

Table 8 – Checklist for performing a SEVESO inspection (SMSPMA).

KEY QUESTIONS	ASPECTS TO OBSERVE <i>IN LOCO</i> / DOCUMENTATION TO ANALYSE / COMMENTS
I. Policy for the prevention of major accidents involving dangerous substances (MAPP)	
<p>Legal requirements (Decree-Law 254/2007, Annex III, a): <i>The policy for the prevention of major accidents involving dangerous substances should be set out in writing and include the general objectives and action principles defined by the operator for controlling the risks of major accidents involving dangerous substances. Those objectives and principles should be proportionate to the risk at the establishment.</i></p> <p>Relationship with the requirements of standards OHSAS 18001:1999/NP 4397:2001, OHSAS 18001:2007 and NP EN ISO 14001:2004: <i>HSW Policy (4.2) and Environmental Policy (4.2)</i></p>	
<ul style="list-style-type: none"> • Has the organisation defined a specific MAPP for the establishment? • Is the MAPP set out in writing, signed and ratified by top management? • Was the MAPP drawn up within the timescale required for the presentation of notification? • Do specific procedures exist for revising and updating the management policy? • How is the MAPP made available to APA, IGAOT or ECL when requested by these bodies? 	<ul style="list-style-type: none"> • Check the MAPP document. The MAPP document should be signed and ratified by top management. • Ask to see and analyse the specific procedures for revising and updating the MAPP. • Check the existence of records of the MAPP being made available to APA, IGAOT and/or ECL when so requested by these bodies.
<ul style="list-style-type: none"> • Is there evidence that the establishment's top management is directly involved in the development, implementation and revision of the MAPP? 	<ul style="list-style-type: none"> • Examine the documentary evidence produced by the operator (internal memos, minutes of meetings, revisions of the SMSPMA, etc.).
<ul style="list-style-type: none"> • Is the scope of the SMSPMA defined? Does it include the whole of the establishment covered by DL 254/2007? • Does the defined MAPP take account of the following: <ul style="list-style-type: none"> - Does it match the establishment's activities? - Is it consistent with all possible risks of major accidents that could occur in the establishment? - Does it establish that safety management is the responsibility of the entire organisation? - Does it include a commitment to comply with the applicable legislation and pursue continuous improvement in terms of action and 	<ul style="list-style-type: none"> • Check the content of the MAPP document against the real situation in the establishment. • Check the content of the MAPP in terms of the environment and the risk of significant major associated accidents. • Ask to see procedures and evidence of compliance with applicable legislation and of continuous improvement.

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<p>performance in industrial safety matters and the prevention of major accidents involving dangerous substances?</p>	
<ul style="list-style-type: none"> • Is the MAPP consistent with other policies defined at establishment and/or Group level? • How does the SMSPMA relate to the establishment's general management system? 	<ul style="list-style-type: none"> • Check the existence of other management systems and related benchmarks, including internal Group or sector benchmarks. • Examine the organisation defined by the operator for the establishment. • Ask to see other policies defined at establishment and/or Group level (Quality, Environment, HSW, etc). Analyse the integration of the existing policies.
<ul style="list-style-type: none"> • Does the defined MAPP include the guiding principles published on the APA website? • Does the MAPP, as defined by top management, aim to ensure a high degree of protection to humans and the environment? 	<ul style="list-style-type: none"> • Check the content of the MAPP in terms of the environment and the risks of significant major associated accidents. <p>Note: The MAPP should include and reflect the general objectives and action principles established by the operator for controlling the risks of major accidents in terms of the elements contained in Annex III of DL 254/2007, in order to ensure a high degree of protection to humans and the environment. In SEVESO establishments with higher hazard levels (Chap. IV of DL 254/2007), the MAPP forms part of the establishment's safety report, with the result that it is evaluated prior to and independently of the inspection process, by the competent authority (APA).</p>
<ul style="list-style-type: none"> • What are the general objectives and action principles established in the MAPP in relation to the following aspects? <ul style="list-style-type: none"> - Organisation and personnel; - Identification and assessment of the risks of major accidents involving dangerous substances; - Operational control; - Management of modifications; - Emergency planning; - Performance monitoring; - Auditing and revision. 	
<ul style="list-style-type: none"> • How does the operator implement the MAPP? • Are the resources required for the implementation of the SMSPMA (human resources, special skills, infrastructures, technological and financial resources) available? • Does the MAPP define specific objectives with qualitative and/or quantitative indicators and targets (e.g. action plan)? • Have one or more action plans been established including: <ul style="list-style-type: none"> - Precise/exact actions and measures? 	<ul style="list-style-type: none"> • Check the implementation of the MAPP and the SMSPMA. • MAPP objectives (documented) and associated documentation (e.g. action plans, procedures and records relating to the monitoring of action plans).

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<ul style="list-style-type: none"> - Timescales? - Means and resources? - Are quantifiable objectives listed and defined? • How does the operator monitor the application of the MAPP? • What measures are defined for controlling/monitoring the application of the MAPP? 	
<ul style="list-style-type: none"> • How is the MAPP disseminated to interested parties inside and outside the organisation? • How does the SMS/PM ensure that audiences are properly informed? • And that the messages are understood? • How is internal communication about the prevention of risks of major accidents organised? • How are the MAPP principles and objectives formalised in internal communication (i.e. using what medium)? 	<ul style="list-style-type: none"> • Check how the MAPP is disseminated: Records of internal and external communication (e.g. publication on website, distribution of a leaflet). • Analyse the media used for communication with the parties involved in the prevention of risks of major accidents. • By means of interviews, the inspector should be able to check whether there is widespread understanding of the MAPP and the defined objectives, and whether these are observed on a day-to-day basis.
<ul style="list-style-type: none"> • What parties are involved in the preparation of communications? • What media are used? • What is the frequency of communications? • What results indicators are kept? • Does the organisation, via its hierarchy, take account of issues raised by staff? What tools and resources are used? • Are there means or procedures that enable staff to express concerns without fear? • How is communication organised between departments (horizontal communication)? • How are service providers involved in the safety management system? 	<ul style="list-style-type: none"> • Examine the documentary evidence produced by the operator. • The MAPP should take into account the contributions of the people who work in the establishment or on its behalf.

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II. Organisation and Personnel	
<p>Legal requirements (Decree-Law 254/2007, Annex III, c.i): <i>Roles and responsibilities of personnel involved in the management of the risks of major accidents involving dangerous substances at all levels of the organisation. Identification of the training needs of such personnel and the organisation of such training. Participation of personnel, including subcontractors working at the establishment.</i></p> <p>Relationship with the requirements of standard OHSAS 18001:1999/NP 4397:2001: <i>Structure and responsibility (4.4.1), Training, awareness and competence (4.4.2) and Consultation and communication (4.4.3);</i></p> <p>Relationship with the requirements of standards NP EN ISO 14001:2004 and OHSAS 18001:2007: <i>Resources, powers, responsibilities and authority (4.4.1), Competence, training and awareness (4.4.2) and Communication (OHSAS 18001:2007: Participation and consultation) (4.4.3).</i></p>	
Subject: Organisation	
<ul style="list-style-type: none"> • What is the organisation in terms of safety and prevention of major accidents (PMA)? <ul style="list-style-type: none"> - Is there a specific functional structure for safety management/ PMA? - What are its missions? - How are the missions of this structure co-ordinated with other bodies in terms of PMA? 	<ul style="list-style-type: none"> • Examine the operator's reference document defining the organisational structure. • Examine the missions assigned to that structure. • Analyse the general and specific organograms for safety/PMA, and the way in which they relate to the rest of the establishment's structure. • Co-ordination and functioning of the structure in relation to other departments involved in PMA.
<ul style="list-style-type: none"> • If such a structure is not described, how does the operator: <ul style="list-style-type: none"> - Ensure the application of the defined MAPP? - Ensure the consistency and relevance of the MAPP in safety matters? - Enable top management to have an overarching view of safety-related matters? - Compile information and problems detected? 	<ul style="list-style-type: none"> • Examine documents (minutes of meetings, information files, etc) that may illustrate the organisation in safety terms, and specifically in terms of the prevention of major accidents involving dangerous substances.
<ul style="list-style-type: none"> • Is there a qualified, overall manager with authority and/or access to the establishment's top management, appointed to: <ul style="list-style-type: none"> - Ensure that SMSPMA procedures are established, implemented and maintained; 	<ul style="list-style-type: none"> • Definition of roles (e.g. manual of roles). • Evidence of regular meetings between top management and the personnel responsible for safety/PMA (minutes, records, etc).

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<ul style="list-style-type: none"> - Inform top management about SMS/PMA performance and improvement needs; - Ensure that the established channels of communication are appropriate for the establishment? 	
<ul style="list-style-type: none"> • Is the hierarchy of the organisation able to take note of issues raised by staff and problems detected on the ground? What tools and resources are used? 	<ul style="list-style-type: none"> • Examine the tools presented by the operator. • Examine illustrative examples.
<ul style="list-style-type: none"> • Have any situations been identified that might give rise to conflict/interference with safety management/PMA? <ul style="list-style-type: none"> - If so, what measures were adopted to prevent the occurrence of these situations? - Who is responsible for deciding the actions to adopt? How are these decisions made? 	<ul style="list-style-type: none"> • Examine procedures and/or role descriptions.
<ul style="list-style-type: none"> • Does the structure responsible for safety management/PMA functions have the necessary human and material resources to implement these activities? 	
Subject: Roles and Responsibilities of Staff	
<ul style="list-style-type: none"> • Are the roles and responsibilities of staff in terms of safety/PMA clearly defined at all levels of the organisation? • Are roles and responsibilities, and relationships and interdependences, formalised in key documents (e.g. organograms, descriptions of the organisation), in job descriptions and in operational documents? • Is there a specified management structure and specified responsibilities for safety/PMA matters? Are the relationships and interdependences of the various elements clearly defined? 	<ul style="list-style-type: none"> • Examine the organograms for safety/PMA matters. • Document indicating roles and responsibilities at the various hierarchical levels in safety/PMA terms. • Analyse the operational documents and compare the responsibilities defined in them with: <ul style="list-style-type: none"> - Job descriptions; - Individual training plans; - The operator's key documents on organisational matters. • Check that the relationships and interdependences of the various elements and hierarchical levels are clearly defined.
<ul style="list-style-type: none"> • Do the defined roles and responsibilities cover all levels of the organisation? 	<ul style="list-style-type: none"> • Description of staff roles (examine the content of jobs at different hierarchical levels).

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<ul style="list-style-type: none"> Have staff been informed about the organisational structure for safety management? 	<ul style="list-style-type: none"> Interviews with staff.
<ul style="list-style-type: none"> Are the personnel involved aware of their roles and responsibilities? 	<ul style="list-style-type: none"> Interviews with personnel involved.
<ul style="list-style-type: none"> Are the organisation and corresponding procedures consistent with the organisation and procedures for training? <ul style="list-style-type: none"> Are the roles and responsibilities in terms of safety/PMA clearly defined? Is the distribution of roles and responsibilities consistent with the hierarchical level of the personnel? Are the qualifications required to perform these roles defined? Are the prior requirements demanded of staff (qualifications, experience and knowledge), and those that should be acquired via specific training, defined? Do the defined requirements ensure that the staff have sufficient knowledge, skills and experience to fulfil their roles and responsibilities? 	<ul style="list-style-type: none"> Examine the consistency of the organisation in terms of training. Examine the relevant organograms. For any operative, check/analyse the match between the role occupied and the various organograms and the individual training plan. <p>Note: The inspector should check that all jobs that have safety/PMA-related roles in the establishment (from top management down to operative level) have been identified. In particular, the following at least should be provided for:</p> <ul style="list-style-type: none"> The provision of measures for the development and implementation of the MAPP and/or the SMSPPMA; Co-ordination of the implementation of the SMSPPMA and reporting to top management; Identification of hazards, assessment and control of the risk of major accidents; Raising the awareness of staff about the risk of major accidents and compliance with the MAPP; Identification, recording and monitoring of corrective actions and improvements; Control of normal and abnormal situations, including emergencies; Identification of training needs, planning of training activities and evaluation of their effectiveness; New installations and modifications of existing ones; Investigation of accidents and incidents; Implementation and monitoring of systems for the prevention and control of major accidents; Control and planning of audits and revisions; Purchasing and contracts management.
<ul style="list-style-type: none"> Do the designated personnel, and their substitutes, have appropriate qualifications for the job they are doing, in particular as regards the key jobs in terms of safety/PMA? 	<ul style="list-style-type: none"> Check the consistency between the requirements established for each role and the profile of the person occupying it by means of training records, interviews, etc. <p>Note: The inspector should check the key roles in terms of safety, such as:</p>

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	<ul style="list-style-type: none"> - Safety/PMA Manager; - Operational and maintenance personnel; - Personnel with responsibilities in emergency situations.
<ul style="list-style-type: none"> • Is there consistency with the various procedures mentioned in Annex III of DL 254/2007? 	<ul style="list-style-type: none"> • Checking of procedures and operational documents against the various points in Annex III of DL 254/2007.
<ul style="list-style-type: none"> • At operative level, is there a system for ensuring the suitability of personnel involved in operations that could give rise to major accidents? <ul style="list-style-type: none"> - If so, what are the corresponding procedures? - If not, what are the equivalent measures that are defined and used? 	<ul style="list-style-type: none"> • Analyse the operator's procedures/documents. • Analyse the consistency between the contents of risk analyses, the organisation and procedures for emergency planning, operational control and the organograms of roles and responsibilities.
Subject: Competence and Training	
<ul style="list-style-type: none"> • What is the organisation used by the operator to manage training in the prevention of major accidents? 	<ul style="list-style-type: none"> • Analyse the establishment's training procedure(s). • Examine the general/specific training procedures. • Examine the record of training administered and the corresponding evaluations.
<ul style="list-style-type: none"> • How are training plans for the prevention of major accidents prepared? • Is there a procedure of identifying training needs in terms of PMA? Does it involve the identification of the training needs of internal and external workers? • Does the training plan include initial and recurrent training? • How are training needs identified in post-accident/incident analyses incorporated? 	<ul style="list-style-type: none"> • Analyse the establishment's training procedure(s) (identification of training needs in terms of PMA). • Examine the training plan/programme, including the subject content. • Check whether the following situations are taken into account in the identification of training needs and, subsequently, in the defined training plan: <ul style="list-style-type: none"> - Changes to jobs or roles; - Changes to processes; - New products; - New installations or modifications of existing ones; - Purchase of new equipment, in particular items that are critical to safety; - New procedures, in particular those related to operations, maintenance and emergency situations; - New workers, including service providers housed on site.

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	<ul style="list-style-type: none"> • Check whether the training is consistent with that defined for the management of changes. • Checking of specific cases, e.g. checking the theoretical and practical training of the various emergency teams.
<ul style="list-style-type: none"> • Do training plans or actions on safety/PMA include: <ul style="list-style-type: none"> - New workers? - Temporary staff? - Trainees? - Service providers and subcontractors that operate in the establishment? • Are these training actions administered to personnel involved in: <ul style="list-style-type: none"> - The assignment of resources, including human resources, for the development and implementation of the SMSPMA? - Actions designed to ensure awareness of hazards by staff and compliance with the operator's MAPP? - The conduct of risk analyses? - The preparation of PMA procedures? - The identification of training needs, provision of training and evaluation of its effectiveness? - Control of abnormal situations including emergencies? - Accident/incident analyses? - Conduct of audits? - Identification, recording and monitoring of corrective actions or improvements? - Co-ordination of the implementation of the SMSPMA and reporting to top management? 	<ul style="list-style-type: none"> • Examine the documentary evidence produced by the operator. • Check whether the operator ensures that any person that carries out tasks for the establishment or on its behalf who may have an impact on the SMSPMA is competent in terms of education, training or experience. Perform these checks in relation to personnel who are more important/key in terms of PMA.
<ul style="list-style-type: none"> • How does the operator ensure that the training administered to subcontractors/service providers involved in the safety/PMA area is appropriate? 	<ul style="list-style-type: none"> • Analyse the corresponding procedures; check with the aid of examples.
<ul style="list-style-type: none"> • Is the administered training consistent with the defined competences, roles and responsibilities? • In general, how does the operator select staff with an active role in terms of safety/PMA? 	<ul style="list-style-type: none"> • Checking via interviews with staff.

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<ul style="list-style-type: none"> • Are the staff involved consulted in the preparation of training plans? 	<ul style="list-style-type: none"> • Checking via interviews with staff.
<ul style="list-style-type: none"> • How is the competence of trainers ensured? 	<ul style="list-style-type: none"> • Analyse the establishment's training procedure(s). • Examine some examples (training records).
<ul style="list-style-type: none"> • Who monitors the individual training plans? 	<ul style="list-style-type: none"> • Check against the description of roles and responsibilities.
<ul style="list-style-type: none"> • How often are the training plans revised? 	<ul style="list-style-type: none"> • Check the individual training plans.
<ul style="list-style-type: none"> • Does the content of the training involve general aspects and specific job-related training? 	<ul style="list-style-type: none"> • Check whether the training, general and/or specific, includes the following aspects matched to each job: <ul style="list-style-type: none"> - MAPP, defined objectives and SMS/SPMA; - Risks of accidents associated with the jobs; - What to do in the event of an emergency; - Personal protective equipment; - Rules of conduct.
<ul style="list-style-type: none"> • Does the training evaluate the knowledge acquired (in particular in safety/PMA matters)? • How is the effectiveness of the training evaluated? 	<ul style="list-style-type: none"> • Analyse the organisation's training procedures (evaluation of training and its effectiveness). • Analyse some PMA-related training actions and the evaluation of their effectiveness (associated records).
<ul style="list-style-type: none"> • How are the methodologies and results of risk assessments reflected in training plans? • Are the procedures for identifying and assessing the risks of major accidents consistent with the training plans? • Is there a correspondence established between significant operations for safety/PMA and training needs? 	<ul style="list-style-type: none"> • If the operator has a list of important/significant operations for safety, compare it with the training administered to the personnel involved in those operations. • Comparison between operations for which risk analyses are carried out and the training of the operatives responsible for such operations.
<ul style="list-style-type: none"> • Does the operator keep records of the qualifications, training and experience of employees? 	<ul style="list-style-type: none"> • Examine the records and check whether they contain: <ul style="list-style-type: none"> - Employee's name; - Date of joining; - Previous training and experience; - Activities for which the employee is qualified; - Cycles of training received; - Changes of job.

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Subject: Communication and staff participation	
<ul style="list-style-type: none"> • Is there a defined system to ensure efficient communication, both internal and external, at all levels of the organisation? • Are the channels of communication defined at all levels of the organisation? 	<ul style="list-style-type: none"> • Analyse the organisation's communications procedure. • Check whether the procedure is implemented, in particular whether the defined channels of communication (e.g. leaflets, circulars, meetings) are operational and working. • Check, by means of interviews, whether there is widespread knowledge of: <ul style="list-style-type: none"> - the MAPP, - the defined objectives, - the respective roles and responsibilities, - the consequences of non-compliance, - the benefits in terms of safety and individual performance. • In relation to external communication, check compliance with the legal obligations arising from DL 254/2007 in terms of external communication. Check timescales and organisations to be contacted.
<ul style="list-style-type: none"> • Do the defined channels permit communication exchanges between different shifts and facilitate the collection of proposals and suggestions from shifts? 	<ul style="list-style-type: none"> • Check associated records and conduct interviews with staff.
<ul style="list-style-type: none"> • Is there a defined mechanism for documenting and analysing communications effected by staff in terms of suggestions for improvements, anomalies or defects detected in the safety management system? 	<ul style="list-style-type: none"> • Check associated records and conduct interviews with staff.
III. Identification and Assessment of the Risks of Major Accidents	
<p>Legal requirements (Decree-Law 254/2007, Annex III, c.ii): <i>Identification and assessment of the risks of major accidents involving dangerous substances – adoption and implementation of procedures for systematically identifying the risks of major accidents involving dangerous substances that could occur under normal and abnormal operating conditions and assessment of the probability of the occurrence of such accidents and their gravity.</i></p> <p>Relationship with the requirements of standards OHSAS 18001:1999/NP 4397:2001, OHSAS 18001:2007 and NP EN ISO 14001:2004: Planning for the identification of hazards, and for the assessment and control of risks (4.3.1) and Environmental Aspects (4.3.1)</p>	

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<ul style="list-style-type: none"> • What are the existing procedures for periodically and systematically identifying hazards and assessing the risks associated with the presence of dangerous substances, from a PMA perspective? • What are the procedures for identifying the appropriate measures for prevention and/or mitigation of the risks of major accidents? • Is the methodology applicable and adaptable to the various phases of the establishment's life cycle, including project design, normal and abnormal operation (accidents, alterations, etc) and dismantling? • Does this methodology define the criteria for: <ul style="list-style-type: none"> - The application of a risk analysis methodology? - The selection of the team that will conduct the analysis? - Identification of the resources needed? - The frequency/schedule for analysing risks? - The selection of the risk analysis and assessment techniques to be used? • Does the operator assess the level of probability and gravity of the risks? 	<ul style="list-style-type: none"> • Examine the documented procedure(s) for periodically and systematically identifying hazards, assessing the risks of major accidents and identifying appropriate prevention and/or mitigation measures. • Analyse the associated records (records of the application of the methodology, plans and other records of identified prevention and/or mitigation measures, etc). • Check the definition of criteria in existing procedures. • Evaluate the defined methodology used to identify hazards and assess and control risks. This methodology should ensure the continuous identification of new potential sources of hazards and may be one of the following types: <ul style="list-style-type: none"> - <i>What if</i>; - <i>Check list</i>; - <i>HAZOP</i> (Hazard and Operability Study); - <i>FMEA</i> (Failure Mode and Effects Analysis); - Event Tree. • Check the qualifications of the personnel involved in the application of the methodologies used to analyse risks.
<ul style="list-style-type: none"> • Can the operator produce evidence of the use in practice of the hazard identification and risk assessment methodology? • Are risk analyses that are carried out documented? 	<ul style="list-style-type: none"> • Analyse the associated records. Check the consistency with the risk analysis information. • Analyse the risk analysis reports and check whether they contain the following information: <ul style="list-style-type: none"> - Description of the process analysed; - Identification of hazards in the installations; - Systematic analysis of risks and critical safety elements; - Conclusions drawn from the analysis; - List of existing (and planned) preventive measures for reducing the risk of accidents and mitigating their consequences; are the measures adopted (or to be adopted) described and justified?
<ul style="list-style-type: none"> • Has the operator been sufficiently exhaustive in its identification of hazards and assessment of risks and their consequences in order to prevent them and determine the appropriate measures to reduce their 	<ul style="list-style-type: none"> • Check whether the following aspects are taken into account in the identification of hazards and assessment of the risks of major accidents: <ul style="list-style-type: none"> - Analysis of the risks of new installations, equipment, processes and

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<p>consequences?</p> <ul style="list-style-type: none"> • What normal and abnormal operating cases are taken into account? 	<p>substances, or modification of existing ones;</p> <ul style="list-style-type: none"> - Initial analysis of risks for existing installations that have not been analysed in the past; - Experience acquired in fields relevant to the project (engineering, design, operations, maintenance, safety, etc). - All substances, products, reactions and sources of hazards, including external sources; - Technical and operating failures of safety-critical equipment; - Containment failures; - Process parameters outside the fixed/established limits; - Human factors; - Risks resulting from activities carried out during the construction of the establishment; - Risks associated with external factors (risks of natural origin e.g. earthquakes, floods, etc; Transport); - Unauthorised interventions; - Elements in the surrounding environment liable to be affected (people, goods and the environment); - Foreseeable failures in auxiliary systems (electricity, water, air, etc); - All operational phases (start-up, normal operation, stoppages, loading and unloading, transport inside the establishment, emergencies, maintenance, wind down, etc); - Causes related to design, construction and safety management (design errors, operating procedures, modifications of unsuitable processes and equipment, failures in the work authorisation system, etc); - Results of investigations of accidents/incidents occurring in the establishment or in similar installations, and of previous audits and inspections; - Possibility of the domino effect occurring between installations, and between different establishments.
<ul style="list-style-type: none"> • How are the organisation, identification procedures and the preparation of risk analyses linked and co-ordinated? 	<ul style="list-style-type: none"> • Check the consistency with the risk analysis information.

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<ul style="list-style-type: none"> • Are the results of the methodology reflected in the definition and implementation of the SMS/PSMA, in particular in terms of: <ul style="list-style-type: none"> - objectives, - staff competences, - operating procedures, - modifications management procedures, - emergency planning. 	<ul style="list-style-type: none"> • Check the consistency between the results of the analysis of the establishment's risks and the organisation, the methods used and the defined SMS/PSMA procedures, in particular in terms of: <ul style="list-style-type: none"> - objectives and action plans; - organisation and personnel; - operational control; - management of modifications; - emergency planning.
<ul style="list-style-type: none"> • Does the analysis of risk assessments lead to checking of key safety equipment and parameters? • Is the list of key safety equipment and parameters kept up to date? • If no such list exists, how are the key safety equipment and parameters distinguished from the rest, particularly in terms of monitoring their operation and maintenance? 	<ul style="list-style-type: none"> • Examine the operator's supporting information (e.g. lists of equipment and parameters, critical equipment control plans, list of corresponding checks, etc).
<ul style="list-style-type: none"> • How is internal and external experience acquired and reflected in the preparation of procedures for the systematic identification of hazards and assessment of the risks of major accidents? • Is the probability of the occurrence of accidents re-assessed after the occurrence of an accident? How? 	<ul style="list-style-type: none"> • Hazard identification and risk assessment procedure. • Check the corrective actions recommended in the light of experience acquired in related fields. • Check the records of accidents and check consistency with the results of risk assessments.
<ul style="list-style-type: none"> • How is the revision of risk analyses initiated? • Are the results of the revision reflected in an action plan (where necessary)? 	<ul style="list-style-type: none"> • Analyse the documentary evidence produced by the operator. • Evaluate the identification of typical situations that justify a revision or new risk assessment and their implications (action plan).
IV. Operational Control	
Legal requirements (Decree-Law 254/2007, Annex III, c.iii): <i>Adoption and implementation of procedures and instructions for operation under safe conditions, including maintenance operations, processes, equipment and</i>	

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<p><i>temporary stoppages.</i></p> <p>Relationship with the requirements of standards OHSAS 18001:1999/NP 4397:2001, OHSAS 18001:2007 and NP EN ISO 14001:2004: <i>Legal and other requirements (4.3.2), Documentation (4.4.4), Control of documents (4.4.5), Operational control (4.4.6), Management/Control of records (4.5.3/4.5.4)</i></p>	
<p>Subject: Safety in Operation</p>	
<ul style="list-style-type: none"> Does the operator possess the necessary permits and licences for the setting up of the establishment and the carrying on of its activities? 	<ul style="list-style-type: none"> Ask to see the following, for selected installations, and as applicable: <ul style="list-style-type: none"> Business, works and operating licence; Installation operating licence. <p>Note: The inspector should check compliance with applicable legislation and other conditions imposed by the authorities. The inspector should also check the correspondence between the existing licences and the installations/activities carried on in the establishment.</p>
<ul style="list-style-type: none"> Does the operator comply with the industrial safety regulations applicable to its establishment? 	<ul style="list-style-type: none"> Check conformity with the technical specifications defined in the applicable industrial safety regulations. Analyse the documentary evidence produced by the operator. <p>Note: The inspector should check the technical safety of the installations and equipment in the establishment, especially those critical equipment items which have been installed as measures for controlling and mitigating major accidents. Annex II of this Guide contains the regulations and provisions likely to affect the establishment in terms of PMA. Some of the aspects covered in these regulations are:</p> <ul style="list-style-type: none"> Scope of application; Administrative or technical conditions and requirements; Documentation and procedures for authorisation; Documentation related to maintenance, servicing and inspections; Mandatory planning and design conditions for the construction of infrastructures, installations and equipment (layout, distances, protection, materials, dimensions, etc), indicating the mandatory minimum and maximum values; Compulsory standards.
<ul style="list-style-type: none"> What are the procedures and instructions laid down by the operator to 	<ul style="list-style-type: none"> List of work procedures/instructions adopted by the operator in relation to

KEY QUESTIONS	ASPECTS TO OBSERVE <i>IN LOCO</i> / DOCUMENTATION TO ANALYSE / COMMENTS
ensure operation under safe conditions?	<p>the various activities carried on in the establishment, under both normal and abnormal operating conditions. Select those that are relevant from the point of view of PMA.</p> <ul style="list-style-type: none"> Analyse the work procedures/instructions that are most relevant in PMA terms.
<ul style="list-style-type: none"> What is the defined organisation for the preparation of procedures on operational control? How are the procedures drawn up? In particular: <ul style="list-style-type: none"> Who does what and how? Who controls what, whom and how? 	<ul style="list-style-type: none"> Analyse the procedure(s) for preparing and monitoring/controlling the establishment's SMSPMA documentation. Analyse the corresponding work procedures/instructions.
<ul style="list-style-type: none"> What are the various operating phases covered by these procedures? Are the following situations covered: <ul style="list-style-type: none"> Initial start-up of the installation? Periodic start-ups and stoppages? Normal operation? Operation during maintenance of the installations, processes and equipment? Temporary or special operations? Emergency operations? Wind down and dismantling? 	<ul style="list-style-type: none"> Analyse the associated procedures and records. Comparison with risk analyses. Comparison of the consistency with the procedures for the systematic identification of risks.
<ul style="list-style-type: none"> Are the procedures consistent with the other aspects defined by the organisation? In particular: <ul style="list-style-type: none"> In the identification and assessment of risks? In roles and responsibilities? In emergency planning? In the management of modifications? In the management of acquired experience? 	<ul style="list-style-type: none"> Analyse the procedures and check their consistency with: <ul style="list-style-type: none"> The organograms of roles and responsibilities. Training plans. Emergency planning procedures.
<ul style="list-style-type: none"> Do the operational procedures cover the following aspects? <ul style="list-style-type: none"> Channels of communication with the staff responsible; Pre-start-up work authorisations (initial, following scheduled stoppage, following emergency stoppage); 	<ul style="list-style-type: none"> Analyse the procedure(s) for preparing and monitoring/controlling the establishment's SMSPMA documentation. Analyse operating procedures. <p>Note: The inspector should confirm that deviations that may occur and may</p>

KEY QUESTIONS	ASPECTS TO OBSERVE <i>IN LOCO</i> / DOCUMENTATION TO ANALYSE / COMMENTS
<ul style="list-style-type: none"> - Necessary material resources; - Instructions for conducting safe operations; - Safe operating limits and corrective actions in the event of possible deviations; - Information about the properties and risks associated with the substances present, stating: <ul style="list-style-type: none"> o Special precautions to adopt; o Existing safety systems; o Personal protection measures; o What to do in the event of an accident/incident. 	<p>affect safety trigger a process of analysis, investigation and correction of the causes that gave rise to them.</p> <p>The inspector should also check the following characteristics of the procedures:</p> <ul style="list-style-type: none"> - Format compatible with other documents; - Terminology appropriate to the personnel to which they are addressed; - Clear, concise wording, without ambiguities. <p>The inspector should check that the operating procedures cover the main sources of hazards that could lead to a major accident, which should be identified in the risk analyses performed.</p>
<ul style="list-style-type: none"> • Are procedures and documents written in foreign languages used in the preparation of specific procedures for the establishment? • If so, what measures are defined to ensure their correct translation? 	<ul style="list-style-type: none"> • Analyse the procedure(s) for preparing and monitoring/controlling the establishment's SMS/PSMA documentation.
<ul style="list-style-type: none"> • What is the process for validating procedures? • Are procedures tested before being put into operation? • Are the personnel who will use the procedures involved in their preparation? 	<ul style="list-style-type: none"> • Analyse the procedure(s) for preparing and controlling the establishment's SMS/PSMA documentation (analyse the process for validating procedures). • Talk to the operatives.
<ul style="list-style-type: none"> • How does the operator ensure that procedures are complied with? • Is the operator able to demonstrate the use of the operating procedures in practice? • Are personnel (including subcontractors) familiar with and do they comply with the work procedures and instructions? 	<ul style="list-style-type: none"> • Analysis of records and <i>in loco</i> observation in each case (evaluation of the implementation of the defined operating procedures). • Interviews with personnel (including subcontractors) to check whether they: <ul style="list-style-type: none"> - Follow the instructions in the procedures. - Have received training in the procedures. - Habitually use the procedures. - Understand the authorisation systems. - Request authorisations correctly. - Keep records correctly.
<ul style="list-style-type: none"> • How are comments taken into account following the operational use of the procedures? 	<ul style="list-style-type: none"> • Examine the documents that show that workers' comments are taken into account.

KEY QUESTIONS	ASPECTS TO OBSERVE <i>IN LOCO</i> / DOCUMENTATION TO ANALYSE / COMMENTS
<ul style="list-style-type: none"> • Are the operating procedures precise in terms of: <ul style="list-style-type: none"> - The purpose of the document? - The phases, the sensitive materials or the conclusions of risk analyses? - The important equipment and parameters in safety terms? - The operating phases under normal conditions and the limits of such operation? - The hazards in the event of deviation from the normal situation? - Corrective actions (in cases in which those limits are exceeded)? 	
<ul style="list-style-type: none"> • Are the operating procedures precise in terms of: <ul style="list-style-type: none"> - Who does what and how? Who controls what, whom and how? 	
<ul style="list-style-type: none"> • Do the procedures cover the safe operation of the installations at all levels? 	
<ul style="list-style-type: none"> • Do the procedures on operational control cover the critical operations and sensitive phases? 	<ul style="list-style-type: none"> • Examine the corresponding procedures and check compliance with them.
<ul style="list-style-type: none"> • Does the establishment possess safety/PMA documentation for the existing processes and installations? 	<ul style="list-style-type: none"> • Check the existence of documentation relevant to the safety/PMA of installations and processes, such as: <ul style="list-style-type: none"> - Process and instrumentation (P&I) diagrams. - Block diagrams or simplified diagrams of the process. - Flow diagrams. - Electrical wiring diagrams. - List of critical components. - Mass and energy balances. - Upper and lower permissible limits, where applicable, for variables such as temperature, pressure, flow and composition, and the safety-related consequences of deviations in such variables. - SDS of products (raw materials, additives, catalysts, intermediate products, finished products, etc). - Classification of electrical areas. - Design and bases of relief systems and ventilation systems. - Piping and equipment specifications. - Description of shut-down systems.

KEY QUESTIONS	ASPECTS TO OBSERVE <i>IN LOCO</i> / DOCUMENTATION TO ANALYSE / COMMENTS
<ul style="list-style-type: none"> Are the quantities of substances that may be present in the installations continuously controlled (raw materials, intermediate products, waste, finished products, etc)? 	<ul style="list-style-type: none"> Check the records of inbound and outbound substances, inventories, etc.
Subject: Safe Working Practices	
<ul style="list-style-type: none"> Has the operator defined a system for ensuring the safe conduct of activities carried out by staff? 	<ul style="list-style-type: none"> Analyse the system and assess whether it ensures that activities carried out by staff do not compromise the safety of the installation and that personnel are not exposed to unacceptable risks (e.g. Work Authorisations System).
<ul style="list-style-type: none"> Are work instructions documented and capable of being performed safely? 	<ul style="list-style-type: none"> Analysis of the work instructions defined by the operator. Check whether the risks inherent in each activity have been identified and work instructions have been drawn up for those activities that could trigger a major accident, e.g. <ul style="list-style-type: none"> Opening piping or process equipment. Works and procedures in electrical installations. Works involving ignition sources. Entry in confined spaces. Use of cranes and similar heavy equipment. Entry and circulation of vehicles. Loading/unloading operations. Works in areas classified under the ATEX Directive. Handling of dangerous substances.
<ul style="list-style-type: none"> Has the operator defined a procedure for authorising works? Does the procedure cover the following aspects? <ul style="list-style-type: none"> Scope of application (activities that require express authorisation) Assignment of responsibilities (staff responsible for authorising such works) Do the work authorisations include: <ul style="list-style-type: none"> Identification details of the work; Date and duration; Description of the works or applicable work instruction; Necessary requirements for preparing the area prior to 	<ul style="list-style-type: none"> Procedure adopted for establishing work authorisations. Records of work authorisations.

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<p>commencement of the work;</p> <ul style="list-style-type: none"> ○ Resources needed to execute the works (human and technical); ○ Personal protective equipment required; ○ Emergency response resources (e.g. firefighting equipment). 	
<ul style="list-style-type: none"> ● Are general rules of conduct defined and applied for personnel, both internal and external, who work inside the installations? 	<ul style="list-style-type: none"> ● Request evidence of the definition of general rules of conduct for personnel. ● Check the application of the defined rules of conduct, for both internal and external personnel, e.g. <ul style="list-style-type: none"> - Mandatory use of personal protective equipment (PPE) (e.g. boots, gloves, helmets, etc). - Prohibition on smoking inside the installation; - Handling of substances and waste; - Rules for visitors; - Others.
<ul style="list-style-type: none"> ● Are there instructions about the use, maintenance and inspection of personal protective equipment (PPE)? 	<ul style="list-style-type: none"> ● Check that the instructions specify: <ul style="list-style-type: none"> - The circumstances in which PPE is to be worn; - The risks that a particular item of PPE protects against; - Instructions for use; - Maintenance and inspection programme.
Subject: Quality and operability of the equipment and installations	
<ul style="list-style-type: none"> ● Is there an established system to ensure the quality and continuous operability of the equipment and installations? 	<ul style="list-style-type: none"> ● Maintenance procedure. ● Maintenance plan. ● Inspection and testing plan for critical equipment in safety/PMA terms (as a minimum, the bulk of it), i.e. <ul style="list-style-type: none"> - Components whose failure could directly occasion a major accident (e.g. process equipment, piping networks, tanks, flexible connectors, etc) or create conditions likely to lead to a major accident; - All safety equipment, both mechanical and instruments (e.g. escape and fire detection systems, sensors, alarms, auxiliary services, etc); - All devices for limiting the potential damage (including emergency

KEY QUESTIONS	ASPECTS TO OBSERVE <i>IN LOCO</i> / DOCUMENTATION TO ANALYSE / COMMENTS
	<p>equipment and fire and/or toxic emissions prevention system);</p> <ul style="list-style-type: none"> - Personal protective equipment. • Check whether the operator has allowed for both preventive maintenance and corrective maintenance of critical equipment and installations in safety/PMA terms.
<ul style="list-style-type: none"> • Does the defined system cover the following aspects? <ul style="list-style-type: none"> - The need to interrupt a process where serious anomalies are detected that justify such action; - The need for servicing and/or maintenance operations on equipment or installations following the occurrence of abnormal situations; - Analysis of the results of maintenance and adoption of suitable measures in the light of them. 	<ul style="list-style-type: none"> • Maintenance procedure. • Check whether the operator ensures that anomalies detected during maintenance, servicing or inspections are evaluated by competent personnel. To that end, the system should include: <ul style="list-style-type: none"> - The assignment of responsibilities that ensure that anomalies are evaluated and the corresponding corrective actions are implemented; - Technical competence of the personnel designated to carry out these roles.
<ul style="list-style-type: none"> • Do specific maintenance procedures exist for the safety-critical installations and equipment? 	<ul style="list-style-type: none"> • Maintenance procedure. Check whether the content of the procedure includes: <ul style="list-style-type: none"> - Qualifications required by personnel. - Work authorisations required for the operations to be carried out. - Material resources required, including those relevant from the safety point of view. - Information about the properties and risks of the substances present. E.g. <ul style="list-style-type: none"> • Special precautions to avoid exposure and measures to be adopted in the event of physical contact or inhalation. • What to do in the event of incidents/accidents. • Existing safety systems. • PPE required. • Information about precautions to be taken. - Maintenance, servicing and inspection operations that should be performed, including: <ul style="list-style-type: none"> • Necessary calibration and measurement tests. • Parts or components of the equipment or installation that require priority attention at each servicing interval. • Specifications of the products or materials used or replaced in the maintenance operation.

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	<ul style="list-style-type: none"> • Record of the results of maintenance operations. - Approval criteria for the maintenance operations performed.
<ul style="list-style-type: none"> • Is the operator able to show that it has established an appropriate maintenance plan for all the safety-critical installations and equipment? • Does the plan include: <ul style="list-style-type: none"> - A list of the equipment covered by the programme? - Applicable maintenance instructions? - Maintenance intervals? • Does the maintenance frequency take account of: <ul style="list-style-type: none"> - Necessary personnel and resources? - Manufacturer's recommendations? - Operating experiences of the team at the establishment or in other installations? - Results of previous inspections? 	<ul style="list-style-type: none"> • Check whether the critical equipment is included in the establishment's maintenance plan, in particular: <ul style="list-style-type: none"> - Process equipment. - Equipment in explosive atmospheres (electrical equipment). - Safety-related control and alarm systems and indicators (meters, alarms, emergency shut-down systems, etc). - Services necessary for safe operation (electricity, steam, water, etc). - Pressurised systems and tanks for dangerous substances. - Escape detection systems. - Flexible connectors (hoses and loading arms, etc). - Fire prevention or emergency equipment (hydrants, pumps, smoke detectors, water reservoirs, gas masks, showers, eyebaths, emergency radios, etc). - Personal protective equipment.
<ul style="list-style-type: none"> • Is the maintenance plan revised and updated at regular intervals? Who is responsible for this revision or updating? 	<ul style="list-style-type: none"> • Check the frequency of revision and who is responsible for it.
<ul style="list-style-type: none"> • Is the operator able to demonstrate the implementation of the maintenance plan on a day-to-day basis? <ul style="list-style-type: none"> - Is the defined procedure implemented? - Is the stated equipment inspected on the scheduled date? - Is the stated requirement for authorisation complied with? - Is non-compliant equipment correctly followed up? 	<ul style="list-style-type: none"> • Check the maintenance records presented by the operator.

KEY QUESTIONS	ASPECTS TO OBSERVE <i>IN LOCO</i> / DOCUMENTATION TO ANALYSE / COMMENTS
<ul style="list-style-type: none"> • Are records kept of the results of maintenance operations? • Are the maintenance records adequate? 	<ul style="list-style-type: none"> • Check the maintenance records presented by the operator. Check whether the records contain: <ul style="list-style-type: none"> - A clear and concise description of the maintenance carried out. - The date on which it was carried out. - The date of the next maintenance operation. - Name of the person who performed the maintenance. - Results. - Any action taken or that should be taken.
<ul style="list-style-type: none"> • Does the following information exist for safety/PMA-critical equipment? <ul style="list-style-type: none"> - Identification and location of the equipment in the installations. - Technical specifications. - Applicable standards and codes for its installation, operation and maintenance, depending on the case. - Range of limit values for operating parameters. - Maintenance history: <ul style="list-style-type: none"> • Scheduled operations (date of operation, person responsible, report of operation); • Non-scheduled operations (date of operation, person responsible, reason for the operation, report of operation). 	<ul style="list-style-type: none"> • List of safety/PMA-critical equipment.
Subject: Legal and other requirements	
<ul style="list-style-type: none"> • Is there a methodology for managing the legal and other requirements that apply to the establishment? 	<ul style="list-style-type: none"> • Procedure(s) for managing the legal and other requirements that apply to the establishment. • Check whether the operator possesses mechanisms for identifying, receiving and distributing applicable legislation, standards, codes, regulations, specialised technical documentation, etc, and for monitoring new technical knowledge in terms of safety/PMA.
<ul style="list-style-type: none"> • Is a record of all applicable requirements kept? 	<ul style="list-style-type: none"> • Check that the record is up to date and whether it is easy to search for a given item of legislation in the record. <p>Note: The applicable requirements should be documented, together with periodic revisions to ensure their validity, especially as concerns applicable legislation. The list contained in Annex II of this Guide may be used.</p>

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<ul style="list-style-type: none"> Is there a defined system for ensuring adaptation to new requirements, or modifications to them? 	<ul style="list-style-type: none"> Analyse communications issued for the purpose of informing workers about new requirements and records of actions implemented.
Subject: Documentation of the Safety Management System	
<ul style="list-style-type: none"> Do procedures exist for preparing, revising, modifying, approving and controlling SMSPMA documents? Have people been designated with responsibility for the preparation, revision and approval of the documents? 	<ul style="list-style-type: none"> Document management procedure(s). Check the application of the procedure(s).
<ul style="list-style-type: none"> How is the establishment's SMSPMA documentation structured? Is there a safety manual describing the SMSPMA? Is there an index listing which documents are currently valid? Are the dates, revision number and date of entry into force stated? 	
<ul style="list-style-type: none"> Do the documents meet the following characteristics? <ul style="list-style-type: none"> An established format; Terminology is appropriate to the staff to whom they are addressed; Are appropriately identified; Are prepared, revised and approved by authorised personnel; Are identified with reference to the information sources and, where applicable, to the relevant standards, codes and regulations. 	
<ul style="list-style-type: none"> Does the document management include the following aspects? <ul style="list-style-type: none"> Revision and updating of documents where necessary, and subsequent approval? Are the updated documents available? Are the documents legible and easily identified? Are external documents identified and is their distribution controlled? Is the intentional use of obsolete documents prevented and are they specially identified? Is all information that may be confidential controlled? 	
Subject: SMSPMA records	
<ul style="list-style-type: none"> Do specific procedures exist for managing records? 	Note: The procedure should cover the identification, coding, maintenance,

KEY QUESTIONS	ASPECTS TO OBSERVE <i>IN LOCO</i> / DOCUMENTATION TO ANALYSE / COMMENTS
	archiving, protection, recovery, modification, retention time and deletion of records. Where computerised records are used, it is necessary to ensure the easy recovery of the archived information and that measures have been established to prevent its manipulation.
<ul style="list-style-type: none"> Is there a records system matched to the characteristics of the establishment? 	
<ul style="list-style-type: none"> Is the information contained in the records sufficient to assess compliance with the applicable requirements? 	
Subject: Purchasing and contracts management	
<ul style="list-style-type: none"> Is there a defined system for selecting suppliers and service providers who may affect safety management? 	<ul style="list-style-type: none"> Purchasing and contracts management procedures.
<ul style="list-style-type: none"> Is there a defined methodology ensuring the proper administration of the products to be purchased and their subsequent checking against the purchasing requirements? 	<ul style="list-style-type: none"> Analyse the associated records.
<ul style="list-style-type: none"> Do contract documents include the safety requirements applying to service providers? Is information sought from contractors about the risks that their activities might introduce into the establishment? Are procedures and criteria defined to ensure at all times that contracted personnel have the abilities and qualifications needed to perform their roles? 	<ul style="list-style-type: none"> Analyse the associated records. Request the names of service providers that are performing tasks in the establishment at the time of inspection. Select one or more tasks in progress that are relevant in PMA terms and check the abilities and qualifications of the subcontracted personnel present in the establishment at the time of inspection to perform their roles.
<ul style="list-style-type: none"> Are the validity and suitability of the procedures used by the contractor checked (if they form part of the establishment's SMSPMA)? 	
<ul style="list-style-type: none"> Is there a defined system for co-ordinating contracted activities? 	<ul style="list-style-type: none"> Analyse the associated records and check whether the operator: <ul style="list-style-type: none"> analyses the compatibility of the risks associated with the tasks performed by subcontractors with its own activities, materials, installations, equipment, etc, in order to identify the possible continuously monitors and controls the personnel and activities carried out in the establishment.

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<ul style="list-style-type: none"> • Are activities established to inform external personnel about the following aspects? <ul style="list-style-type: none"> - Risks to which they are exposed; - What to do in an emergency; - Safe working practices, including protection measures and personal protection; - Applicable SMS/PSMA procedures. 	<ul style="list-style-type: none"> • Analyse the associated records.
Subject: Procedures	
<ul style="list-style-type: none"> • Are the following operating phases governed by procedures? <ul style="list-style-type: none"> - Normal operation of the installations; - Scheduled stoppage of the installations; - Stoppage for maintenance of the installations; - Temporary stoppage: e.g. stoppage of the installations at night or weekends; - Unscheduled temporary stoppage; - Stoppage, if necessary, following an incident/accident; - Start-up of the installations; - Loading/unloading of tanks, ships; - Preparation/calibration of products; - Labelling. 	<ul style="list-style-type: none"> • Examine the procedures.
<ul style="list-style-type: none"> • Are there specific maintenance and checking procedures for: <ul style="list-style-type: none"> - Installations, processes and the various safety-critical equipment (in terms of the prevention of major accidents)? - Protection equipment (valves, rupture discs, etc)? 	
<ul style="list-style-type: none"> • In the case of industrial procedures for successive production campaigns involving different products (pharmaceutical, chemical, etc), do the specific procedures include the cleaning/washing of installations between campaigns? 	
<ul style="list-style-type: none"> • Are possible incompatibilities between products clearly examined? 	
<ul style="list-style-type: none"> • Do the procedures allow for special operating phases, such as: <ul style="list-style-type: none"> - Shift changes? - Substitution in the event of absence of an agent? 	<ul style="list-style-type: none"> • Examine the procedures and check the corresponding instructions.

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<ul style="list-style-type: none">- Momentary inoperability of parts of the installation?- Momentary inoperability of specific materials?	
<ul style="list-style-type: none">• How are operatives informed of modifications in progress?• And in particular, how are they informed about unscheduled modifications (urgent modifications, temporary modifications, etc)?	<ul style="list-style-type: none">• Analyse documents and procedures associated with stoppages of the units (on incidents or programmes).
<ul style="list-style-type: none">• Do procedures include washing and/or dismantling in cases where the installations, or part of the installations, are definitively or temporarily stopped/deactivated?	

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V. Management of modifications	
<p>Legal requirements (Decree-Law 254/2007, Annex III, c.iv): <i>Adoption and implementation of procedures for the planning of modifications to be made to existing installations or storage areas or for the design of a new installation, process or storage area.</i></p> <p>Relationship with the requirements of standards OHSAS 18001:1999/NP 4397:2001, OHSAS 18001:2007 and NP EN ISO 14001:2004: <i>HSW management programme (4.3.4) and environmental management programme (4.3.3), Operational Control (4.4.6)</i></p>	
<ul style="list-style-type: none"> • Has the operator adopted and implemented management procedures for planning, implementing and controlling all the modifications that may affect the control of risks of major accidents? 	<ul style="list-style-type: none"> • Modifications management procedure. Check whether the modifications management system defined by the operator covers their correct design, planning, installation and testing.
<ul style="list-style-type: none"> • Do the modifications management procedures clearly define what is a modification? • Do the procedures apply to all modifications that may in some way affect safety, including: <ul style="list-style-type: none"> - Changes made during the design and construction of new installations, processes and storage? - Organisational changes (in personnel)? - Physical changes (installations, equipment, materials, software, etc.)? - Process changes (feedstock, catalysts, solvents, etc) and/or changes in process variables (temperature, pressure, flow, etc)? - Operating procedures? - Changes produced during the design and construction of installations and processes? - Changes in external circumstances? 	<ul style="list-style-type: none"> • Existing associated records (analysis records of the implications of modifications in terms of control of the risk of major accidents; records of safety measures implemented following such analysis). • Interviews with staff. • <i>In loco</i> observation of alterations compared with the description of the installations. • Knowledge of modifications by the personnel affected and their involvement in the process (interviews with operatives). • Modifications management procedure. • Existing associated records.
<ul style="list-style-type: none"> • Does the procedure cover permanent, temporary and urgent operational modifications? • In the case of temporary modifications, is the maximum duration of the modification and the authorisations required during the temporary modification period identified? 	

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<ul style="list-style-type: none"> Does the procedure assign responsibilities and authority to initiate, plan, authorise and implement a modification? 	
<ul style="list-style-type: none"> Does the procedure establish: <ul style="list-style-type: none"> the identification and analysis, where appropriate, of any safety implications of the proposed modification? Are the safety-critical components of the proposed modification identified and is the impact on the safety of the establishment analysed (risk analysis)? the definition, and explanation where appropriate, documentation and implementation of appropriate safety measures, including any necessary information and training, and necessary modifications to operating procedures? 	
<ul style="list-style-type: none"> Does the procedure establish how to: <ul style="list-style-type: none"> verify the correct implementation of the proposed modifications? undertake post-modification revision and correction and subsequent precautionary mechanisms? 	<ul style="list-style-type: none"> Modifications management procedure. Existing records.
<ul style="list-style-type: none"> Is there a procedure for the re-adjustment or deactivation of safety systems in a controlled manner? 	
<ul style="list-style-type: none"> Do the procedures provide for the revision of the MAPP or SMSPMA/SR? Is the information stipulated in DL 254/2007 sent to APA at the stated times? 	<ul style="list-style-type: none"> MAPP or SMSPMA/SR (latest revision). Records of correspondence with APA.
<ul style="list-style-type: none"> Have the organisational, technical and administrative systems that have been modified in the establishment been authorised or not? 	
<ul style="list-style-type: none"> Are the modifications that have taken place appropriately documented, identifying the reasons for them and their possible consequences? 	
<ul style="list-style-type: none"> Are the modifications to be carried out, and the basis for their implementation, clear? Are the following taken into account prior to modifications: <ul style="list-style-type: none"> Drawings (e.g. plans, sections, etc)? Necessary documentation and information, including standards, design codes and applicable legislation? 	<ul style="list-style-type: none"> Modifications management procedures; Associated records; Documentation relevant to the modification process, including: <ul style="list-style-type: none"> Process and instrumentation (P&I) diagram; Flow diagrams; Block diagrams;

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<ul style="list-style-type: none"> - The period of time required to implement the modification? - Periodic inspections during the execution of the modification? - Issuance and control of authorisations (identification of authorisation levels and associated personnel)? - Explanation of the proposed modification and its consequences to the personnel affected, including contract staff? - Identification and scheduling of training/development activities? - Preparation and/or modification of documentation? Have operating, maintenance, safety and emergency procedures been revised and/or updated? - Review of modifications during construction and prior to entry into service, and correction and control mechanisms? Does this review include aspects such as checking the operational status of safety systems and conformity with project specifications (including legal requirements and manufacturer's specifications) in the installed construction and equipment? 	<ul style="list-style-type: none"> - Mass and energy balances; - Electrical wiring diagram; - List of critical components of the installation; - Safety Data Sheets for all substances (raw materials, additives, catalysts, intermediate products, finished products, etc); - Operating procedures and instructions; - Necessary authorisations for operation; - Equipment specifications. <p>Note: The definition of critical safety components is essential for the correct documentation of the safety process and for implementing inspection and maintenance programmes.</p>
VI. Emergency planning	
<p>Legal requirements (Decree-Law 254/2007, Annex III, c.v): <i>Adoption and implementation of procedures to identify foreseeable emergencies via a systematic analysis, and to prepare, test and review emergency plans in order to respond to such emergencies, and provide specific training to the personnel concerned. Such training should be given to all personnel working in the establishment, including relevant subcontracted staff.</i></p> <p>Relationship with the requirements of standards OHSAS 18001:1999/NP 4397:2001, OHSAS 18001:2007 and NP EN ISO 14001:2004: <i>Preparation for and response capability to emergencies (4.4.7.)</i></p>	
Subject: Identification of foreseeable emergencies	
<ul style="list-style-type: none"> • Are there procedures in place for identifying foreseeable emergency situations? • Do the methods used ensure the systematic nature of the analysis undertaken? • Is there consistency between these procedures and the risk assessment procedures? 	<ul style="list-style-type: none"> • Procedure for emergency planning (identification of possible emergency situations from risk analyses, forming the basis for the IEP). • Existing records. • Assess the consistency between these procedures and the risk analysis.
<ul style="list-style-type: none"> • How are foreseeable emergency situations included in operating 	<ul style="list-style-type: none"> • Existing procedures and records.

KEY QUESTIONS	ASPECTS TO OBSERVE <i>IN LOCO</i> / DOCUMENTATION TO ANALYSE / COMMENTS
procedures? <ul style="list-style-type: none"> What foreseeable emergency situations were taken into account in the preparation of the Internal Emergency Plan (IEP)? 	<ul style="list-style-type: none"> IEP Check that all possible emergencies have been included for all major accident scenarios, on the basis of the risk analysis.
<ul style="list-style-type: none"> How often are procedures revised and foreseeable emergency situations identified? What are the circumstances that can lead to such revision? 	<ul style="list-style-type: none"> Existing procedures and records. Assess the consistency between the management of modifications and the corresponding procedures.
Subject: Emergency procedures – preparation and implementation	
<ul style="list-style-type: none"> Have procedures and/or IEPs been defined that match the potential emergencies? Is the intervention strategy for each type of accident clear and precise? Have all the necessary measures to minimise the occurrence of a major accident and its consequences been included? 	<ul style="list-style-type: none"> Existing procedure for the development, implementation, revision and periodic testing of emergency plans. <p>Note: Summarise the protection and intervention measures used as pillars for the design of the IEP.</p>
<ul style="list-style-type: none"> Does the methodology for the preparation of the IEP include the following aspects? <ul style="list-style-type: none"> Reason for preparation of the IEP; Person responsible for the preparation and implementation of the IEP; Summary of content; Accident scenarios; Identification of the different areas of the establishment and associated risks; Measures for minimising effects; Process and logistics operations personnel; Internal and external emergency services. 	<ul style="list-style-type: none"> IEP and associated procedures.
<ul style="list-style-type: none"> Does the IEP describe the internal and external resources that can be mobilised by the operator to limit the consequences of a major accident to humans and the environment? 	
<ul style="list-style-type: none"> Has account been taken of the effects of the actions to be implemented as emergency responses to minimise the total impact of the accident on humans and the environment? 	

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<ul style="list-style-type: none"> Do the procedures cover the necessary measures for distributing the plans to all individuals potentially affected by an emergency? 	<ul style="list-style-type: none"> Training procedures for specified emergencies. Emergency response training programme and records.
<ul style="list-style-type: none"> Are the resources included in the IEP appropriate and sufficient to minimise the consequences of: <ul style="list-style-type: none"> the release of inflammable gases and/or substances in the event of a major accident? contaminants or dangerous substances dispersed in the soil or water in the event of a major accident? 	<ul style="list-style-type: none"> Analysis of the IEP to evaluate the adequacy of the planned resources for deployment in the event of an accident, having regard to the environmental impact of emergency situations. Risk analysis.
<ul style="list-style-type: none"> Is the IEP implemented? Is there understanding of the measures to be adopted in the event of an accident? 	<ul style="list-style-type: none"> Interviews with staff (assess the implementation and testing of the IEP). Training records.
<ul style="list-style-type: none"> Does the methodology for the implementation of the IEP include the following aspects? <ul style="list-style-type: none"> Existence of necessary documentation; Distribution of documentation to interested parties; Distribution of the IEP to everybody. 	
<ul style="list-style-type: none"> Is there a staff training/information and drills programme (and is it implemented), covering action and response in the event of an emergency, in particular in terms of: <ul style="list-style-type: none"> fire prevention and extinction? first aid? 	<ul style="list-style-type: none"> Training procedures for specified emergencies. Emergency response training programme and records.
<ul style="list-style-type: none"> Have all suitable and sufficient precautions been taken for co-ordination and communication during the emergency response? 	
<ul style="list-style-type: none"> Does the IEP clearly define the emergency structure and the responsibilities and roles of each person involved? Do staff know their roles in the event of an emergency? 	<ul style="list-style-type: none"> Job descriptions. Interviews with staff.
<ul style="list-style-type: none"> Has allowance been made for alternative services in the event of interruption of the normal emergency systems? 	
<ul style="list-style-type: none"> Does the IEP allow for activation of the decision-making and action structure at any time (night, weekends, public holidays, staff holidays, etc) 	<ul style="list-style-type: none"> Analysis of the IEP in terms of the provisions made for such periods.

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<p>in the event of an emergency?</p> <ul style="list-style-type: none"> • What measures are defined for each of the periods covered? 	<ul style="list-style-type: none"> • Records of activation of the IEP. <p>Note: Reaction time is a fundamental element in limiting the scale and consequences of a major accident.</p>
<ul style="list-style-type: none"> • Are appropriate and sufficient planned resources prepared and available for emergency response in the event of a major accident? • Is there a record of existing emergency resources? 	<ul style="list-style-type: none"> • Inventories of emergency equipment; • Emergency organisational structure. <p>Note: The inspector should confirm that, in the event of a major accident, appropriate and sufficient intervention, protection and rescue equipment and personnel can be mobilised to act in accordance with appropriate scales and in accordance with the actions specified in the IEP.</p>
<ul style="list-style-type: none"> • Has the operator supplied sufficient information to the external services to enable them to act when the IEP is activated? 	<ul style="list-style-type: none"> • Records of activation of the IEP and records of notifying accidents and incidents to the ECL. • Other records of contacts with external organisations.
<ul style="list-style-type: none"> • Confirm the measures for mobilising first aid and medical care during an emergency response. • Confirm the provisions made to mobilise equipment that may be requisitioned during an emergency response. 	<ul style="list-style-type: none"> • Check whether the provisions made are appropriate and sufficient.
<ul style="list-style-type: none"> • Is allowance made for adequate maintenance, inspection and testing of mobile resources and other equipment to be used in an emergency response? 	<ul style="list-style-type: none"> • Maintenance and inspection plans. • Records of drills using the equipment.
<ul style="list-style-type: none"> • Is appropriate and sufficient provision made for monitoring and/or sampling that may be needed in the event of a major accident? 	<p>Note: Where applicable, the operator should show that measures have been planned for monitoring wind speed and direction and other environmental conditions in the event of a major accident.</p>
<ul style="list-style-type: none"> • Are appropriate and sufficient measures planned for the restructuring/recovery and cleaning of the environment following a major accident? 	
<p>Subject: Emergency procedures – testing and revision</p>	
<ul style="list-style-type: none"> • How are the emergency procedures tested and validated? • Is their performance simulated before being applied operationally? If so, how? If not, why? • Is allowance made for the need to test, revise and update the IEP? 	<ul style="list-style-type: none"> • Analysis of the validation process of procedures and the IEP. • Records of activation of the IEP.

KEY QUESTIONS	ASPECTS TO OBSERVE <i>IN LOCO</i> / DOCUMENTATION TO ANALYSE / COMMENTS
<ul style="list-style-type: none"> • Is there a procedure for testing the IEP on a regular basis? • Have drills been performed? • Is the IEP tested at least once a year? • Is it revised every three years, or as necessary? • Is it tested alongside other IEPs of domino effect establishments belonging to the same Group at least every three years? 	<ul style="list-style-type: none"> • Procedures for performing drills. • Programme/plan for the current year of tests/drills of possible accidents to test the defined emergency plan. • Records of drills i.e. drill reports, indicating the recommended actions.
<ul style="list-style-type: none"> • Do all personnel with responsibilities defined in the IEP take part in the drill(s)? • Do the external emergency services whose intervention is provided for in the IEP participate in the drills? 	
<ul style="list-style-type: none"> • What lessons are learned from these drills and how are they built into procedures? • Where applicable, is the IEP revised and/or updated? 	<ul style="list-style-type: none"> • Drill records. • Evidence of revision of the IEP and associated procedures, and introduction of alterations following the lessons learned in the drills.
<ul style="list-style-type: none"> • Do the procedures used to test and review the IEP involve the competent authorities? 	<ul style="list-style-type: none"> • Procedure for carrying out drills. • Evidence of correspondence with the competent authorities.
<ul style="list-style-type: none"> • Are there criteria defining the activation of the revision of the IEP and its subsequent updating? • Is there a defined and implemented methodology for revising and updating the IEP? • Have responsibilities been assigned to qualified staff for revising and updating the IEP? • Is a record kept of all revisions and updates of the IEP? 	<ul style="list-style-type: none"> • Records of revisions and updates of the IEP.
<ul style="list-style-type: none"> • Are the external emergency services whose intervention is provided for in the IEP always informed when significant alterations are made to the IEP? 	<ul style="list-style-type: none"> • Communications with the external emergency services whose intervention is provided for in the IEP.

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VII. Performance monitoring	
<p>Legal requirements (Decree-Law 254/2007, Annex III, c.vi): <i>Adoption and implementation of procedures for the continuous evaluation of achievement of the objectives defined by the operator under the policy for the prevention of major accidents involving dangerous substances and the safety management system, and introduction of investigation and correction mechanisms in the event of non-achievement. The procedures should cover the notification system for major accidents involving dangerous substances or “near accidents”, namely those that involved failure of the protection measures, and their investigation and follow-up, drawing on the lessons learned.</i></p> <p>Relationship with the requirements of standard OHSAS 18001:1999/NP 4397: 2001, OHSAS 18001:2007 and NP EN ISO 14001:2004: <i>Performance Monitoring and Measurement (4.5.1.), Accidents, Non-Conformities, Corrective and Preventive Actions (4.5.2./4.5.3.)</i></p>	
Subject: General	
<ul style="list-style-type: none"> • Does the operator monitor its performance in terms of the prevention of major accidents, as described in Annex III of DL 254/2007? • Does the existing performance measurement/monitoring process cover all the SMSPMA elements? • Is there evidence of relevant, complete, qualitative and quantitative measurement? • Does the documented procedure for performance assessment include: <ul style="list-style-type: none"> - Verifying fulfilment of the established objectives and programmes? - Verifying implementation of the guidelines? - Description of the approach adopted for managing breaches of the SMSPMA, including, among others: <ul style="list-style-type: none"> - Investigation, analysis, follow-up and reporting of accidents/incidents. - Investigation of breaches that compromise the objectives. • Are the results of performance monitoring documented and archived, and are they analysed in the course of SMSPMA audit and revision processes? 	<ul style="list-style-type: none"> • Documented procedure for assessing the performance of the SMSPMA, on the basis of the defined indicators. • Performance assessment records for safety matters in the previous year, comparing the results obtained with the established objectives.
Subject: Monitoring of SMSPMA objectives and plans	
<ul style="list-style-type: none"> • Have measurable, achievable objectives consistent with the MAPP been defined and approved by top management? Are the timescales, 	<ul style="list-style-type: none"> • Records of the objectives and plans established under the SMSPMA (objectives are measurable if it is possible to determine clearly when they

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<p>responsibilities and resources to achieve them defined?</p> <ul style="list-style-type: none"> • Are there procedures/methodologies for the continuous evaluation of conformity with the objectives and plans established in the MAPP and SMS/SPMA and adopted by the operator? • Are the adopted procedures adequate and implemented in practice? 	<p>have been achieved).</p> <ul style="list-style-type: none"> • Procedures for evaluating conformity with the objectives and plans – performance assessment for year x (results/objectives).
<ul style="list-style-type: none"> • Is the definition of “non-conformity with the objective” clear and precise? • How are non-conformities detected? • Do the defined indicators make it possible to evaluate conformity with the defined objectives? How are deviations in the indicators treated? How is a normal variation in the indicators distinguished from a deviation that should give rise to corrective action? • Do investigation and correction mechanisms exist for non-conformities with the defined objectives? 	<ul style="list-style-type: none"> • Analysis of indicators in terms of their consistency and relevance to the elements of the policy, objectives and plan. • Records of monitoring of indicators and treatment of deviations. <p>Note: It should be noted that a low accident index is not a guarantee that the risks are being managed properly. There could be establishments with a low probability of the occurrence of accidents but where the consequences associated with such accidents could be very significant.</p>
<ul style="list-style-type: none"> • Have the objectives been achieved and do they ensure control of the risks without the occurrence of accidents? 	
<ul style="list-style-type: none"> • Is there internal communication about the defined and monitored indicators and objectives? <ul style="list-style-type: none"> - If so, how does it happen and whom does it involve? - If not, why? 	<ul style="list-style-type: none"> • Assess the consistency with the internal communication. • Check whether the forms of communication are effective.
Subject: Monitoring of the implemented measures (proactive monitoring)	
<ul style="list-style-type: none"> • How is respect ensured for the procedures, rules and instructions drawn up for the implementation of the MAPP? • How are non-conformities detected? • What mechanisms are defined for checking conformity? Is the frequency of these mechanisms defined? 	<ul style="list-style-type: none"> • Analysis of the corresponding procedures. • Records of verification of conformity as set out in the defined procedures.
<ul style="list-style-type: none"> • Are there procedures for evaluating the measures implemented to control risks prior to the occurrence of an accident or incident (proactive monitoring)? • For each activity or sector, are the applicable procedures, the control data to be obtained, the acceptance criteria and the actions to be taken 	<ul style="list-style-type: none"> • Checklist of equipment/installations. • Inspection and maintenance programme for safety-critical equipment/installations. • Reports of inspections carried out.

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<p>where the results are not satisfactory all defined?</p> <ul style="list-style-type: none"> • Are the adopted procedures adequate and implemented in practice? • Does the establishment possess the necessary resources to implement the defined controls? 	<p>Note: <u>Proactive monitoring</u> should include:</p> <ul style="list-style-type: none"> - systematic inspections of safety-critical installations, equipment, instrumentation and control systems; - measurement of critical process variables; - continuous observation to check compliance with established procedures, instructions and rules (evaluation of the effectiveness of training and defined working practices); - Detection and/or alarm systems for breaches and deviations from established procedures. <p>It is necessary to define the control parameters, evaluation criteria and actions to be taken in each case.</p>
<p>Subject: Monitoring of measures implemented after incidents/accidents (reactive monitoring)</p>	
<ul style="list-style-type: none"> • Are there procedures for identifying and recording non-conformities with the MAPP and SMSMA which could trigger incidents/accidents, particularly those that involve failures of protection measures? • Is the definition of non-conformity clear? Are there various types of non-conformities that give rise to different treatments in terms of investigation and definition of corrective and/or preventive measures? • Are there procedures for investigating and analysing the causes and consequences of non-conformities and initiating corrective and/or preventive actions? • Are the defined corrective and/or preventive actions and implementation timescales matched to the risk associated with the detected deviation? • Are the defined corrective and/or preventive actions implemented and is their effectiveness evaluated? Are they matched to the gravity and possible consequences of the detected deviation? • Is the responsibility for initiating the investigation and implementation of corrective and/or preventive actions in the event of non-conformity with some part of the SMSMA clearly identified? 	<ul style="list-style-type: none"> • Procedure adopted to identify possible failures of the system that could result in incidents/accidents and for identifying/implementing preventive actions; • Approach adopted for recording accidents and incidents, and for drawing up the related report; • Records of the results of monitoring performed (records of non-conformities, corrective and/or preventive actions adopted and evaluation of their effectiveness). <p>Note: <u>Reactive monitoring</u> requires an efficient system for reporting incidents and accidents and an investigation system that identifies not only the immediate causes but also the failures that led to the event. It should pay particular attention to cases where protection measures have failed (operational and management failures) and should include investigation, analysis and follow-up (including transfer of information to the personnel involved) to ensure that the lessons learned are applied in future operations. This should include in particular, and where necessary, revisions of procedures and systems with a view to preventing recurrences.</p>
<ul style="list-style-type: none"> • Is there a procedure for incorporating acquired internal experience? 	<ul style="list-style-type: none"> • Assess the consistency between the various procedures.

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<ul style="list-style-type: none"> • Have the results of the lessons drawn from these situations led to revision of the SMS/PMA? How is their incorporation reflected in terms of: <ul style="list-style-type: none"> - Identification of the risks of major accidents? - Operations control? - Management of modifications? - Emergency planning? - Monitoring of procedures? 	
<ul style="list-style-type: none"> • Are there procedures in place for notifying major accidents or incidents, defining the notification criteria, responsibilities, communication channels and protocols, and identifying addressees? • Is there a procedure governing the notification of major accidents to the competent authorities in accordance with Article 22 of DL 254/2007? 	<ul style="list-style-type: none"> • Accident/incident reports. • Procedure for notifying major accidents to the competent authorities (Article 22 of DL 254/2007). • Ask what is the procedure for communicating the occurrence of a major accident or incident to personnel with defined responsibilities in this matter and to other operating personnel. <p>Note: The Emergency Plan should cover the notification procedures. The operator may define a list of types of accidents/incidents that are subject to established notification rules:</p> <ul style="list-style-type: none"> - Major accidents; - Dangerous conditions or incidents that may give rise to a major accident; - Incidents affecting safety at work; - Incidents that may have environmental effects.
<ul style="list-style-type: none"> • Are there procedures for investigating and analysing the causes and consequences of accidents/incidents and initiating corrective and/or preventive actions? • What methodologies are used to analyse accidents, incidents and failures (e.g. why-tree)? • Are there defined criteria for activating accident/incident investigation processes? • Is the responsibility for initiating the investigation and implementation of corrective and/or preventive actions clearly defined? • Are the conclusions of the analysis recorded in the form of a report? Does the report contain the following information: <ul style="list-style-type: none"> - who conducted the investigation; 	<ul style="list-style-type: none"> • Consider incidents/accidents known to IGAOT; • Associated procedures; • Action plan; • Accident/incident reports; • Analysis of a specific illustrative case. <p>Note: The investigation and analysis of accidents/incidents should be conducted by appropriately qualified personnel. Consider the requirements of ISO 19001. The procedure should include a clear definition of a major accident or incident. Consistency with defined roles and responsibilities and modifications management should be evaluated. Consistency with control and</p>

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<ul style="list-style-type: none"> - description and outcome of the accident/incident; - analysis of the causes and consequences; - conclusions and corrective and preventive actions? <ul style="list-style-type: none"> • Are there processes for validating the defined corrective actions? (relationship with management of modifications, control and verification). • Are the defined corrective and/or preventive actions appropriate to the occurrence, and designed to correct or prevent the causes leading to the accident/incident (not just the elimination of the symptoms or consequences generated)? • Were the defined corrective and/or preventive actions implemented within the established timescales? Was their effectiveness evaluated, and did they match the gravity and possible consequences of the identified deviation? • Did the results of the lessons drawn from these situations lead to revision of the SMSPMA? • Were the affected personnel and top management informed of the results of the investigations of accidents and the measures adopted to correct and prevent them? How? • Were the established procedures applied in the case of the accidents and/or incidents that occurred? Are records kept of accidents/incidents that occur and the measures adopted? 	<p>modifications management should be evaluated. Consistency with control and verification procedures should also be evaluated.</p>
<ul style="list-style-type: none"> • Are there mechanisms for the external dissemination of the experience obtained in the establishment to organisations that might benefit from the "lessons learned"? What are they? • Are there mechanisms for incorporating external experience in the continuous improvement of the implemented SMSPMA? What are they? 	
VIII. Auditing and revision	
<p>Legal requirements (Decree-Law 254/2007, Annex III, c.vii): <i>Adoption and implementation of procedures for the regular and systematic evaluation of the policy for the prevention of major accidents involving dangerous substances and of the effectiveness and appropriateness of the safety management system. Documented review of the results of the policy and of the safety</i></p>	

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<p><i>management system and their revision by top management.</i></p> <p>Relationship with the requirements of standards OHSAS 18001:1999/NP 4397:2001, OHSAS 18001:2007 and NP EN ISO 14001: Audits (4.5.4./4.5.5.), Revision by the Board (4.6)</p>	
<p>Subject: General</p>	
<ul style="list-style-type: none"> • Have the objectives defined by the operator been achieved? If not, was an analysis undertaken of the cause(s) and were corrective measures taken? • Were the objectives reviewed and did they show continuous improvement in terms of PMA? 	<ul style="list-style-type: none"> • Performance assessment for year x (results/objectives).
<p>Subject: Auditing of the SMSPMA</p>	
<ul style="list-style-type: none"> • Is there a procedure for scheduling and performing internal audits of the SMSPMA? • Does the audit procedure ensure that the organisation, processes and procedures as defined and implemented in practice are consistent with the SMSPMA? 	<ul style="list-style-type: none"> • Procedure establishing regular audits of the SMSPMA in order to evaluate its effectiveness and appropriateness for fulfilling the MAPP. <p>Note: As a complement to the routine monitoring of performance, the operator should include in its SMSPMA the performance of regular audits as part of its normal activities. An audit should check whether the overall performance of the SMSPMA conforms to the requirements, both those established by the operator and the external and legal requirements.</p>
<ul style="list-style-type: none"> • Is there an audit programme that covers all the above requirements and those required by DL 254/2007? • In defining the Audit Programme: <ul style="list-style-type: none"> ✓ does it reflect the criticality of areas; does it state the frequency; does it state the responsibilities for the management and conduct of internal audits? ✓ does it adjust the programme in the light of the results of previous audits? ✓ does it include communicating the Operator's results? • Is the internal audit programme implemented and up to date? • This programme, which should be reviewed at appropriate intervals, should define: <ul style="list-style-type: none"> ○ The areas and activities to be audited (scope of the audit); 	<ul style="list-style-type: none"> • Analyse the Audit Programme, which should, as a minimum, include the following information: <ul style="list-style-type: none"> - The period of time that it covers; - The activities to be audited; - Designated auditors; - Date of the performance of each audit. • Check the degree of fulfilment of the defined Audit Programme. • Check whether the coverage in terms of areas/activities is adequate in the light of the identified risks.

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<ul style="list-style-type: none"> ○ The frequency of audits for each area; ○ The audit team responsible for each audit; ○ The resources and personnel required for each audit, allowing for the need for independent specialist technical support in operational terms; ○ Audit instruments to be used (including questionnaires, checklists, open and structured interviews, measurements and observations); ○ Procedures for reporting the results of audits; ○ Monitoring procedures. 	
<ul style="list-style-type: none"> ● Does the Audit Programme cover all the elements of the SMSPMA? ● Were all the elements of the SMSPMA included in previous audits and reviews? 	<ul style="list-style-type: none"> ● Audit Programme for the current year, identifying the areas and activities to be audited, frequency, audit team responsible, resources needed, instruments to be used, procedure for reporting results and monitoring.
<ul style="list-style-type: none"> ● Are the results of monitoring of the establishment's performance used as inputs for the analysis undertaken in audits and reviews? 	<ul style="list-style-type: none"> ● Plan of corrective and preventive measures to be implemented in the light of the results of the last audit.
<ul style="list-style-type: none"> ● Has an evaluation been undertaken of conformity with standards, codes of good practice and other requirements adopted by the establishment? 	
<ul style="list-style-type: none"> ● Are there appropriate mechanisms for training and qualifying internal auditors? Are there minimum qualification requirements for an internal auditor? ● Is there a guarantee of the objectivity, impartiality and independence of the internal auditors designated for each audit? ● Is there evidence demonstrating the competence, experience, training and, where relevant, independence of auditors? 	<ul style="list-style-type: none"> ● Necessary records demonstrating the competence, experience and training of auditors. <p>Note: Audits should be performed by people who are sufficiently independent of the operational management of the unit being audited to ensure that the analysis is objective.</p>
<ul style="list-style-type: none"> ● Is the frequency of audits of the SMSPMA reasonable? ● How often are all the elements of the SMSPMA audited? 	<p>Note: It is recommended that the frequency should be at least every three years.</p>
<ul style="list-style-type: none"> ● Does the methodology used take account of the following aspects? <ul style="list-style-type: none"> - Objectives and scope of the audit; - Reference documents, benchmarks and standards; - Requirements applying to auditors; - Checks to be made; - Resources available for the audit; - Organisation of the audit; 	<ul style="list-style-type: none"> ● Analysis of procedures for performing audits: check whether they include the definition of the scope of the audit, frequency, methodologies, competencies, responsibilities and reporting of results.

KEY QUESTIONS	ASPECTS TO OBSERVE <i>IN LOCO</i> / DOCUMENTATION TO ANALYSE / COMMENTS
<ul style="list-style-type: none"> - Results of the audit (report, non-conformities, definition and follow-up of corrective and preventive actions); 	
<ul style="list-style-type: none"> • The evaluation of internal audits may also include, where appropriate: <ul style="list-style-type: none"> - Discussion with the audit team (lead auditor and other auditors); - Interviews with line managers and staff to check their involvement in the audit; - Independent checks to confirm the general reliability of the audit on a sampling basis; - Consideration as to whether the conclusions of the audit are justified. 	
<ul style="list-style-type: none"> • Is there evidence that audits have been performed in accordance with the requirements set out in Annex III of DL 254/2007? • Are the results of internal audits documented? • Are the deviations detected in audits recorded and treated as non-conformities? 	<ul style="list-style-type: none"> • Audit reports. • Reports of corrective actions and of the evaluation of their effectiveness.
<ul style="list-style-type: none"> • Are the results of audits reported to all the parties involved, including the top management of the establishment? • Have the results of audits been appropriately used in: <ul style="list-style-type: none"> - identifying improvements to be introduced in the components of the SMSPMA and their implementation; - reviewing the operator's policy and general strategy for controlling major accidents? 	<ul style="list-style-type: none"> • Check whether reports containing the results of audits are sent to the Board.
Subject: Review of the SMSPMA	
<ul style="list-style-type: none"> • Is there a procedure for periodically evaluating the adequacy of the SMSPMA for fulfilling the policy and objectives established by the operator? • Is there evidence that reviews have been performed by top management in accordance with the requirements set out in Annex III of DL 254/2007? 	<ul style="list-style-type: none"> • Procedure for reviews by top management. • Analysis of records of reviews by top management (e.g. minutes of meetings): demonstrate that a revision of the MAPP and the SMSPMA has been undertaken by top management at the appropriate intervals.
<ul style="list-style-type: none"> • How often are reviews undertaken by management? • Is the frequency of reviews by top management adequate? 	<p>Note: Annual reviews are recommended.</p>

KEY QUESTIONS	ASPECTS TO OBSERVE <i>IN LOCO</i> / DOCUMENTATION TO ANALYSE / COMMENTS
<ul style="list-style-type: none"> • Does the review of the SMSPMA take account of all aspects related to safety management, such as: <ul style="list-style-type: none"> - Follow-up actions from previous reviews by top management; - Defined objectives; - Results of internal and/or external audits; - Status of corrective and preventive actions; - Suggestions by staff for improving the SMSPMA; - Results of the implementation of the training plan; - Recommendations by customers and others; - Results of investigations of incidents or possible accidents that have occurred; - Changes to the establishment (installations, staff, SMSPMA, etc); - Legal and regulatory requirements; - New technical knowledge; - Results of risk analyses. 	<ul style="list-style-type: none"> • Analysis of records of reviews by top management (e.g. minutes of meetings): check the information collected and analysed in the review of the system.
<ul style="list-style-type: none"> • Do reviews take into account changes in organisation, technology, standards or legislation? 	
<ul style="list-style-type: none"> • Is there evidence of the implementation of changes with a view to improving performance where necessary? • Is the allocation of resources adequately evaluated in reviews by top management? 	<ul style="list-style-type: none"> • Analysis of records of reviews by top management (e.g. minutes of meetings): analyse the approved corrective and preventive actions.
<ul style="list-style-type: none"> • Have alterations been made to the MAPP following reviews by top management? • Have new objectives and related management programmes been defined? • Were these changes adequate? 	<ul style="list-style-type: none"> • Analysis of records of reviews by top management (e.g. minutes of meetings): check whether there have been changes to the MAPP, objectives and management programmes (responsibilities, timescales and resources for achieving objectives) defined following reviews by top management.
<p>NOTE: Standard OHSAS 18001:2007 is the most recently revised standard, the translation/adaptation of which to Portuguese Standards (NP) has not yet been published. Standard NP4397:2001 (equivalent to OHSAS 18001:1999) is accordingly still valid. This being the case, the main changes introduced by OHSAS 18001:2007 compared with OHSAS 18001:1999 and NP4397:2001 are summarised in Annex III.</p>	