this document.

The presence, contents and working of the OH&S system is and will be communicated and explained to all personnel with the intent that employees are made aware of their individual roles in obtaining OH&S objectives. As applicable, all documents and other information relevant for the proper performance of personnel at any level in the organization will be made available to them.

While the description of the TopChem OH&S system, as deemed relevant, is and will be made available to identified third parties, this information is also available on request to any other party wishing to receive such information. Certain restrictions on the availability of the information will exist where provision of such information may damage the commercial or other interest of TopChem and its subsidiaries beyond the scope of its legal or societal obligations.

The TopChem OH&S policy will be reviewed at least annually and by appropriate senior corporate and subsidiary management levels to ensure that it remains relevant and appropriate to its activities and related risks, accepted industry standards and local and international legislation.

TopChem OH&S policy is further detailed in the TopChem corporate and subsidiary OH&S policy statements and in the OH&S programs or elements that are contained in the M4A Manuals. Policy statements are signed by current appropriate corporate or subsidiary management.

TopChem

Occupational Safety and Health Policy Statement

The Management and Board of Directors of TopChem consider the safety and health of their employees and other persons and regard for the conservation of the environment as vital issues in conducting their activities.

The Management and Board of Directors regard Safety, Health and Environmental matters. on a level at least equal to other aspects of business.

The Management and Board of Directors will provide their leadership and commitment to:

- provide a safe place to work to their employees as well as to other persons working under their responsibility, without undue negative health aspects
- promote the health of their employees, as appropriate,
- use installations and processes that are safe and have no undue negative influences on the environment
- manufacture and place on the market products which are safe to use and have no undue negative influence on the environment

The Management and Board of Directors of TopChem will demonstrate their leadership and commitment through:

- Complying with all applicable occupational safety and health legislation
- using the best practical management practices to produce desired occupational safety and health results
- c. ensuring employee participation in the development and execution of relevant occupational safety and health programs and activities
- d. establishing current and long-term goals to provide the necessary guidelines for continuous improvement of occupational safety and health
- e. publishing HSE objectives, activities and performance data as part of their Positive Risk Communication efforts.

The ultimate responsibility for the overall functioning of the HSE program rests with the Management and Board of Directors of TopChem. Detailed responsibilities together with appropriate authorities and accountabilities will be assigned to relevant individuals or groups at all levels in the organization.

The Management of TopChem

The Board of Directors

Senior Manager

Chairperson

Relation 3.2. - TopChem M4A Manual

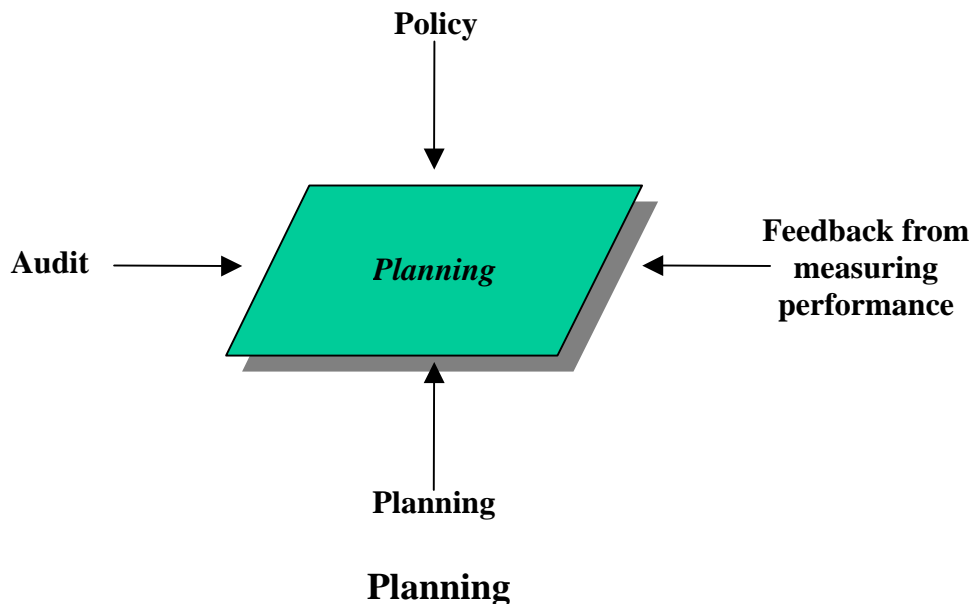
The main relations between the TopChem “OH&S Policy” as presented in this chapter 3.2. and the M4A Manual (level 2a of the OH&S system) can be found in the following management programs or elements contained in the M4A Manual reference manual – see chapter 3.3.4.a. for manual contents):

1.	Management leadership & culture
16.	Review

Further reference can be found in the structure of each of the TopChem system programs - see 3.3.4.b.:

1.	Need assessment and management statement
4.	Review and improvement

3.3 Planning



3.3.1 Planning for hazard identification, risk assessment and risk control

TopChem has established and will maintain procedures for the ongoing identification of hazards, the assessment of risks, and the implementation of necessary control measures. These procedures are further detailed in the M4A Manual (level 2 of the OH&S system), Good Management Practices (level 3) and, as necessary, in the Work Instructions (level 4) and cover:

- Routine and non-routine activities, including products used or handled;
- Activities of all personnel and others having access to the workplace;
- Facilities at the workplace, whether provided by TopChem or others;
- Emergency situations

Hazard identification and risk assessment activities of TopChem include:

- Design, development and construction stages of products, processes, facilities/installations and work procedures;
- Inspection and maintenance of facilities;
- Modification of facilities, processes and work procedures;
- Observation of general behaviour as well as execution of specific - “critical” – tasks;
- Communications and complaints from employees and other parties;
- Analysis of non-conformances, incidents and accidents;
- Industry best practice knowledge
- National and international legislation

The processes and techniques for hazard identification and risk assessment, which are further detailed in the OH&S M4A Manual and the GMP’s:

- Are and will be relevant to the scope and nature of TopChem activities to ensure pro-active rather than re-active control of risks:
- Will be used in a timely manner to allow – as applicable – pro-active control measures;
- Provide for the classification and identification of risks that are to be eliminated or controlled by measures as defined in 3.3.4.;
- Are consistent with the operating experience and capabilities of the risk control measures employed;
- Provide input into the determination of facility requirements , identification of training needs and/or development of operational controls;
- Provide for the monitoring of required actions to ensure both the effectiveness and timeliness of their implementation;
- Are appropriately documented in a “risk register” during the lifetime of the risks involved.

The hazard and risk assessments processes are and will be carried out by properly qualified and experienced people. As applicable, such qualified people will be secured from external sources.

Preferable, control measures are such as to eliminate the risks involved. If that is not feasible, risks are controlled at tolerable levels giving priority to technical solutions at the source over those of administrative nature while the use of personal protective equipment is considered as a last resort.

The results of the hazard and risk assessments and the effects of controls suggested and implemented are and will be considered when setting OH&S objectives (ref. 3.3.3.).

Relation 3.3.1. - TopChem M4A Manual

The main relations between the TopChem “OH&S Planning for hazard identification, risk assessment and risk control” as presented in this chapter 3.3.1. and the M4A Manual (level 2a of the OH&S system) can be found in the following management programs or elements contained in the M4A Manual reference manual – see chapter 3.3.4.a. for manual contents):

2.	Risk assessment of / legislation concerning:
	2.1. processes
	2.2. products
	2.3. goods/materials
	2.4. installation / workplace
	2.5. tasks to be carried out / procedures
	2.6. personnel (including management & supervision)
	2.7. third party services
8.	Inspections and maintenance
9.	Critical task observations
11.	Modification management
14.	Accident / incident investigation & analysis
15.	Audits
16.	Reviews

Further reference can be found in the structure of each of the TopChem system programs - see 3.3.4.b.:

1.	Need assessment and management statement
3.	Formulation of “standing” plan
	3.1. review of legislation etc. for minimum requirements
	3.2. specific activities
4.	Review and improvement

3.3.2 Legal and other requirements

As further described in the M4A Manual, TopChem has established and will maintain a process for identifying legal and other OH&S requirements that are applicable to its activities.

The information obtained through this process – as relevant - is and will be communicated to TopChem employees and other relevant parties, including any specific actions required to be carried out by those people.

Relation 3.3.2. - TopChem M4A Manual

The relations between the TopChem “Legislative and other requirements” as presented in this chapter 3.3.2. and the M4A Manual (level 2a of the OH&S system) can be found in all management programs or elements contained in the M4A Manual reference manual – see chapter 3.3.4.a. for manual contents):

Further reference can be found in the structure of each of the TopChem system programs - see 3.3.4.b.:

3.	formulation of “standing” plan
	3.1. review of legislation etc. for minimum requirements
	3.4. employee training
	3.6. communication needs
	3.7. standing plan assessment
4.	review and improvement

3.3.3 Objectives

TopChem has established - or will establish - and maintains documented OH&S objectives, at each relevant function and level within its organization. These objectives are quantified whenever and wherever practicable and related to both the efforts to obtain the desired objectives (process oriented / pro-active) as well as the results thereof (results oriented / re-active).

Objectives are set and prioritized by applicable corporate and subsidiary management not less than annually and may include:

- Extension or reduction of OH&S (M4A program) activity – pro-active;
- Improvement of existing program activity – pro-active;
- Reduction of undesired event frequencies - re-active.

Relevant levels at which objectives are set include:

- TopChem as a whole;
- All TopChem subsidiaries in which TopChem has a controlling interest;
- All major departments of TopChem subsidiaries, such to be decided by subsidiary management;
- Specific trades/occupations, where deemed relevant and necessary.

When establishing and reviewing its objectives, TopChem considers the legal and other requirements with which it either has to or wishes to comply with (ref. 3.3.2.), the OH&S hazards and risks as identified through the relevant processes (ref. 3.3.1.), its technological options as well as its financial, operational and business requirements, and the views of relevant interested parties. The objectives are and will be consistent with the OH&S policy, including the commitment to continual improvement.

Relation 3.3.3. - TopChem M4A Manual

The relations between the TopChem “Objectives” as presented in this chapter 3.3.3. and the M4A Manual (level 2a of the OH&S system) can be found in the following management programs or elements contained in the M4A Manual reference manual – see chapter 3.3.4.a. for manual contents):

1. Management leadership & Culture
15. Reviews

Further reference can be found in the structure of each of the TopChem system programs - see 3.3.4.b.:

1. Need assessment and management statement
4. Review and improvement

3.3.4 OH&S management programs

TopChem initiates management programs as part of its ongoing effort to achieve, maintain and further improve its OH&S objectives.

Management programs that are part of the TopChem OH&S system and the M4A manual are indicated on the following page as part of a process to obtain and maintain a organization “safe to operate”. This process can be seen to include 4 phases:

- Prepare – the activities and areas required to prepare for building “safe to operate” and build/construct facilities based on criteria established during preparation phase
- Maintain – facilities and operations at the desired “safe to operate” level
- Improve – facilities, operations and systems in a changing environment

Each program or element as described in the M4A manual includes documentation of:

- The scope and objectives of the program as well as the leadership and support of management to obtain the objectives;
- The means (and time-scale as applicable) by which objectives are to be achieved;
- Organizational and other conditions that need to be present to successfully conclude the program
- The designation of responsibilities and authorities for achievement of the objectives at relevant functions and levels of the organization.
- The activities to obtain the objectives set;
- Designation of responsibilities and authorities to periodically monitor the proper implementation of activities as well assess results obtained. As relevant, action-plans will be set up to deal with non-conformances found.
- Designation of responsibilities and authorities to periodically review programs in view of possible internal or external changes that may require adaptation of program objectives and/or activities.
- Training of people to properly develop, implement, manage, monitor and review the activities concerned;

TopChem OH&S M4A Manual	Activities to obtain level Safe to operate during system life time		
Elements or programs – the subjects	Prepare	Maintain	Improve
1. Management leadership & culture	◆	◆	◆
2. Risk identification of / legislation concerning:			
2.1. processes	◆		
2.2. products	◆		
2.3. goods / materials	◆		
2.4. installation / workplaces	◆		
2.5. tasks to be carried out	◆		
2.6. personnel (including management and supervision)	◆		
2.7. third party services	◆		
3. External communication	◆	◇	
4. Information & documentation	◆	◇	
5. Obtain (d esign/ p urchase) safe level of:			
5.1. processes (d)	◆	◇	
5.2. products (d)	◆	◇	
5.3. goods / materials (p)	◆	◆	
5.4. installations / workplaces (d)	◆	◇	
5.5. work instructions / procedures (d)	◆	◇	
5.6. personnel (p)	◆	◆	
5.7. third party services (p)	◆	◆	
6. Training	◆	◆	◆
7. Construction and start-up	◆	◇	
8. Inspections and maintenance	◇	◆	
9. Critical task observations	◇	◆	
10. Behavior management	◇	◆	
11. Modification management	◇	◆	
12. Internal communication	◇	◆	
13. Emergency planning and preparedness	◇	◆	
14. Accident / incident investigation & analysis	◇	◆	◆
15. Audits	◇	◆	◇
16. Reviews	◇	◇	◆

These programs or elements are further detailed in the M4A manual (the “what, whom, and when”) and in the Good Management Practices (the “how”). The TopChem corporate OH&S manual provides the basic content, objectives and structure that needs to be made operational at the subsidiary level.

Each program as described in the M4A manual has the following internal structure:

1.	Need assessment and management statement
2.	Co-ordination of element activities
3.	Formulation of “standing” plan
	3.1. review of legislation etc. for minimum requirements
	3.2. specific activities
	3.3. employee participation in development/improvement
	3.4. employee training
	3.5. employee participation in implementation
	3.6. communication needs
	3.7. standing plan assessment (“program audit”)
4.	review and improvement (“program review”)

NOTE: The “standing” plan indicates what – within the scope of the program - shall be done, by whom and when. The term “standing” is intended to indicate that such activities will be continued during the entire lifetime of the operation or system being considered. The alternative to the “standing” plan is the plan that has a determined end objectives and date: the “single use” plan.

OH&S management programs are reviewed at least once per year by TopChem Corporate Management and at least once every six months by subsidiary management. Based on results of these reviews, action plans will be developed to address internal as well as external aspects such as:

- change of activities, products, services and operating conditions
- changes in legislation and market expectations.