
5° SEMINARIO DI AGGIORNAMENTO PER ISPETTORI AMBIENTALI ISPRA

SALA CEVAD 1° PIANO VIA VITALIANO BRANCATI 48

ROMA, 14 OTTOBRE 2019

UNEP Guide on «Inspection of Industrial Facilities»

Confronto con le modalità ispettive in uso

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UNEP Guide on «Inspection of Industrial Facilities»

- Documento presentato e discusso al «Meeting UNEP-MAP Atene, 9-11 ottobre 2019»
- Scopo del documento

The Guide on inspection of industrial facilities is aiming at the acquaintance of the national inspecting authorities with the general framework for conducting of inspections which includes issues such as planning, preparation and execution of an inspection focusing on practical issues such as the relevant checklists to be used during a site visit.

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Di seguito, segnalati in evidenziato, alcuni aspetti indicati nella guida e ritenuti di interesse per eventuale implementazione nelle attività ispettive di ns. interesse.

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ROMA, 14 OTTOBRE 2019



Figure 4: The inspection cycle

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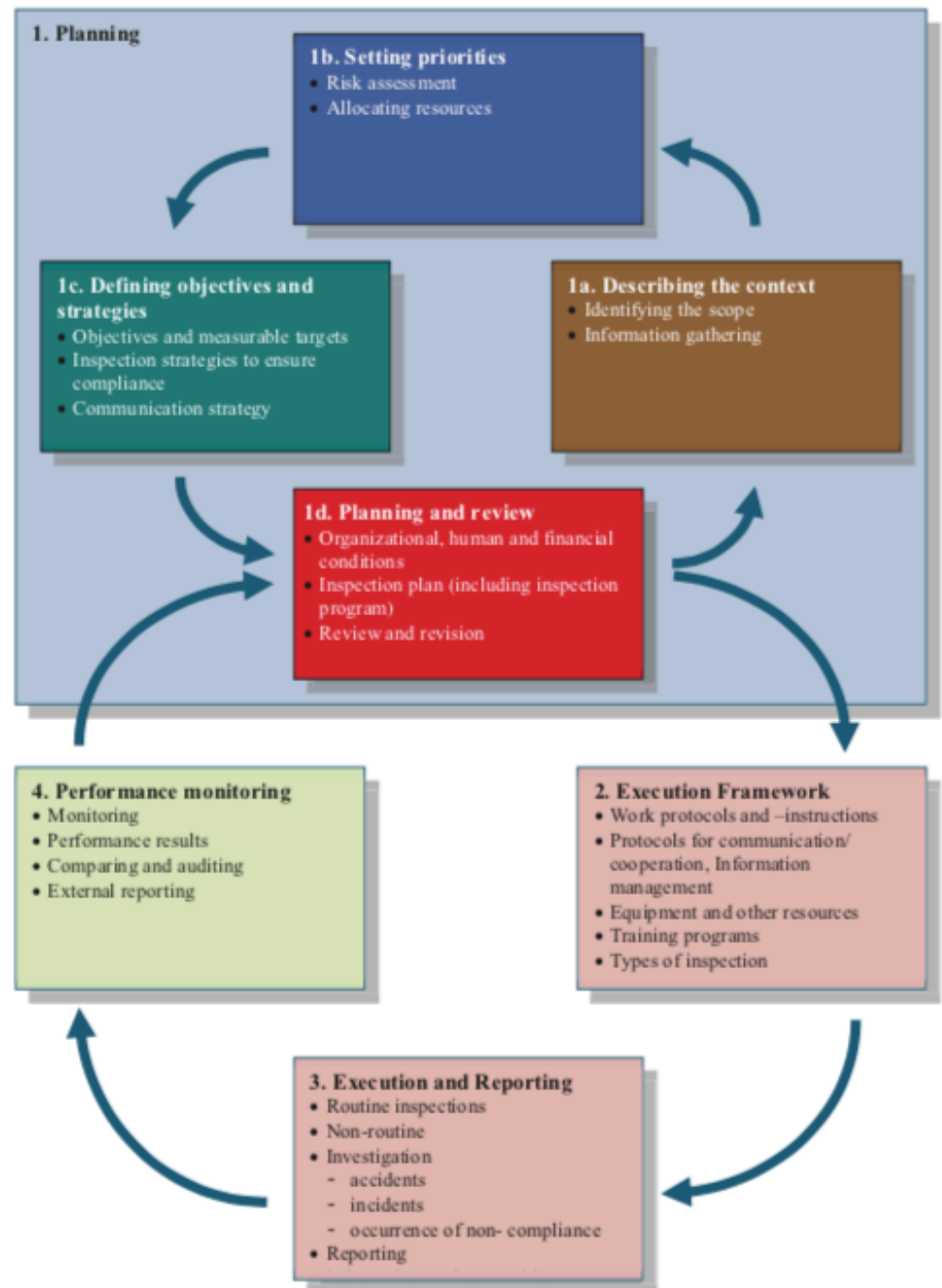


Figure 5: Inspection cycle – details

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SALA CEVAD 1° PIANO VIA VITALIANO BRANCATI 48

ROMA, 14 OTTOBRE 2019

Lo schema proposto per l'esecuzione dell'attività ispettiva non differisce in maniera sostanziale da quanto già in essere per ISPRA

Table 30: Inspection types

Inspection type	Objectives
Program	
Geographic	<ul style="list-style-type: none"> • Checking of pollution sources to specific receiving media • Checking of pollution sources from facilities in a specific area
Sector specific	Checking of aspects relevant to specific sector
Site inspection	
Comprehensive	Evaluation of compliance of all facilities of one/more sectors in a geographic area
Specific	Investigation of compliance status of one or more facilities on the basis of complaints
Follow-up	Evaluation of implementation of compliance procedures (from previous inspections)

5° SEMINARIO DI AGGIORNAMENTO PER ISPETTORI AMBIENTALI ISPRA

SALA CEVAD 1° PIANO VIA VITALIANO BRANCATI 48

ROMA, 14 OTTOBRE 2019

33. The execution framework should at least cover:

- Training program(s) for the inspectors (staff) based on a training needs assessment
- Protocols and working instructions for routine inspections
- Protocols and working instructions for non-routine inspections (how to react to incidents and accidents).
- Procedures/guides for imposing sanctions
- Development of inspection and enforcement handbooks
- Protocols for communication with the public (access to information) and with industry
- Information management (e.g. information systems) and information exchange (within the organization and with partner organizations)
- Provisions and memoranda of understanding for cooperation with relevant partners (other inspecting authorities).

36. Training does not have to mean a group of inspectors gathered together in one room with a lecturer. It might be realized on an individual basis, even weekly e.g. professional duties can include the reading of a case-law of a court or the examination of a received complaint from an installation's neighborhood.

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1.2.1.2. *Equipment*

41. Equipment that an inspector should have during on-site inspections is:

- A camera (it should take pictures of a minimum quality)
- Clothes resistant to atmospheric conditions and difficult circumstances (e.g. water proof boots) as well as safety equipment
- Some basic measuring equipment such as pH-meter, conductivity meter, etc. that should be taken if needed
- Any equipment needed for taking complex samples if necessary.

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1.2.2.1. *What should be inspected?*

53. Each inspection should at least cover:

A) Routine site visits:

- Examining the environmental impact
- Evaluating permits and authorizations
- Monitoring of emissions
- Checks of internal reports
- Verification of self-monitoring devices
- Checking of the BAT used
- Adequacy of the environmental management of the installation
- Additional inspection (follow-up/control inspection) in case an important non-compliance has been identified (within 6 months after the initial inspection).

5° SEMINARIO DI AGGIORNAMENTO PER ISPETTORI AMBIENTALI ISPRA

SALA CEVAD 1° PIANO VIA VITALIANO BRANCATI 48

ROMA, 14 OTTOBRE 2019

54. In case of accidents/incidents:

- To clarify the cause and its impact
- Responsibilities, liabilities and consequences of the operator
- Follow up that has to be taken:
 - Actions to mitigate / remedy the impact
 - Actions for prevention of such cases in the future
 - Actions of the operator.
 - Enforcement actions.

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1.2.4. Execution of an inspection

1.2.4.1. *What to check?*

65. The questionnaire and the checklists will guide the inspector throughout his/her inspection. In general the inspector has to check:

- The administrative part (names of responsible persons, structure of the environmental management unit, procedures applied for monitoring the environmental performance of the installation etc.)
- The vicinity of an installation (this may be done even before entering the area of the installation) to see if there are some traces of a possible impact of the installation (e.g. leftovers of waste, dust from air emissions, appearance of a river that is a recipient of discharges from the installation)
- Production lines to assess whether the installation is actually working during the visit and to what extent
- Emission points to air/water to check whether their number and positions are in line with the permit

5° SEMINARIO DI AGGIORNAMENTO PER ISPETTORI AMBIENTALI ISPRA

1.4.2. Performance indicators

82. Regular checking of the inspectorate's performance is crucial to justify its mission and function. The best way for this checking is the close monitoring of some indicators which have to be comprehensive (well defined), simple and understandable.

83. Types of performance indicators can be:

- ✓ Total number of inspections performed/year
- ✓ Number of inspections allocated/inspector unit/individual inspector
- ✓ Number of installations allocated/inspector unit/individual inspector
- ✓ Number of complaints received/year
- ✓ Number of non-compliant facilities/year
- ✓ Number of samples taken/facility
- ✓ Number of administrative decisions issued/year
- ✓ Number of appearances in courts
- ✓ Number of fines/year
- ✓ Amount of collected fines (i.e. \$/€/year).
- ✓ $I_2 = \frac{\text{Number of environmental inspectors}}{\text{Number of facilities}}$
- ✓ $I_5 = \frac{\text{Number of inspected facilities}}{\text{Number of facilities}}$
- ✓ Number of facilities

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1.4.2. Performance indicators

83. Types of performance indicators can be:

- ✓ $I_6 =$ Number of non compliances
- ✓ Number of facilities
- ✓ $I_7 =$ Number of judicial actions
Number of non compliances
- ✓ **Optional indicators**
- ✓ $I_9 =$ Number of inspectors with an operational plan
- ✓ Number of environmental inspectors
- ✓ $I_{10} =$ Number of facilities with self monitoring or environmental management system
- ✓ Number of facilities
- ✓ $I_{11} =$ Number of administrative sanctions
Number of inspected facilities

5° SEMINARIO DI AGGIORNAMENTO PER ISPETTORI AMBIENTALI ISPRA SALA CEVAD 1° PIANO VIA VITALIANO BRANCATI 48 ROMA, 14 OTTOBRE 2019

2. Checklists

2.1. What is a checklist?

84. A good preparation of a site visit requires that the inspector knows in advance what/where to inspect. Therefore he/she needs a “pathway” which will guide him/her throughout the visit. The checklist is exactly this “pathway”: it contains a sequence of issues to be addressed which will allow the inspector to assess the environmental performance of the installation.

85. Advantages of using checklists are:

- To ensure that all necessary aspects will be inspected
- A better organisation of the interview and site visit
- Time/resources rationalisation
- Fast assessment of the non-compliance situations.

5° SEMINARIO DI AGGIORNAMENTO PER ISPETTORI AMBIENTALI ISPRA
SALA CEVAD 1° PIANO VIA VITALIANO BRANCATI 48
ROMA, 14 OTTOBRE 2019

ENVIRONMENTAL MANAGEMENT SYSTEM

Ref. to the permit (page)	Topic	BAT	What to check	What has been observed	Compliance (YES/NO)
	EMS	Commitment of senior management	Official company documents on the EMS		
	EMS	Establishment of environmental policy including continuous improvement of installations by management	Company documents on the EMS and most recent reporting on results		
	EMS	Planning, establishing and implementation of necessary procedures, objectives and targets	Company documents and reports on the EMS about targets and necessary investments		
	EMS	Implementation of structure, responsibility, training, communication and documentation	Reports on results of EMS implementation in the company		
	EMS	Performance and corrective action, monitoring and measurement and preventive action	How does the system work, how is the monitoring and measurement organized		
	EMS	Maintenance of records Independent internal and external auditing	The presence of auditing reports		
	EMS	Review EMS by senior management on adequacy and effectiveness	Is a regularly review organized?		
	EMS	Following development of cleaner technologies	Presence of knowledge about new developments in the industrial sector		
	EMS	Application of sectoral benchmarking on a regular basis	Is the operator aware of the environmental performance of other companies in the sector? What is the knowledge about international norms and standards		

5° SEMINARIO DI AGGIORNAMENTO PER ISPETTORI AMBIENTALI ISPRA SALA CEVAD 1° PIANO VIA VITALIANO BRANCATI 48

ENVIRONMENTAL MANAGEMENT SYSTEM

Ref. to the permit (page)	Topic	BAT	What to check	What has been observed	Compliance (YES/NO)
	EMS	Independent audits	Is the EMS and audit procedure examined and validated by an accredited certification body or an external EMS verifier?		
	EMS	EMAS and EN-ISO 14001:1996	Is there an implementation and adherence to an internationally accepted voluntary system such as EMAS and ISO 14001?		

ENVIRONMENTAL MANAGEMENT SYSTEM

Ref. to the permit (page)	Topic	BAT	What to check	What has been observed	Compliance (YES/NO)
	Energy efficiency	Carrying out an audit	<p>Check if the operator ever performed an audit.</p> <p>Check the content of the audit:</p> <ul style="list-style-type: none"> - energy-using equipment, and the type and quantity of energy used in the installation; - detected possibilities to minimize energy use; - possibilities to use alternative sources or use of energy that is more efficient. 		
	Energy efficiency	Establish energy efficiency indicators	Check if the operator identified suitable energy efficiency indicators for the installation, and measure their change over time or after the implementation of energy efficiency measures		
		Carry out maintenance at installations to optimize energy efficiency	<p>Check if the operator applies the followings:</p> <ul style="list-style-type: none"> - establishing a structured program for maintenance - supporting the maintenance program by appropriate record keeping systems and diagnostic testing 		

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STORAGE/HANDLING					
Ref. to the permit (page)	Topic	BAT	What to check	What has been observed	Compliance (YES/NO)
			stored properly (safety regulations)		
	Storage and handling	Collect the rainwater in a special basin for checking, treatment if contaminated and further use.	Check the separation among wastes with different properties; check if rainwater can produce a leakage of the waste.		
	Storage and handling	Handling odorous materials in fully enclosed or suitably abated vessels and storing them in enclosed buildings connected to abatement.	Check from the yearly report the presence of odorous wastes; check how they are stored.		
	Storage and handling	Equipping tanks and vessels with suitable abatement systems when volatile emissions may be generated, together with level meters and alarms.	Check from the yearly report the presence of waste that can produce volatile emissions; check how they are stored and the presence of abatement systems.		
	Storage and handling	Have a waste management plan	Check if they have procedures to manage existing waste streams; check if they maximize the re-use of generated waste (i.e. separation of waste streams, transport to waste recycling centers).		

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Grazie per l'attenzione