

## ***ARPA's role in IED inspections: assessment of technical,procedural, programmatic and organisational aspects***

### *0. Personal details*

*1. Identification of the audit team*

*2. Scheduling and drafting of a detailed control plan*

*3. Audit execution times*

*4. Any provisions/procedures/instructions issued by the Management of the participating Environmental Agencies*

*5. Transmission and evaluation of the plant operator's monitoring and self-control data*

*6. Assessment by ARPA of the plant operator's disclosure obligations*

*7. Sampling and subsequent laboratory analyses carried out by ARPA as part of an audit*

*8. Verification by ARPA of requirements and obligations related to the following environmental parameters: wastewater, emissions into the atmosphere, waste products, noise, odour, protection of soil and groundwater, etc.*

*9. Assessment of the application of general and industry-specific BATs*

*10. Promotion of compliance and continuous improvement*

*11. Directions to the Competent Authority*

*12. Baseline report*

*13. Emmission Trading (CO<sub>2</sub> and climate change)*

*14. Companies with a major accident risk (Seveso Directive)*

*15. Livestock enterprises - IPPC activities referred to in point 6.6 of Annex 8*

*16. Economic impact of the IPPC audits on ARPA*

Compiling instructions
First type: YES / NO / sometimes
Second type: NEVER, <10% (infrequently carried out actions), ± 50% (averagely carried out actions), > 80% (frequently carried out actions)
Third type: use of numbers or explanations
<b><u>First and second type answers: please tick in the proper box</u></b>

2. Scheduling and drafting of a detailed control plan					
		YES	NO		
2.1	The ROUTINE inspection is considered complete when all environmental media have been checked				
2.2	The ROUTINE inspection is considered complete when even one environmental media has been checked				
2.3	NON-ROUTINE inspections predominate on ROUTINE inspections from the point of view of occurrence programming				
2.4	Any non-routine inspections are only performed on order of the Competent Authority or can be performed on Agency's initiative				
2.5	The occurrence of routine inspections is scheduled on predefined criteria				
2.6	To schedule the occurrence of routine inspections, the Agency uses formalized tools /criteria for risk assessment				
2.7	The results of the assessment of self-monitoring may affect the occurrence of routine inspections				
2.8	The results of the assessment of self-monitoring can trigger any non-routine inspections				
2.9	The outcomes of previous inspections can affect the occurrence of inspections				
		YES	NO	sometimes	
2.10	The inspection programme, with the definition of the inspection team, is defined on an annual basis				
2.11	The possible participation of external expert staff, other than exclusively dedicated to IED installation inspections, is formalized				
2.12	The required Agency/lab activities are defined at the planning stage of the IED inspections				
		Never	<10%	±50 %	>80%
2.13	Inspection activities on request of the Judicial Authority at which percentage affect the overall IED inspection activities				
2.14	The results of inspections in the previous year are evaluated in terms of achievements versus the human resources used, in order to modify the forthcoming inspection programs				

3. Audit execution times				
		YES	NO	
3.1	The duration of an inspection is defined in the annual programme			
3.2	The duration of an inspection is determined on the basis of available resources			
3.3	The duration of an inspection is defined on the basis of the authorization			

## QUESTIONNAIRE

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0. Personal details				
0	AGENCY			
0.1	Name of the official filling in the questionnaire			
0.2	Address, e mail and telephone number of the official			
0.3	Number of IED installations at regional level	National	Regional	
0.4	Does ARPA take part in national IED inspections	YES	NO	
0.5	Number of IED installations at regional level, also subject to Seveso Directive	National	Regional	
0.6	Number of IED installations at regional level included in point 6.6. of IED "Intensive rearing of poultry or pigs"	National	Regional	

1. Identification of the audit team				
		YES	NO	sometimes
1.1	The inspection team is established at:			
1.1 a	central level			
1.1 b	local level			
1.1 c	combination of C&L			
1.2	The inspection team consists of inspectors:			
1.2 a	from a structure permanently dedicated to IED inspections			
1.2 b	formed from time to time depending on the type of installation			
1.2 c	formed from time to time on the basis of the environmental media to be controlled			
1.2 d	also formed by staff of other institutions			
1.3	The inspection team establishment takes into account the inspector staff turnover imposed by the anti-corruption legislation			
1.4	In the establishment of the inspection team exists the possibility of a compensation between different territorial structures			
1.5	In the establishment of the inspection team exists the possibility of a compensation of the technical direction towards the territorial structures			
1.6	In the establishment of the inspection team the presence of personnel with qualification of Official Criminal Police (OCP) is envisaged			

4. Any provisions/procedures/instructions issued by the Management of the participating Environmental Agencies				
		YES	NO	partly
4.1	There are official procedures for the execution of the different inspection steps			
4.2	There are official procedures for the preparation of the final report of the inspections			
4.3	There are official procedures for handling violations involving administrative sanctions			
4.4	There are official procedures for handling violations involving criminal sanctions			
4.5	Courses of training / update of the inspection staff are envisaged as significant regulatory changes (eg. Eco-criminal law) occur			
4.6	There is a plan for continuous training of the inspection staff			
4.7	An introductory training for new inspectors is envisaged			
4.8	Inspection activities are included in a official quality management system			
4.9	Update of the procedures is envisaged when significant regulatory changes (eg. Eco-criminal law) occur			

5. Transmission and evaluation of the plant operator's monitoring and self-control data					
5a	Transmission of the plant operator's monitoring and self-control data	Never	<10%	±50 %	>80%
5a.1	The mode of transmission of the monitoring and self-control data are defined in the authorization				
5a.2	The operator is obliged to transmit also the analytical certificates for monitoring and self-control of provided data				
		YES	NO		
5a.3	There is an Agency's / Competent Authority IT platform where the operator enters directly the monitoring and self-control data				
5a.4	In case of a negative answer to the question 5a.3, the Agency /Competent Authority uses a database where monitoring and self-control data provided by the operator are transcribed				
5b		Never	<10%	±50 %	>80%
5b.1	The evaluation of the monitoring and the self-control data of the operator is conducted during the routine inspection				
5b.2	The evaluation of the monitoring and self-control data of the operator is conducted annually regardless routine inspection				
5b.3	The self-monitoring data assessed outside of the routine inspections (point 5b.2) give rise to a special report by ARPA				
5b.4	With regard to the monitoring data of each installation, the percentage at which the Agency carries out correctness verification				
5b.5	Tools, procedures and methods, used by the operator for the collection and evaluation of their own self-controls, are controlled and evaluated				
5b.6	The participation of laboratory to which the operators commit its self-controls are envisaged during installation inspections				
5b.7	In case of positive answer to the previous question 5b.6, specialist staff attends				
5b.8	The results of the monitoring and self-control data affect the planning of routine inspections				
5b.9	The results of the evaluation of self-monitoring can trigger any non-routine inspections				

6. Assessment by ARPA of the plant operator's disclosure obligations					
		Never	<10%	±50 %	>80%
6.1	Evaluation of the duty of communications of abnormal events (malfunctions, accidents, etc.) that cause significant environmental impacts				
6.2	Evaluation of communications of imposed limits exceeded				
6.3	Evaluation of E_PRTR Communications (EC Regulation no. 166/2006 "European Registry of Emissions and Transfer of Pollutants)				
6.4	Evaluation of the Unique Model of Environmental Declaration (UMED) submission				
6.5	Evaluation of the communications of plant modifications				
6.6	Evaluation of the communications about the change of the operator and / or the ownership of the authorization				
6.7	Assessment of the submission of the Solvents Management Plan				

7. Sampling and subsequent laboratory analyses carried out by ARPA as part of an audit					
		Never	<10%	±50 %	>80%
7.0	<i>The Monitoring and Control Plan (PMC) * of the authorization includes the number and frequency of sampling activities of the environmental recipients to be carried out by ARPA</i>				
7.1	WASTEWATERS				
7.1.1	Samples of wastewaters discharging in <u>into sewer</u> are collected				
7.1.2	Samples of wastewaters discharging <u>into the water body</u> are collected				
7.1.3	With what frequency, compared to the total number of samplings, are sampled the following types of wastewater:	Never	<10%	±50 %	>80%
7.1.3.1	industrial wastewater deriving from the production cycles				
7.1.3.2	industrial wastewater deriving from "cooling"				
7.1.3.3	wastewaters of "run-off rain"				
7.1.4	In case of presence of wastewater treatment plant:	Never	<10%	±50 %	>80%
7.1.4.1	sampling and subsequent laboratory analysis are carried out in different points of the plant (eg: equalization tank, the biological section output, output of physical chemical treatment, upstream-downstream filtration, etc.) to assess the yields of the different sections or to evaluate particular problems				
7.1.4.2	on-site measures are carried out for cognitive nature (not fiscal) through the use of portable equipment such as pH, electrical conductivity, dissolved oxygen, red-ox, spectrophotometric measures, through the use of kit: determination of nutrients (P, N, NH 3 etc.)				
7.1.5	Choosing of analytical parameters determined by the laboratory on sampled wastewater:	Never	<10%	±50 %	>80%
7.1.5.1	exclusively pollutants and parameters set out in the authorized "Monitoring Plan"				
7.1.5.2	also other parameters provided from Tab. 3, Annex 5, but not expressly set out in the authorized "Monitoring Plan"				
7.1.5.3	only some parameters				

7.2	EMISSIONS IN THE ATMOSPHERE	Never	<10%	±50 %	>80%
7.2.1	The Solvents Management Plan is evaluated				
7.2.2	Sampling of emissions are carried out during the routine inspections				
7.2.3	In case of sampling: how many stacks are normally controlled with respect to the total number in the installation (which have significant emissions).				
7.2.4	In case of sampling: which are the considered pollutants (choose from the following options):	Never	<10%	±50 %	>80%
7.2.4.1	only those included in the authorization Monitoring Plan				
7.2.4.2	only the most critical ones included in the authorization Monitoring Plan				
7.2.4.3	more than the ones included in the authorization Monitoring Plan				
7.2.4.4	only the pollutants that the ARPA's lab can analyse				
7.2.5	In installations with continuous emission monitoring systems (CEMS) tests are carried out in parallel with ARPA equipment to verify the proper operation and calibration of CEMS (Linearity, IAR, QAL 2, UNI 14181, etc.)				
7.2.6	During inspections, fact-finding tests are carried out to verify the internal procedures relating to the maintenance of proper calibration of measuring instruments, such as the reading of the gas certified samples owned by ARPA or belonging to the operator				
7.2.7	Fact-finding non-fiscal measures are carried out through portable equipment (PID, explosimeters, multi parametric instruments) for the quantification, for example, of diffuse emissions				
7.2.8	In case of particularly significant emissions resulting from incineration plants, co-incineration, the first smelting steel mills or foundries dealing with scrap, etc., micropollutants are determined (PAHs, dioxins-furans)	Seldom - not in each routine inspection	In each routine inspection	More frequently than in each routine inspection	Yearly
7.3	ODORS	YES	NO		
7.3.1	There is a regional legislation about odor / olfactory nuisance				
7.3.2	Limits are provided in odorimetric unit (o.u.)				
		Never	<10%	±50 %	>80%
7.3.3	In case of an installation with evident problems of olfactory nuisance, with which frequency does ARPA carry out odorimetric investigations				
7.3.4	Investigations are carried out by ARPA's laboratory				
7.4	NOISE	Never	<10%	±50 %	>80%
7.4.1	How often noise emission measuring campaigns are carried out, in the absence of complaints, only to verify the compliance to limits				
7.5	GROUNDWATER / INDUSTRIAL WATER FROM WELLS	Never	<10%	±50 %	>80%
7.5.1	In case of usage of groundwater for industrial purposes, with which frequency analyses are performed for the chemical-physical monitoring of extracted water				
7.5.2	The regional IED installations are equipped with a piezometric network				
7.5.3	In presence of piezometers for groundwater quality monitoring in the IED installation (eg, landfills, waste treatment plants, installations subject to remediation procedure, etc.), how often sampling and analysis are carried out				

7.6	WASTE MANAGEMENT	Never	<10%	±50 %	>80%
7.6.1	In case of inspections in installations for the recycling / disposal of waste (installations authorized for operations R or D), how often the incoming waste is sampled and analyzed				
7.6.2	In case of inspections in installations producing "end of waste" (EoW) or byproducts, how often such materials are sampled and analyzed				
7.6.3	During inspections in installations not specifically authorized to waste management - in which the production cycle will anyway generate waste to be recycled or disposed of - samplings and analyses of waste are carried out (e.g. to prove the correct attribution of the EWC code)				
7.6.4	During inspections of landfills leachate is sampled				
7.6.5	During inspections of landfills biogas is sampled in order to assess the quality for later use (eg. torch or motors)				
7.6.6	During inspections of landfill biogas is sampled for evaluation of diffuse emissions, lateral leaks or fugitive emissions				

**8. Verification by ARPA of requirements and obligations related to the following environmental parameters: wastewater, emissions into the atmosphere, waste products, noise, odour, protection of soil and groundwater, etc.**

		Never	<10%	±50 %	>80%
8.1	A detailed verification of the compliance of all the obligations of the IED authorization is carried out by ARPA				
8.2	Only the verification of the compliance of some obligations of the IED authorization is carried out by ARPA, focusing on those considered the most critical for the installation				
8.3	OTHER VERIFICATIONS				
8.3.1	SOIL				
8.3.1.1	During the inspections, the integrity of the pavements, the presence of curbed areas, the drainage basins, the cleaning of the yards, etc. are verified				
8.3.1.2	The following verifications and controls are carried out if tanks with hazardous substances are present:				
8.3.1.2.a	presence of vents and connections to abatement equipments				
8.3.1.2.b	presence and proper design and construction of drainage basins				
8.3.1.2.c	execution by the operator of any testing for leaks and / or structural integrity				
8.3.1.2.d	other (list further options) _____				
8.3.2	WASTE MANAGEMENT				
8.3.2.1	The proper storage and correct identification of waste in the installation is verified				
8.3.2.2	The proper compiling and filing of the loading / unloading registers of waste is verified				
8.3.2.3	The proper compiling and filing of the 4th copy of FIR (waste transportation forms) is verified				
8.3.2.4	The registration (if due) and the proper compiling of SISTRI, the national online register of waste, is verified				
8.3.2.5	Verification that the companies managing the installation's waste are properly authorized for the purpose is carried out				
8.3.2.6	Verification of the waste transportation authorizations is carried out				
8.3.2.7	The analyses for waste characterization before disposal / recycling, if required, are verified				
8.3.3	INSTALLATION MAINTENANCE				
8.3.3.1	Verification of documents attesting the maintenance of the critical parts of the plants (eg. pumps, control systems, fans, depuration systems, etc.) is carried out				



9. Assessment of the application of general and industry-specific BATs					
		Never	<10%	±50 %	>80%
9.1	Usually verification of the application of BAT (Best Available Techniques) during inspections is conducted				
9.2	Guidance or suggestions about the application of those not implemented is provided				
9.3	The level of preparation of the personnel of the Agency for the control of new BAT is considered sufficient				

10. Promotion of compliance and continuous improvement		
		YES NO
10.1	Promotion of continuous improvement is included in the final report of ARPA	
10.2	It is suggested to the operator the application of environmental management systems (eg ISO 14001, EMAS) even not certified	
10.3	Actions aimed at reducing the use of water resources	
10.4	Actions aimed at reducing the use of energy resources	
10.5	Emission performance is promoted	
10.6	Actions aimed at improving waste management	
10.7	Replacing hazardous substances by less hazardous or non-hazardous	
10.8	Other (list further options) _____	

11. Directions to the Competent Authority		
		YES NO
11.1	Changes / integrations of the Monitoring and Control Plan (if deemed necessary), also following evaluation of the data produced by the operator, are proposed	
11.2	Requests to clarify or change requirements in the authorization, not only regarding monitoring, hardly verifiable by the Agency, are submitted to the Competent Authority	
11.3	Requests to include new requirements in the authorization, not only related to the Monitoring and Control Plan, are submitted to the Competent Authority	

12. Baseline report				
		YES	NO	Comments
12.1	There is a regional provision that indicates for regional authorization, the timing for submission of the pre-report (verification of the need of compulsory submission of the baseline report) and the baseline report			
12.2	Regarding the baseline pre-report, the Agency shall provide a technical advice by issuing any requests for additions			
12.3	As part of the routine inspections, verification of the content of baseline pre-report is carried out. In case of positive answer what is verified:			
12.3.1	geological and hydrogeological characteristics of the site (describe in the comments how the verification is carried out)			
12.3.2	amount of relevant hazardous substances (describe in the comments how the verification is carried out)			
12.3.3	installation characteristics (describe in the comments how the verification is carried out)			
12.4	As a result of evaluations on the baseline pre-report some modification are normally made to groundwater and soil monitoring frequency			
12.5	For the preparation of the baseline report, the operator normally agrees the plan of characterization and the parameters to search with ARPA			
12.6	How is the baseline report validated by ARPA:			
12.6 a	ARPA's technical opinion carried out just on document basis			
12.6 b	ARPA's technical opinion carried out on document basis and on on-site visit			
12.6 c	ARPA's technical opinion carried out on document basis and on on-site visit, with groundwater and soil sampling and analysis			
12.6 d	no ARPA's technical opinion			

13. Emission Trading (CO2 and climate change)				
		YES	NO	
13.1	Verifications are conducted during IED inspections			
13.2	Indicate other assessments that are carried out			

14. Companies with a major accident risk (Seveso Directive)				
		YES	NO	
14.1	Inspections are performed by the same team that performs IED inspections			
14.2	The execution of a unique joint IED-Seveso inspection is preferred			
14.3	A specialized group is dedicated to Seveso inspections			

15. Livestock enterprises - IPPC activities referred to in point 6.6 of Annex 8					
		Never	<10%	±50 %	>80%
15.1	The Agency carries out soil samples in land spreading areas defined by the of Agronomic Utilization Plan (PUA)				
15.2	The suitability of the PUA with respect to the load of nitrogen produced by the livestock farming and the correspondence between the planned and the practiced crops is verified				
15.3	Fugitive emissions resulting from the activities of ammonia and methane releases from storage of slurry / slurry landspreading, are estimated				
15.4	Samples of chicken manure for the verification of the correct functioning of drying systems are collected				
15.5	Slurry samples for the assessment of the SV / ST ratio to verify the correct operation of the vacuum system are collected				
15.6	Checks are made on tanks of shovellable effluent storage, non shovellable and under grid				
15.7	The consistency of the livestock farming is checked by registers verification, with respect to the consistency stated				
15.8	Emission controls and / or management controls on the biogas plants from manure effluents are conducted, if present in the installation				

16. Economic impact of the IPPC audits on ARPA				
		Number	Comments	
16.1	In the year 2014 how many ordinary inspections (see paragraphs 2.1 and 2.2) were carried out by the Agency			
16.2	In the year 2014 how many ARPA's officials were employed in IED inspections			
16.3	In the year 2014 what was ARPA's revenue for IED inspections			
		YES	NO	Explanation
16.4	Even if no inspection has been performed during the year, the operator is still required to pay the fixed rate of the inspection activities			