

Conference on

“INSPECTIONS AND CONTROLS IN SEVESO AND IED ESTABLISHMENTS:  
POSSIBLE INTEGRATIONS FOR SIMPLIFICATION PURPOSES

Exchanges of multilateral experience Italy/Europe

**THE ROLE OF THE REGIONAL AGENCIES:  
POSSIBLE INTERACTIONS IN THE ENVIRONMENTAL CONTROLS**  
*Experience in Arpa Piemonte*

***Barbara Basso, Daniela Cescon***

**Arpa Piemonte - Via Pio VII n°9 - 10135 Torino, Italy**

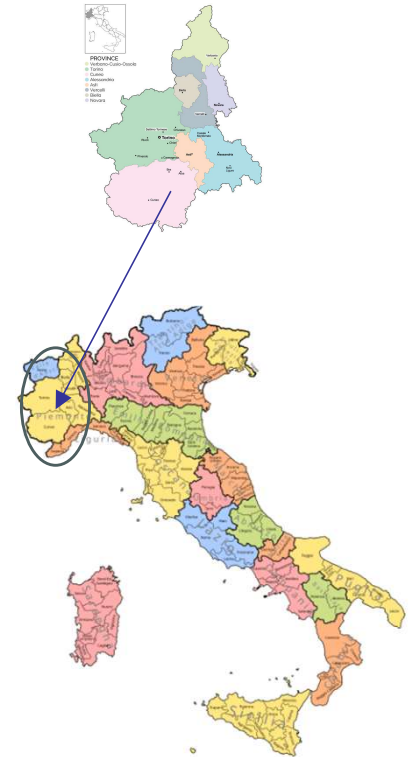


# The role of Arpa Piemonte

**Arpa Piemonte** is the Regional Agency for Environmental Protection in Piedmont region.

Among its institutional activities, in force of the regional law n°18/2016 (amended by the regional law n°60/1995), we carry out **inspections** on:

- **Seveso establishments** (under Directive 2012/18/EU)
- and
- **IED installations** (under Directive 2010/75/UE, amended by Directive 2024/1785)



These 2 kind of inspections are carried out by **different departments** in Arpa Piemonte

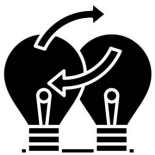
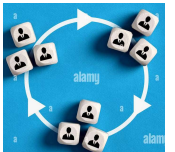


# The project in Arpa Piemonte

With reference to the goal “PERF.04.01” given to Arpa Piemonte by Piedmont Region, in 2023 started a new project, aimed to improve the performance of controls in “Seveso establishments” which are also covered by IED Directive.

The purposes of the project are:

- **identify** common aspects between Seveso Directive and IED Directive;
- **coordinate** operational methods for carrying out Seveso inspections and IPPC controls;
- **share** the experience gained over the years by the inspections on Seveso establishments;
- **integrate** the skills of the personnel assigned to these 2 topics.



# 2023-2024: first part of the project

- Situation in Piedmont region: Seveso establishments vs IED installations
- Study of regulatory framework (Seveso & IED Directives)
- Common aspects between Seveso & IED inspections
- Activities of Arpa Piemonte on Seveso & IED controls: annual inspections programs
- First proposal of operational procedure: preliminary check-list



## Annex:

- List of Seveso establishments & IED installations
- Timetable of activities



**PROPOSTA DI MODALITÀ OPERATIVE  
 PER L'INTEGRAZIONE DELLE ATTIVITÀ DI ARPA PIEMONTE  
 IN MATERIA DI  
 PREVENZIONE DEGLI INCIDENTI RILEVANTI (RIR)  
 E  
 AUTORIZZAZIONE INTEGRATA AMBIENTALE (AIA)**

Redazione	Funzione: Incarico di funzione "Verifiche impiantistiche e verifiche RIR" Struttura Semplice SS03.04 Nome: ing. Barbara BASSO	Data:	Firma: Firmato digitalmente da: BARBARA BASSO Data: 10/01/2024 16:04:41
	Funzione: Collaboratore Tecnico professionale Struttura Semplice SS03.04 Nome: ing. Chiara CARPEGNA	Data:	Firma: Firmato digitalmente da: CHIARA CARPEGNA Data: 10/01/2024 16:02:20
	Funzione: Collaboratore Tecnico professionale Struttura Semplice SS03.04 Nome: ing. Federica MANUGUERRA	Data:	Firma: Firmato digitalmente da: Federica Manuguerra Data: 11/01/2024 09:53:43
	Funzione: incarico di funzione - Coordinamento regionale AIA Struttura Semplice SS10.01 Nome: dott.ssa Daniela CESCION	Data:	Firma: Firmato digitalmente da: Daniela Cescion Data: 11/01/2024 10:46:08
Verifica	Funzione: Incarico di Funzione "Verifiche impiantistiche e verifiche RIR" Nome: ing. Barbara BASSO	Data:	Firma: Firmato digitalmente da: BARBARA BASSO Data: 10/01/2024 16:04:42
Approvazione	Funzione: Dirigente SS 03.04 "Impianti industriali e energia" Nome: ing. Fabio PITTARELLO	Data:	Firma: Firmato digitalmente da: Fabio Pittarello Data: 11/01/2024 11:37:20

# Situation in Piedmont region

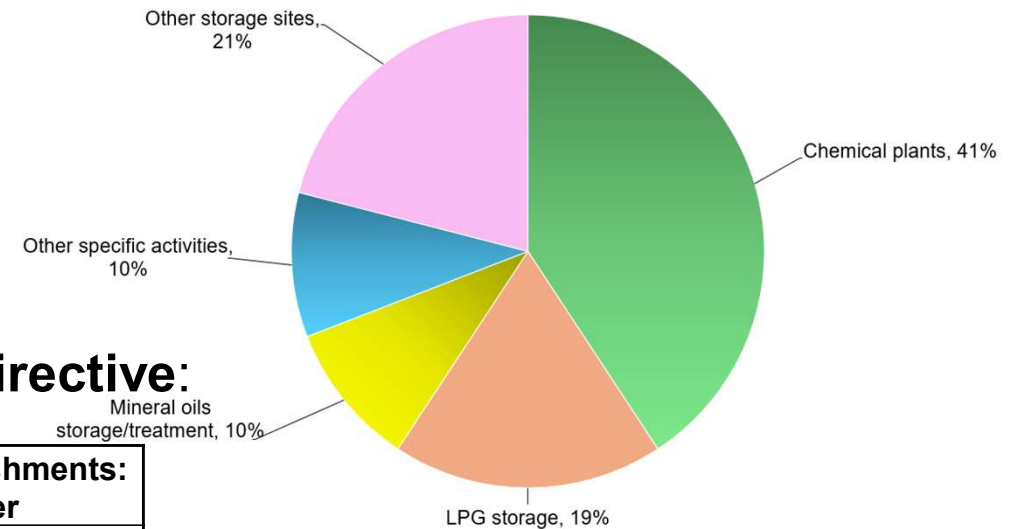
In Piedmont region there are 81 Seveso establishments (December 2025): **44 upper-tier** and **37 lower-tier**



Seveso establishments belong to different sectors and the most common in the Piedmont region are:

- Chemical plants (41%)
- LPG storage (19 %)
- Mineral oils storage/treatment (10%)

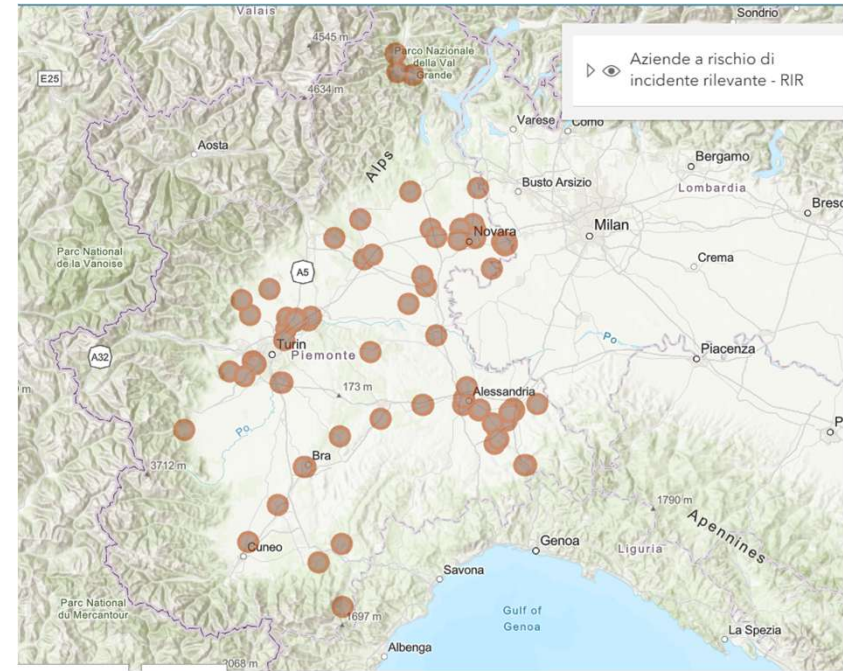
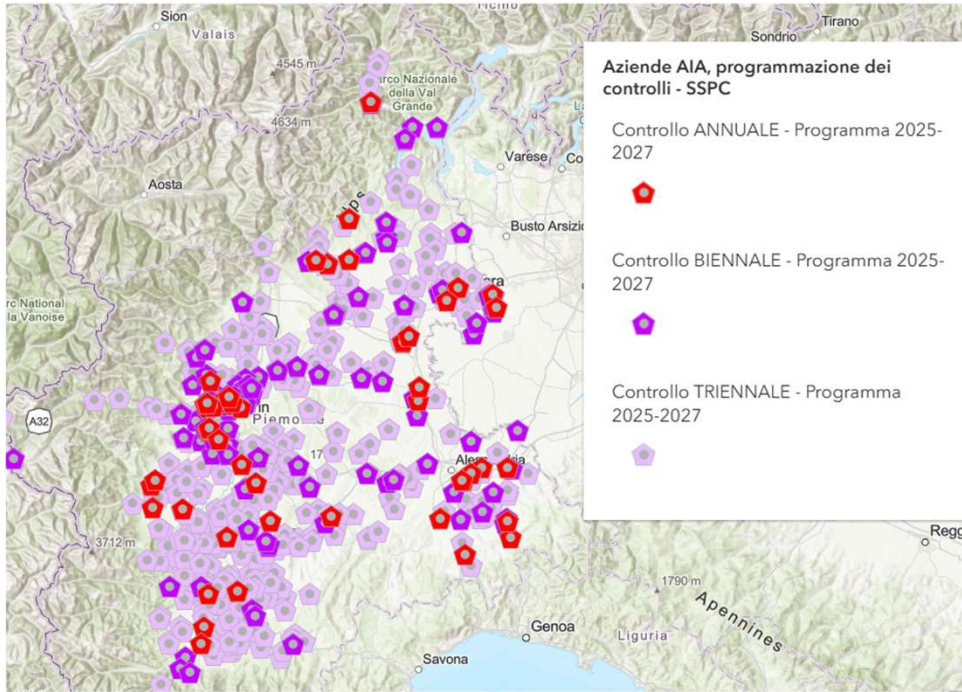
**Activities of Seveso establishments**



**33 Seveso establishments are under IED Directive:**

Seveso activities	Seveso establishments: lower-tier	Seveso establishments: upper-tier
Chemical plants	8	17
Explosives production	-	1
Paper mill	1	1
Refinery	-	1
Waste treatments	1	-
Other activity	2	1
<b>TOTAL n°</b>	<b>12</b>	<b>21</b>

# Geoportale Arpa Piedmont

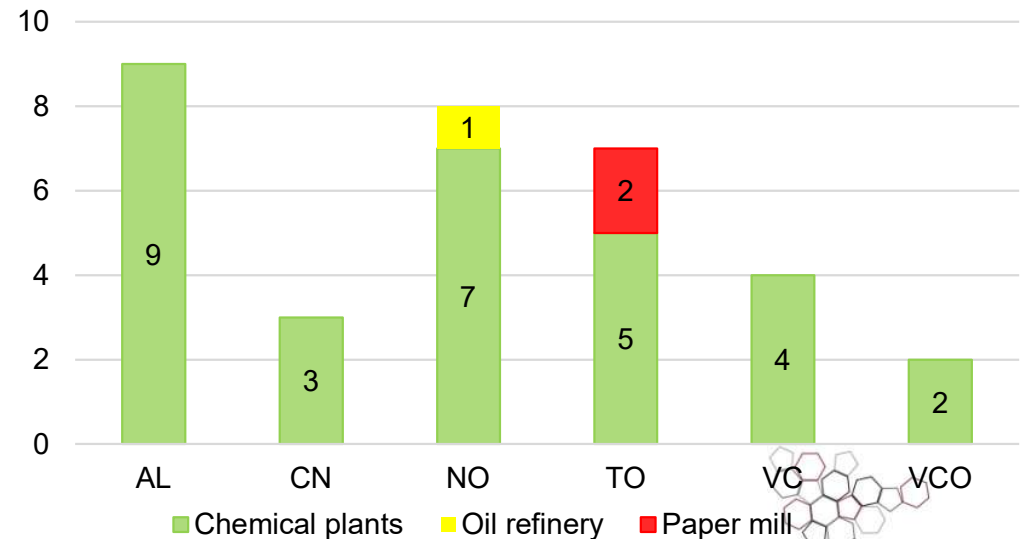


33 Seveso establishments - IED activities:

- code 1. Oil refineries (1 establ.)
- code 4. Chemical plants
- code 5. Waste treatments
- code 6. Other activities (2 paper mills)

(30 establ.)

## IED activities



# Database on hazardous substances in Seveso&IED installations

**Aziende AIA | Aziende AIA**

Zoom a

objectid	32252
Autorizzazione AIA	AIA Nazionali
Ragione sociale	SOCIETA' A RESPONSABILITA' LIMITATA RAFFINERIA PADANA OLII MINERALI S.A.R.P.O.M. S.R.L.
Dettagli Impianto/Stabilimento	RAFFINERIA PADANA OLII MINERALI S.A.R.P.O.M. S.R.L.
Provincia Sede	Novara
Scheda sostanze	<a href="#">Visualizzazione</a>
Comune Sede	Treviso
Indirizzo sede	Via VIGEVANO, 43

1: 72224 1 km

**RAFFINERIA PADANA OLII MINERALI S.A.R.P.O.M. S.R.L.** (AIA NAZIONALI) - SEDE ATTIVA - SEDE OPERATIVA -

SOCIETA' A RESPONSABILITA' LIMITATA RAFFINERIA PADANA OLII MINERALI S.A.R.P.O.M. S.R.L. | sede operativa Via VIGEVANO, 43 - Treviso (Novara) - Piemonte | 0321751 | PEC: sarpom@actaliscertymail.it

**Sostanze pericolose detenute e stoccate dall'azienda (SED\_0000228)**

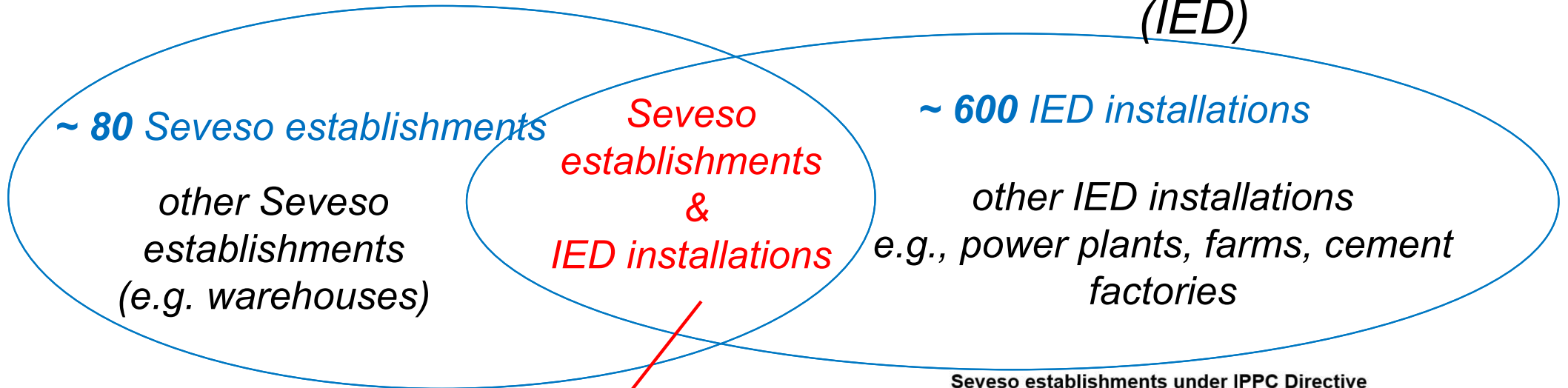
Stato fisico	Modalità di stoccaggio	Sigla area di stoccaggio	Capacità massima stoccabile	Capacità media stoccata	Consumo annuo	UM	Note	Scheda di sicurezza
liquido	bombola				10626	kg	La capacità max stocc. È espressa in m3	-
liquido	fusto/bulk/big bag				20790	kg	La capacità max stocc. È espressa in m3	-
liquido	fusto/bulk/big bag				20160	kg	La capacità max stocc. È espressa in m3	-



# Situation in Piedmont region

## Seveso III Directive

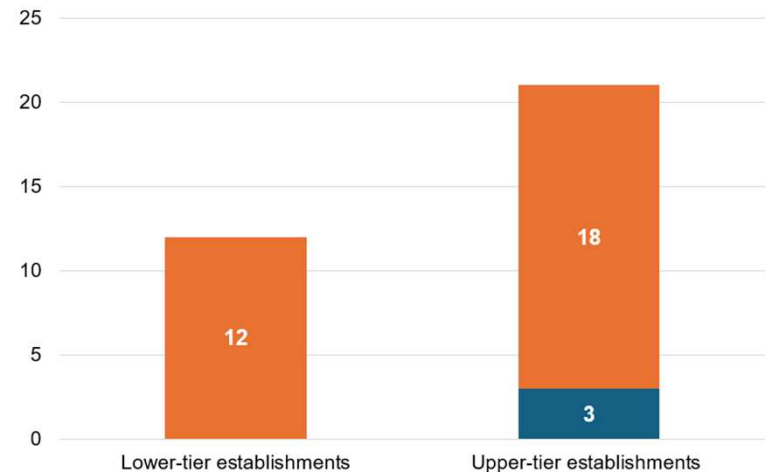
## Industrial Emission Directive (IED)



**33 Seveso establishments & IED installations:**

- **21 upper-tier**
- **12 lower-tier**

Seveso establishments under IPPC Directive in Piedmont region



■ IPPC installations under regional jurisdiction  
■ IPPC installations under statal jurisdiction



# Competent authorities in Piedmont region

## IED INSTALLATIONS:

➤ *under regional jurisdiction* → **Province/CMTO** (regional law n.44/2000)

→ *check compliance* 

➤ *under stataal jurisdiction* → **MASE**

→ *check compliance: Ispra* + 

## SEVESO ESTABLISHMENTS: *inspection on Safety Management System (SMS)*

➤ *upper-tier: technical regional Committee (CTR)*



➤ *lower-tier:*  →  (*DGR 3 agosto 2017, n. 84-5515*)



# Regulatory framework

2 EU Directives with different objectives



**Directive 2012/18/EU (Seveso)**

*(in Italy D.Lgs. 105/2015)*

on the control of major-accident hazards  
involving dangerous substances

**Directive 2010/75/UE (IED), amended by  
Directive 2024/1785**

*(in Italy D.Lgs. 152/2006)*

on industrial emissions  
(Integrated Pollution Prevention and Control  
- IPPC)



they refer to each other, especially for the aspect of preventing  
environmental pollution and limiting the consequences for  
human health and the environment



The aim of this project is to highlight the common aspects

# Regulatory framework

## Directive 2012/18/UE (Seveso):

### *Art.8) Major-accident prevention policy*

1. Member States shall require the operator to draw up a document in writing setting out the **major-accident prevention policy (MAPP)** and to ensure that it is properly implemented. The MAPP shall be designed to ensure a high level of protection of human health and the environment. It shall be proportionate to the major-accident hazards.

[...]

5. The MAPP shall be implemented by appropriate means, structures and by a **safety management systems (SMS)**, in accordance with Annex III, proportionate to the major-accident hazards, and the complexity of the organisation or the activities of the establishment.

## Directive 2024/1785 (IED):

### *Art.14a) Environmental management system*

1. Member States shall require the operator to prepare and implement [...] an **environmental management system (EMS)**. The EMS [...] shall comply with relevant BAT conclusions that determine aspects to be covered in the EMS.

2. The EMS shall include at least the following:

(a) **environmental policy** objectives for the continuous improvement of the environmental performance and safety of the installation, which shall include measures to:

[...]

(iii) prevent or reduce the use or emissions of **hazardous substances**



# Regulatory framework

Directive 2012/2012/18/EU (Seveso) - **Annex III** “Information on the SMS and the organisation of the establishment with a view to the prevention of major accidents”

*For the purpose of implementing the operator’s safety management system, account shall be taken of the following elements:*

*(a) the SMS shall be proportionate to the hazards, industrial activities and complexity of the organisation in the establishment and be based on assessment of the risks; it should include the part of the general management system which includes the organisational structure, responsibilities, practices, procedures, processes and resources for determining and implementing the **major-accident prevention policy (MAPP)**;*

*(b) the following issues shall be addressed by the safety management system:*

- i. organisation and personnel*
- ii. identification and evaluation of major hazards*
- iii. operational control*
- iv. management of change*
- v. planning for emergencies*
- vi. monitoring performance*
- vii. audit and review*



# Regulatory framework

Directive 2024/1785 (IED):

*Art. 14a) Environmental management system*

*1. Member States shall require the operator to prepare and implement an environmental management system (“EMS”), which include the elements listed:*

*(a) **environmental policy** objectives for the continuous improvement of the environmental performance and safety of the installation, which shall include measures to:*

*[...] iii) prevent or reduce the use or emissions of **hazardous substances**;*

*b) objectives and **performance indicators** in relation to significant environmental aspects  
[...]*

*(d) a chemicals **inventory of the hazardous substances** present in or emitted from the installation*

*(e) measures taken to achieve the environmental objectives and **avoid risks** for human health or the environment, including corrective and preventive measures where needed [...]*

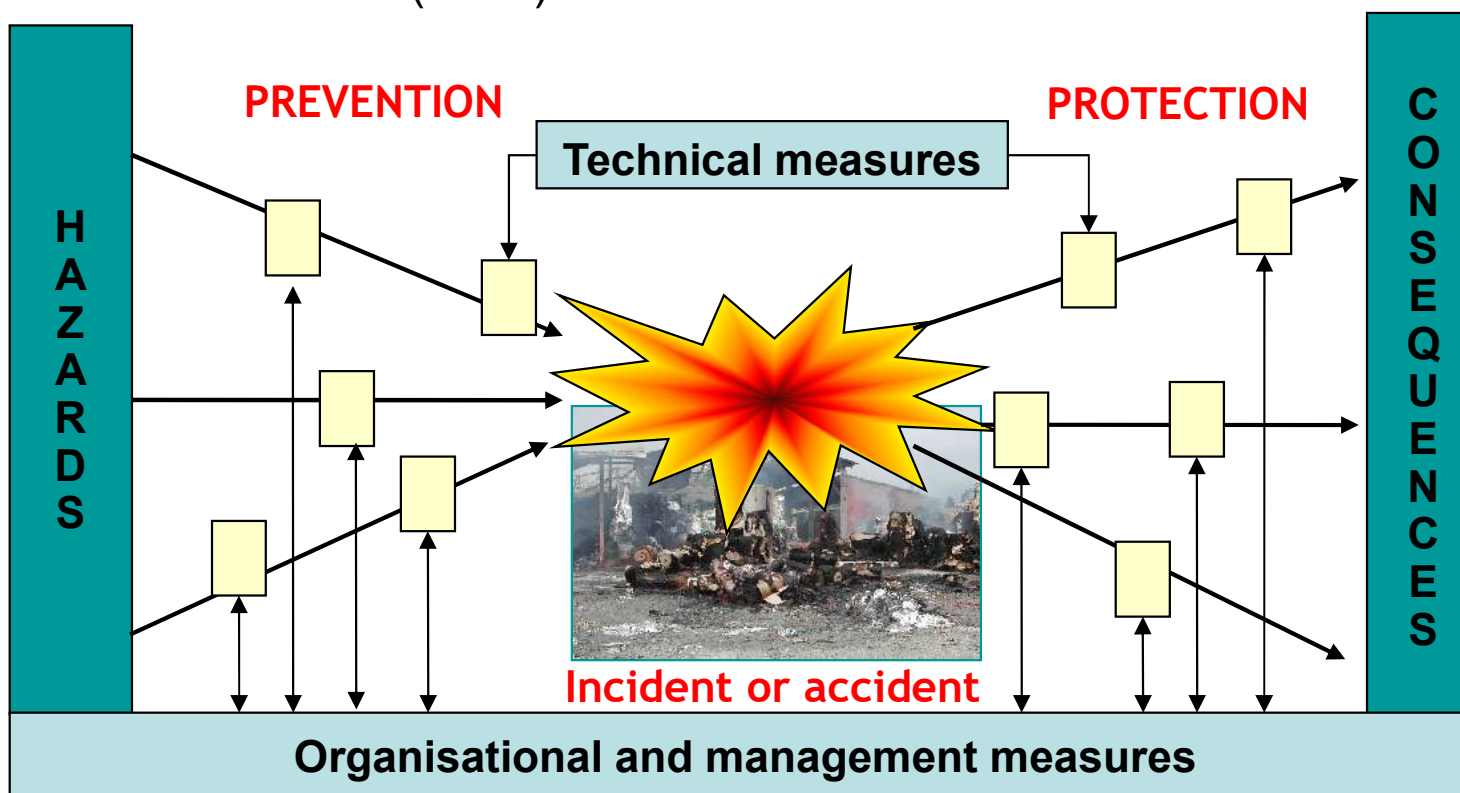
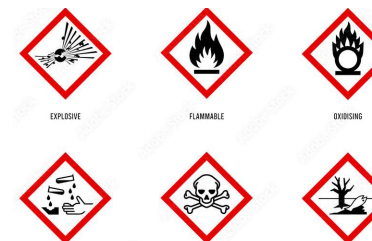
*4. [...] The operator shall prepare and implement the EMS in **accordance with the relevant BAT conclusions** for the sector [...]*

*The EMS shall be **reviewed** periodically to ensure that it continues to be suitable, adequate and effective.*

# 1st common aspect: *PREVENTION*

**Directive 2012/18** lays down rules for the *prevention* of major accidents which involve dangerous substances, and the limitation of their consequences for human health and the environment

**Directive 2024/1785:** In the event of any *incident or accident* significantly affecting human health or the environment the operator informs the competent authority immediately and takes the measures to limit the consequences for human health or the environment and to *prevent* further possible incidents or accidents (art. 7)



# 2nd common aspect: **SMS & EMS**

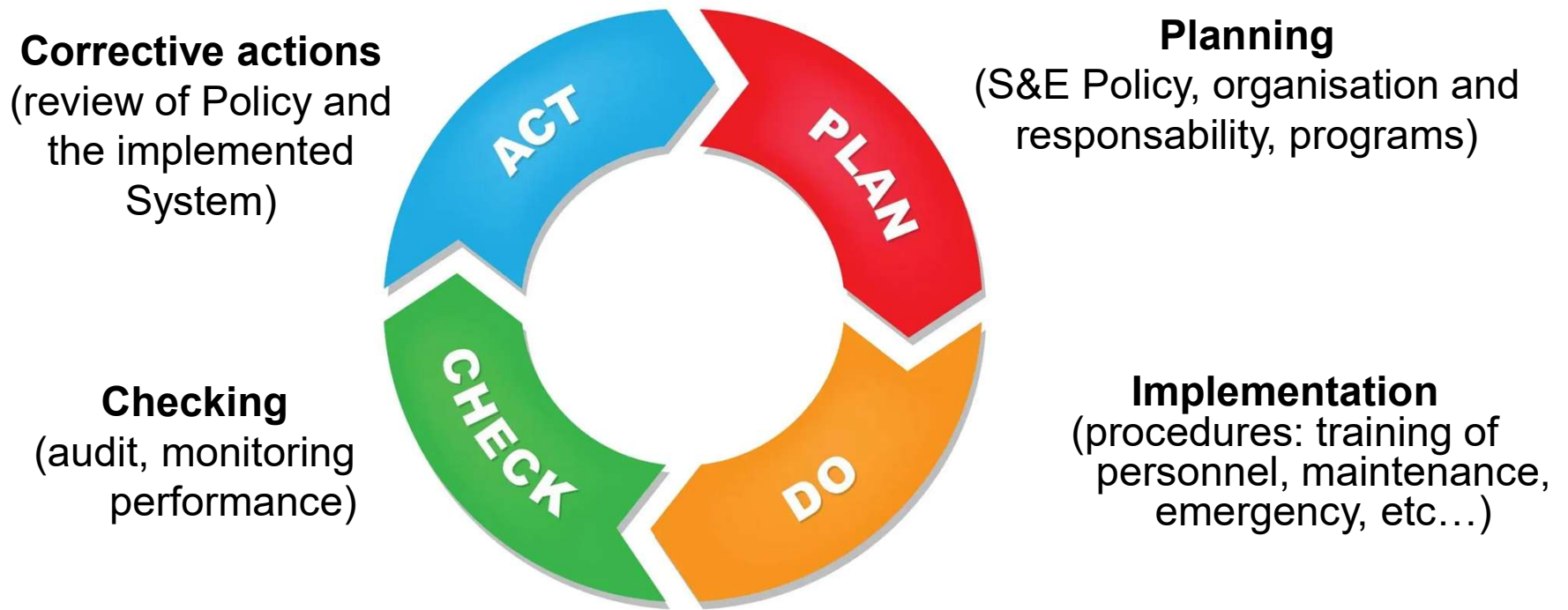
S&EMS

Seveso establishments falling under the IPPC Directive adopt:

➤ a **Safety Management System (SMS)** for the prevention of major accidents, as defined in Annex B of Legislative Decree 105/2015

&

➤ an **Environmental Management System (EMS)** as required by BAT 1, common to all IED categories



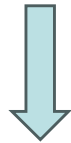
**Deming cycle: continuous improvement**



# Change of approach: SMS & EMS

## Seveso establishments,

in force of Directive 96/82/EC  
(so-called Seveso II → in Italy  
D.Lgs.334/1999),  
adopt a SMS since 2000



**over 20 years experience in**  
Arpa Piemonte on **inspections**  
on **Safety Management System**  
(SMS)

## IED installations,

in force of Directive  
2010/75/UE (IED),  
adopt a EMS since 2010

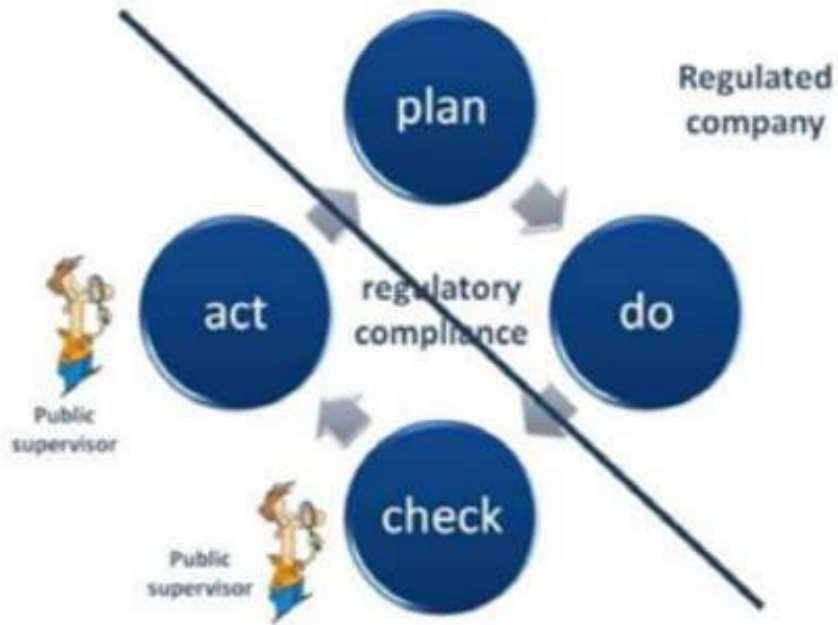


in force of Directive 2024/1785  
a **change of approach** in  
IPPC controls is required ->  
Environmental Management  
System (EMS)

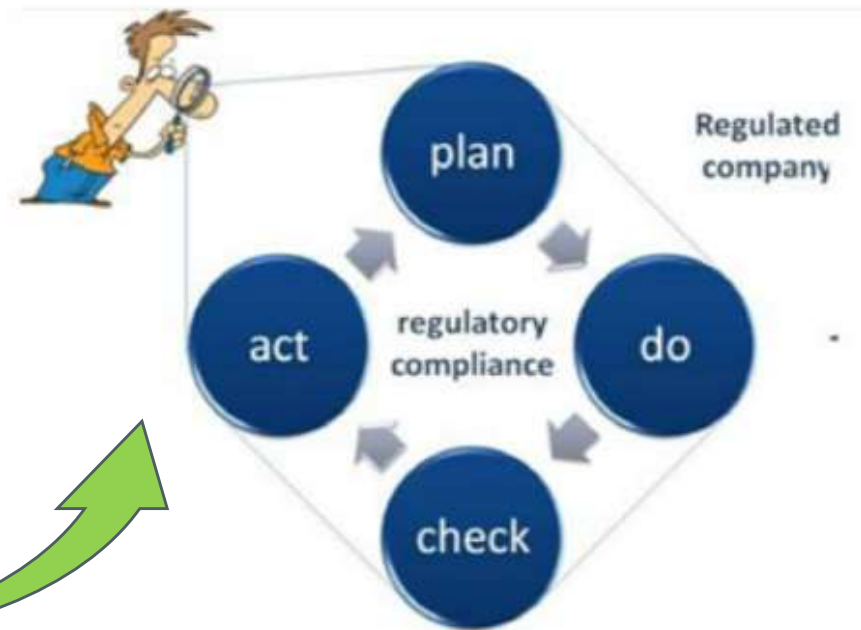


# New approach to inspections ex Dir. IED 1.0 e IED 2.0

Traditional supervision on output



Supervision on a meta level



EMS



# Comparison of inspection programs

Arpa Piemonte is organized into different departments that carries out inspections on Seveso establishments and IED installations; the annual inspection programs are carried out according to different regulations:

- ❖ DGR n. 84-5515 of 03/08/2017, for planning **Seveso** inspections according to a scoring method

$$I_{PIR} = P_B \times (f_{SGS} + f_{TER}/3)$$

$$f_{TER} = f_{DOM} * f_{ANT} * f_{AMB}$$

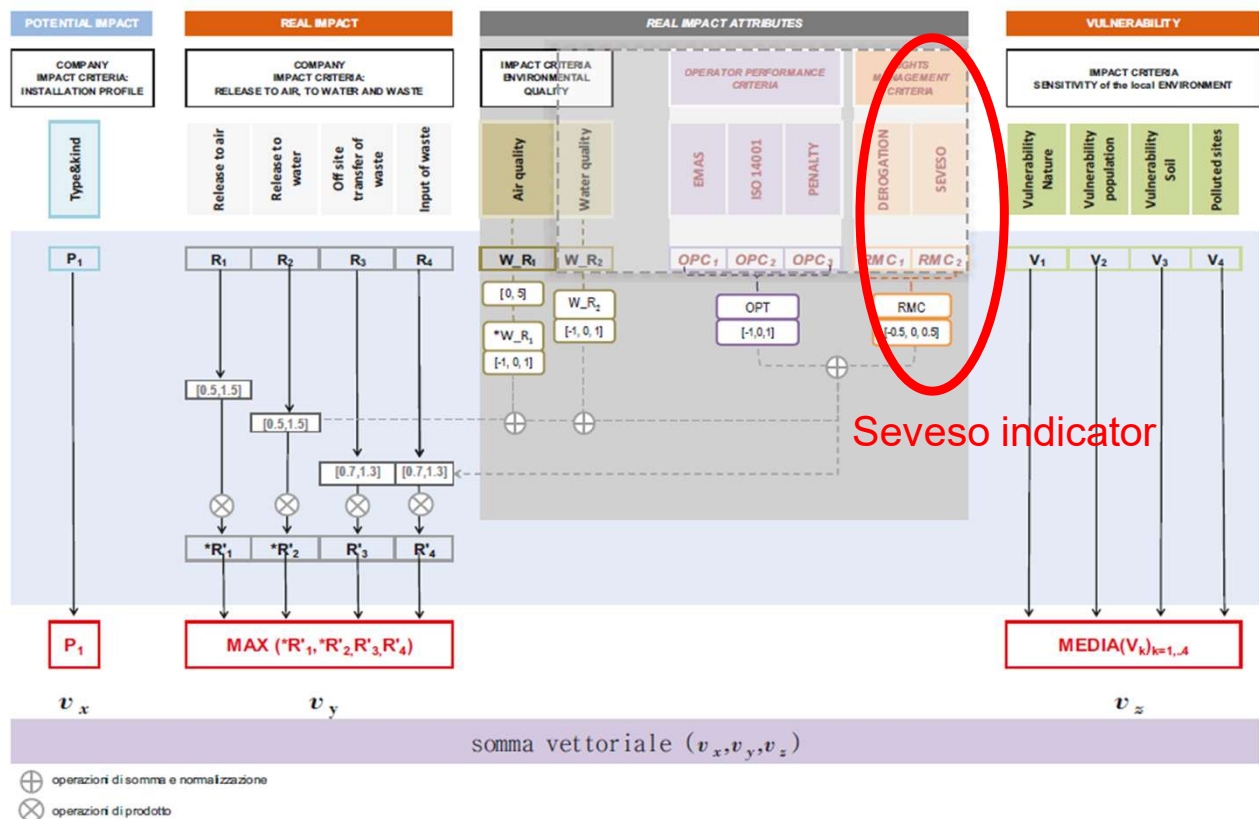
vulnerabilità dei recettori presenti  
nell'area circostante e vie di  
propagazione della sostanza  
pericolosa

ATTIVITA'	PB sostanza	f SGS	f DOM	f ANT	f AMB	f ter	fR	Ipir	Intervalli Ipir	PERIODICITA'
Altre attività specifiche	2	5	1	1	1,5	1,5	5,5	11,0	Ipir < 15	4 anni
Produzione e/o stoccaggio di gas tecnici	4	4	1	1,5	1,5	2,25	4,8	19,0	15 ≤ Ipir < 25	3 anni
Deposito commerciale di sostanze tossiche	2	7	1	1,5	1,5	2,25	7,8	15,5	nuova	2 anni

# Comparison of inspection programs

Arpa Piemonte is organized into different departments that carries out inspections on Seveso establishments and IED installations; the annual inspection programs are carried out according to different regulations:

- ❖ DGR n. 44-32722016 of 09/05/2016, for planning **IED** inspections according to CPSS (Control Programming Support System) → Seveso indicator





# Ranking resulting from the SSPC system preparatory to defining the IED-Seveso inspection programs



IL CONSIGLIO FEDERALE

REGIONE PIEMONTE BU19 12/05/2016

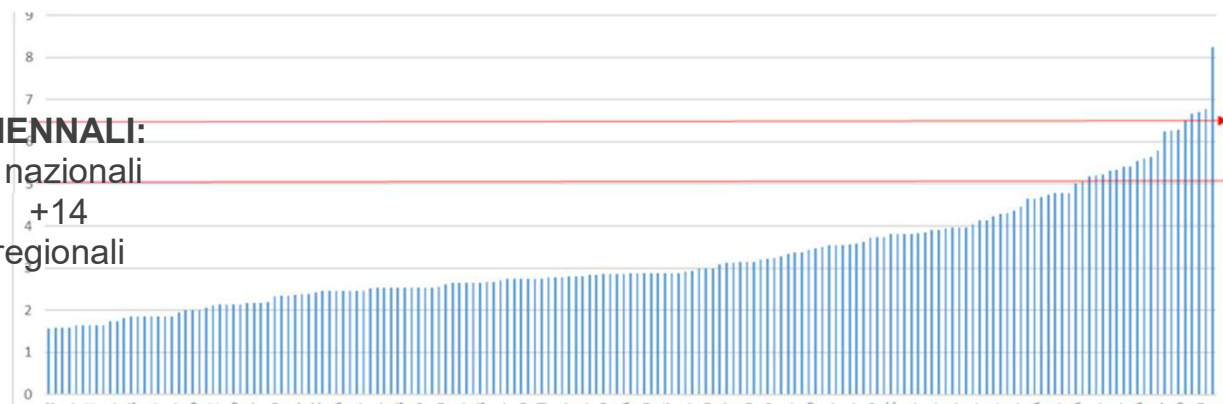
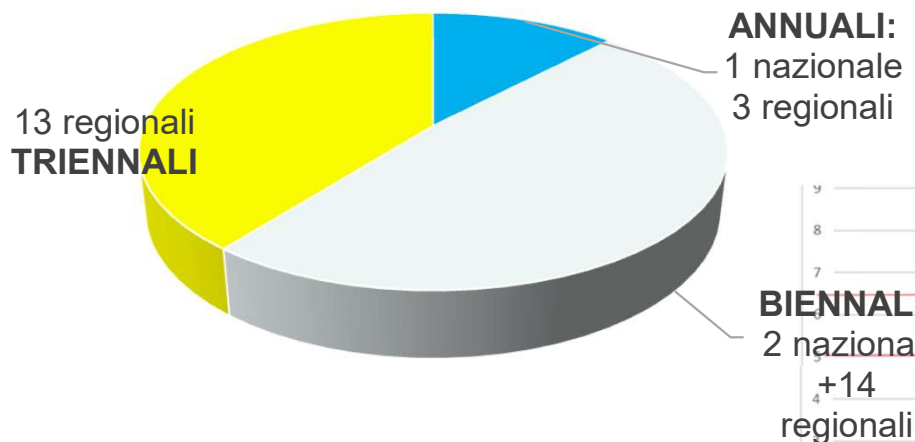
Deliberazione della Giunta Regionale 9 maggio 2016, n. 44-3272

**Decreto legislativo 3 aprile 2006, n. 152 - Titolo III-bis - Piano di ispezione ambientale presso le installazioni soggette ad Autorizzazione Integrata Ambientale, ai sensi dell'art. 29-decies, commi 11-bis e 11-ter.**

DOC N. 63/CF

## AIA - Programma triennale di ispezione ambientale | Arpa Piemonte

### Distribuzione frequenze di controllo AIA di stabilimenti RIR



DC1

Soglia inferiore

Daniela Cescon; 2025-11-28T15:16:12.288

# 2024: first joint inspection

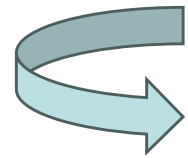
1) **Programming phase**: comparison of the 2 regional programs and choice of the establishment (Seveso lower-tier)

2) **Inspection phase**:

➤ preliminary phase:

- documents examination (description of the process, Seveso Notification, Monitoring and Control Plan - MCP)
- sharing common aspects (procedures, previous inspections results)

➤ on-site phase: joint inspections on-site in order to audit common aspects



***proposal of check-list***

3) **Conclusion**: sharing the inspection outputs

**Note: the procedures are kept separate !**

- Inspection reports and Final reports
- Charging and non-compliance management

# Proposal of check-list

The proposal of check-list is structured in 2 sections:

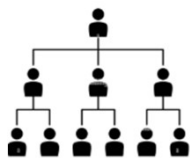
A. Pre-inspection documentation (preparatory phase);

B. Management aspects of S&EMS (inspection phase):

- Major Accidents Prevention Policy and Environmental Policy and relative implementation
- Organisation and personnel
- Dangerous substances and SDS
- Maintenance of critical equipments
- Operational control
- Management of change
- Emergency response
- Management of incidental events
- Monitoring performance
- Internal audit
- Review of S&EMS

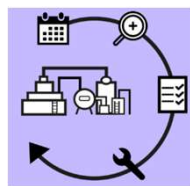
Sezione B. Aspetti gestionali (Fase ispettiva)	Riferimenti
1. Sistema di Gestione della Sicurezza (SGS) - Sistema di Gestione Ambientale (SGA). Verificare: a) che sia adottato il SGS e il SGA b) se i due sistemi sono integrati	<ul style="list-style-type: none"> <li>• punto 1 lista di riscontro allegato H del D.Lgs. 105/2015 (RIR);</li> <li>• punto 3.2 It a) della LG PMC (AIA)</li> </ul>
2. Documentazione PIR e Politica ambientale. Verificare: a) che siano stati predisposti i programmi di attuazione e miglioramento del SGS e del SGA b) se i programmi sono integrati	<ul style="list-style-type: none"> <li>• punto 1 lista di riscontro allegato H del D.Lgs. 105/2015 (RIR);</li> <li>• punto iii della BAT 1 comune a tutte le attività IPPC (AIA)</li> </ul>
3. Struttura organizzativa SGS/SGA. Verificare: a) che sia stato predisposto un organigramma in cui sono individuate anche nominalmente le figure responsabili del SGS/SGA (si cita ad esempio il HSE Manager e gli RLSS) b) che sia stata predisposta una procedura in cui sono definiti i compiti e responsabilità delle figure chiave del SGS/SGA c) che il Servizio che si occupa in maniera specifica degli aspetti di sicurezza e ambiente sia commisurato alla complessità dello stabilimento e all'entità dei rischi	<ul style="list-style-type: none"> <li>• punto 2 lista di riscontro allegato H del D.Lgs. 105/2015 (RIR);</li> <li>• punto vi della BAT 1 comune a tutte le attività IPPC (AIA)</li> </ul>
4. Gestione delle sostanze/miscelate pericolose. Verificare: a) che esista l'elenco delle sostanze/miscelate presenti in stabilimento con i relativi dati di sicurezza e modalità di stoccaggio b) che siano presenti le schede di sicurezza (SdS) di tutte le sostanze/miscelate presenti, aggiornate c) che esista una procedura per la gestione delle sostanze/miscelate presenti in stabilimento e per l'aggiornamento delle relative SdS che tenga conto anche di eventuali modifiche nella classificazione ai sensi del Regolamento CLP	<ul style="list-style-type: none"> <li>• punto 3 lista di riscontro allegato H del D.Lgs. 105/2015 (RIR);</li> <li>• Tabella 1a e Allegato 3 della LG PMC (AIA)</li> </ul>
10. Prestazioni del SGS-SGA. Verificare: a) che siano identificati e valorizzati gli indicatori del SGS-SGA b) che esista una procedura in cui sono definiti l'identificazione e il monitoraggio degli indicatori del SGS-SGA	
11. Audit interni su SGS-SGA. Verificare: a) che siano effettuati audit interni per il SGS e SGA b) che esista una procedura in cui sono definite le modalità operative per la loro programmazione e conduzione	
12. Riesame del SGS-SGA. Verificare: a) che sia effettuato il riesame periodico del SGS-SGA b) che esista una procedura in cui sono definiti i criteri e le modalità di svolgimento dell'attività di riesame del SGS-SGA	<ul style="list-style-type: none"> <li>• punto 8 della lista di riscontro allegato H del D.Lgs. 105/2015 (RIR);</li> <li>• punto v della BAT 1 comune a tutte le attività IPPC (AIA)</li> </ul>

# Common aspects: *SMS* vs *EMS*



➤ **Organisation and personnel:** roles and responsibilities of the staff involved in S&EMS (e.g. HSE manager); organizational chart

➤ **Dangerous substances:** inventory of dangerous substances/mixtures and Safety Data Sheets (SDS) → CLP Regulation



➤ **Maintenance of critical equipments:** critical elements for safety & environment (e.g. equipments involved in incidental releases, components and devices for control, protection, and safety); maintenance plans and procedures

➤ **Operational control:** procedures and instructions for the operational control of the process and other activities relevant to the S&E purposes



➤ **Management of change:** all types of change (permanent or temporary) to plants or processes, which could have significant consequences for S&E

➤ **Emergency response:** procedures to manage emergency situations, preventing and mitigating impacts on human health and environment



# Common aspects: *SMS vs EMS*



➤ **Management of incidental events:** reporting of accidents occurred (major accidents, near misses, etc.) and investigation to identifying the causes and corrective and preventive actions

➤ **Monitoring performance:** adoption of S&E performance indicators (ex BAT-AEPL associated with the best available techniques)



➤ **Internal audit:** adoption and implementation of procedures for planning and carrying out periodic internal audit activities for the evaluation of the efficiency and effectiveness of the S&EMS

➤ **Review of S&EMS:** periodic review of the objectives indicated in the S&E Policy in order to identify the critical issues of the System and the related corrective actions

## + TECHNICAL ASPECTS

Incidental hypotheses → safety measures to prevent and protect in case of incident





# Conclusions

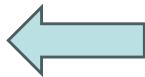


**2023** Mapping of establishments and comparison of the Seveso and IPPC inspection plans AND preparation together the first methodological proposal for integrating Seveso and IPPC activities, in compliance with our respective areas of competence.



**2024** Experimental implementation of a first joint inspection in a Seveso lower-tier establishment subject to ordinary IPPC control in the SSPC year

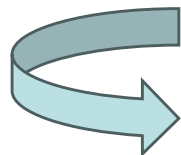
**Proposal of  
check-list**



**2025** Organization of a training activity for Arpa staff involved in IPPC inspections to present the project and the results of the first joint Seveso – IPPC inspection



**2026** Second joint inspection and development of a technical procedure



**CHECK-LIST**

## Inspections on SMS (Safety Management System) in a Seveso establishment

Directive 2012/18 -> D.Lgs. 105/2015

## Inspections on IED installations

Directive IED 1.0 and IED 2.0 → D.Lgs. 152/2006

### DIFFERENT PROCEDURES...

Separate regulatory framework:

- operators' obligations
- competent authorities
- sanctioning system

... but

**HARMONIZED AND  
COORDINATED**

### PURPOSE of the project:

- **optimize** and increase effectiveness of controls carried by different departments of the Agency → D.Lgs.103/ 2024 «Simplification of controls on economic activities»
- **share** the experience gained in over 20 years on Seveso inspections
- **integrate** skills of the personnel



# Thanks !

