



MED-IPPC-NET
Implementing Eco-Future

BILATERAL MEETING ARPA PIEMONTE – ARPA SARDEGNA

MED-IPPC-NET: il progetto e la rete

Cagliari, 11 ottobre 2011

La metodologia comune ed il software di MED-IPPC-NET, sviluppo e validazione

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Arpa Piemonte

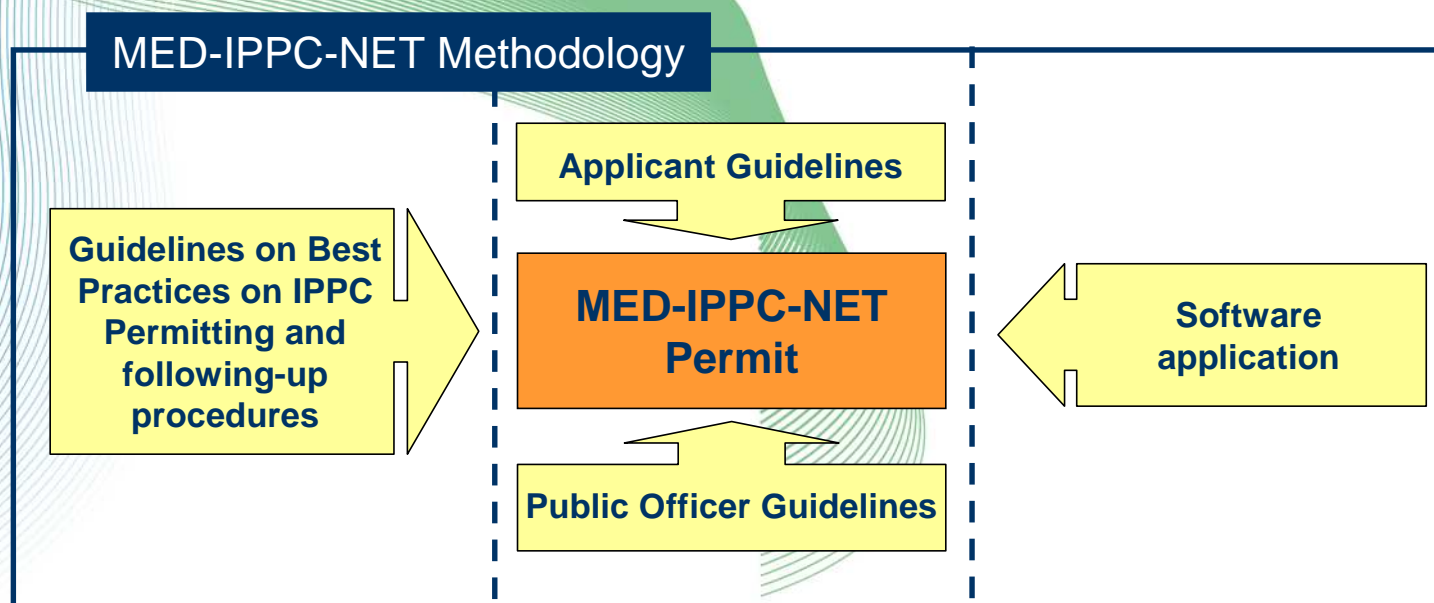




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Dopo la fase di studio ed analisi dello “stato dell’arte” sull’applicazione della direttiva IPPC nelle 7 regioni partecipanti al progetto (Piemonte, Sicilia, Toscana, Andalusia, Valencia, Macedonia Occidentale e Slovenia), che ha prodotto 7 analisi regionali ed una analisi interregionale, si è proceduto alla preparazione di una metodologia comune ed alla sua validazione in campo.





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Sono stati redatti dei **Prodotti pilota** :

- Linee guida sulle migliori pratiche sul rilascio delle autorizzazioni IPPC e procedure seguenti
- Linee guida per le aziende
- Linee guida per le Autorità competenti

Seguendo queste ed utilizzando l'applicazione informatica software

si arriva al modello di Autorizzazione Integrata Ambientale MED.



Linee guida sulle migliori pratiche sul rilascio delle autorizzazioni IPPC e procedure seguenti

Sono trattate le definizioni e le relative modalità di sviluppo e/o calcolo sui seguenti argomenti:

- ◆ **Principio di flessibilità**
- ◆ **Approccio integrato alla procedura di istruttoria e redazione dell'AIA**
- ◆ **Modifiche sostanziali o non sostanziali**
- ◆ **Introduzione dei BREf nel contesto nazionale, regionale, locale**
- ◆ **Accesso alle informazioni e partecipazione del pubblico nella procedura di istruttoria dell'AIA**
- ◆ **Semplificazioni nella procedura di emissione dell'AIA e dei controlli**
- ◆ **Valutazione ambientale**
- ◆ **Aggiornamento delle condizioni dell'autorizzazione**
- ◆ **Contenuto omogeneo delle condizioni dell'autorizzazione**
- ◆ **Attività di controllo, ispezione e monitoraggio**



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Ogni argomento è diviso nei capitoli:

- **Riferimenti**
- **Necessità**
- **Descrizione**
- **Realizzazione**
- **Risultati**

Ci sono quindi allegati con flow-chart e schemi esemplificativi

INDEX

Lo scopo è fornire i dati necessari in modo che l'Autorità Competente possa definire i contenuti dell'autorizzazione.

Sono trattati quindi tutti gli argomenti previsti dalla normativa IPPC.

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Esempio LG aziende



0. GENERAL INFORMATION

0.1. DESCRIPTION OF THE INSTALLATION

1.1.1. DATE OF THE INSTALLATION

The following data of the installation should be included (maximum 1 page):

- Name of the company, trade name, VAT number, full address (including location, province, town, region and country), telephone, fax, e-mail.
- Owner of the installation, operator, legal representative, person in charge of the plant or production (if applicable), person in charge of the environment (if applicable) and contact person with his/her corresponding data (full name, position in the company, address, telephone and e-mail).
- Number of work centres, plants, delegations, headquarters, corporate address, ... The data of the contact person, position, address, telephone, fax and e-mail should be included for each of the centres.
- Register number of industrial establishments.
- National Classification of Economic Activities (CNAE).
- Epigraph of the IPPC Directive to which the main activity and associated production capacity belong.
- Total number of workers.
- Investments targeted to environmental improvements.
- Organization chart (hierarchic representation of the staff with their corresponding positions or jobs).

Linee guida per le Autorità competenti

2. ENVIRONMENTAL CONDITIONS

2.1. ATMOSPHERIC EMISSIONS

2.1.1. CHANNELLED EMISSIONS

2.1.1.1. Requirements and Technical Conditions

The permit should include a brief description of the plant with reference to the technology adopted, referring to the details of the documents submitted by the operator at the instance or with subsequent additions.
For existing plants should be highlighted the changes that the operator has indicated in the application for permission and are authorized to issue the permit.
In some cases the technology used inside it contains primary emission abatement systems (eg in large combustion burners Low NOx) in this case is a good idea to specify that the use of these technologies is considered prescription.

2.1.1.2. Limits

The Competent Authority evaluate the analysis performed by the operator and returns to authorize any legal limits and benefits associated with the use of BAT. Then defines for each point emission limit values that can be expressed in different ways:

- Concentration
- Mass flow
- Specific emission factor (eg, quantity of pollutant per ton of processed product) limits for the concentration and mass flow is fundamental that it is indicated the reference period on which the assessment is made (eg hour, day).

It 'good to clarify that the limits must be respected in any condition of normal operation of the plant (above a minimum threshold so technical), so even during the harshest conditions of operation.

Later stages are associated with emissive peaks, marked by the operator may be flagged and excluded from compliance with the limit value. It's good to summarize the emissions allowed and its limits in a "summary of emissions similar to those already completed by the operator.

For emissive points subject to continuous monitoring would be appropriate to define different limit values of concentration and mass flow depending on the time base reference: eg. you can define a more restrictive limit on a daily basis combined with a bit a 'more permissive on an hourly basis.

It would be useful to indicate whether the limit imposed by the law, or by Bref is related to the technology used.

It 'still important to identify the limit explicitly, without reference to what is shown on laws, documents or other Bref.

Lo scopo è aiutare i funzionari dell'Autorità Competente a definire i contenuti dell'autorizzazione al fine di omogeneizzare il rilascio dell'autorizzazione.

2.1.1.1. Best Available Techniques

You should make note of available Best Available Techniques (BAT) vertical or horizontal. Referring to the comparison with the BAT by the firm should specify the BAT already in use and that are prescribed and those not currently in use that instead of prescribing should be adopted by a deadline.

2.1.1.2. Plan for Monitoring and Control

PMC prescription which should include:

- Timing of monitoring
- Type of measuring equipment and methods used (according to technical documentation)
- Methods of measurement, in accordance with applicable law,
- Number and duration of such measures,
- Duration and frequency,
- Methods of data collection and transmission of results to the Competent Authority (eg technical report, measurement reports, tables and summary)

This information can be summarized in the following tables:

Emission point or source. /Parameter pollutant.

Emission point n° provenience	Parameter/ pollutant	Indirect parameter	Frequency sampling	Method of recording of the checks

Modello di AIA **MED**

**Definito
utilizzando i
contenuti delle
linee guida.**

NAME OF THE COMPANY:

To be completed by the competent authority

REGION:

To be completed by the competent authority

COUNTRY:

To be completed by the competent authority

COMPETENT AUTHORITY:

To be completed by the competent authority

LEGAL ACT:

To be completed by the competent authority

VALIDITY AND DATE OF RESOLUTION:

To be completed by the competent authority

2. TECHNICAL ANNEXES

1.1. ENVIRONMENTAL PERFORMANCE INDICATORS

Prescription of indicators to submit, form at (type of table, columns and so on ...). Indicate what indicators are considered pertinent for company and indicate also the “EMAS oriented” and the Others. Insert the indicators in two tables to divide the “EMAS oriented” from the Others.

Examples:

EMAS Oriented

Environmental aspect	Indicator
Energy efficiency	total annual energy consumption, expressed in MWh or GJ / X
Material efficiency	percentage of total annual consumption of energy (electricity and heat) produced by the organisation from renewable energy sources
Water	annual mass-flow of different materials used' (excluding energy carriers and water), expressed in tones / X
Waste	total annual water consumption expressed in m ³ / X
Biodiversity	total annual generation of waste broken down by type expressed in tones / X
Emissions to air	total annual generation of hazardous waste expressed in kilograms or tones / X
	use of land', expressed in m ² of built-up area / X
	total annual emission of greenhouse gases', including at least emissions of CO ₂ , CH ₄ , N ₂ O, HFCs, PFCs and SF ₆ , expressed in tonnes of CO ₂ equivalent / X
	total annual air emission', including at least emissions of SO ₂ , NO _x and PM, expressed in kilograms or tones / X

X = total annual gross value-added expressed in million euro (EUR Mill.) or total annual physical output expressed in tonnes or, in the case of small organizations the total annual turnover or number of employees

Esempio



Applicazione informatica software



MED-IPPC-NET Software

File Tables Management Support

Exit IAT Innovation and Technology ARPA euroZabic Z&S Bistra GENERALITAT VALENCIANA kefe Scuola Superiore Sant'Anna Arpa

Create PDF Officer Guidelines

PERMITS **GEN** Officer Guidelines INS ENVIRONMENTAL CONDITIONS TECHNICAL ANNEXES

1.1 Description of the Installation 1.2 General Conditions - 1.7 Other authorizations, licences and environmental permits

Corporate name Contact details

Other relevant informations

Address UTM - X UTM - Y Map

Other relevant informations

Epigraph of the IPPC Directive Register number of industrial establishments and NACE codes

Organization Other relevant informations Activity and products Summary of the production process

Flow chart Other relevant informations

Environmental Aspects Pollutant Flow/foreseen consumption Source Depuration and/or Reduction

Main aspects and environmental impacts produced			
EnvAsp	Pollutant	FConsumption	Source

Informazioni generali



MED-IPPC-NEI Software

File Tables Management Support



Create PDF Office Galileians

PERMITS | GENERAL INFORMATIONS | ENVIRONMENTAL CONDITIONS | TECHNICAL ANNEXES |

2.1 Atmospheric Em. | 2.2 Elettromagnetic Em. | 2.3 Wastwaters | 2.4 Consumptions | 2.5 Soil Prot... | 2.6 Wastes Prod. | 2.7 Wastes Manag. | 2.8 Other Env.Asp. | 2.9 Unusual Environmental aspe
 2.3.1 Discharges of industrial waters | 2.3.2 Discharges of sanitary waters | 2.3.3 Discharges of rainwaters | 2.3.4 Other discharges |
 Requirements and Technical Conditions | Other |

1. Data for the discharge

1. Description

Discharge name		code	
U.T.M. coordinates		X:	Y:
Municipal/region name		code	Parcel No:

2. General data

Discharge into:

Public sewage (y/n)		Sewage with WWT (y/n)		WWT name	
Surface water (y/n)		Surface water name			
Soil (groundwater) (y/n)		External professional opinion by institute enclosed (y/n)			
Other		description			

3. Volume flow, amount and type of waste water for particular outlet stream which is conducted on that discharge

Outlet stream: industrial, cooling, sanitary and rainwater on that discharge

Outlet stream code	X1	X2	X3	X4
Waste water type				
Max. 6 hours average volume flow (l/s)				
Max. amount per day (m3/day)				
Max. annual amount (1000* m3/a)				
actual annual amount (m3)				
Type of discharging:				
total area conducted with rainwater (m2)*				

Condizioni Ambientali



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Il software è dotato di algoritmi che definiscono gruppi diversi di prescrizioni, che sono state tratte dalle autorizzazioni analizzate nella prima parte del progetto e sono correlate al grado di complessità dell'impianto.

Il software permette inoltre di inserire altre prescrizioni da parte dell'Autorità Competente (principio di flessibilità, particolari situazioni ambientali e/o di impatti).

Alla fine può essere stampato un documento da utilizzare come traccia per la redazione finale dell'AIA.





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Esempio di algoritmo

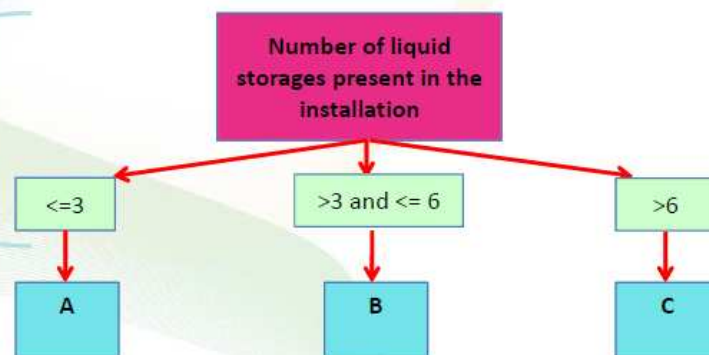


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Requirements and conditions to protect from contamination of soil and groundwater



data input



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Group of requirements and conditions to protect from contamination of soil and groundwater 1/3

GROUP A:

- Measures related to the storage of chemical products:** the firm should follow specific storage measures of chemical products (e.g. storage tank)
- Draining and collection system:** the firms should provide specific draining and collection system of flows (e.g. underground or non-underground storage tanks, etc)
- Control/analysis/monitoring of groundwater:** the firms should control/analyse/monitor groundwater and pollutants with specific modalities, techniques and with a periodical frequency.
- Monitoring of ground-water level:** the firms should monitor ground-water level with specific modalities, techniques and with a periodical frequency.
- Proofs of leakage detection and watertight:** the firms should carry out proofs of leakage detection and watertight with specific modalities, techniques and with a periodical frequency.





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Validazione della metodologia comune

Il test di validazione è stato eseguito su tutti i 5 settori indagati (impianti di combustione, cartiere, ceramiche, discariche, trattamento superficiale).

Ogni settore è stato indagato da un gruppo di lavoro con un capofila e sono state utilizzate le Autorizzazioni Integrate verificate nella prima parte del progetto in numero congruo (10 AIA per ogni settore provenienti da regioni diverse).

Sono stati così ottenuti dati per 3 tipi di valutazione e sono stati prodotti 3 documenti diversi:

- ❖ **Valutazione settoriale e regionale**
- ❖ **Valutazione settoriale ed interregionale**
- ❖ **Valutazione intersettoriale ed interregionale.**



Argomenti della Validazione

Contenuti del software: per ogni settore industriale il software presenta tutti i contenuti necessari a concedere l'autorizzazione ad un'installazione?

È necessario inoltre modificare o chiarire aspetti definiti nella versione pilota delle Linee Guida e del modello di Autorizzazione?

Funzioni del software: per ogni settore industriale quali campi e/o sezioni dovrebbero essere attivati per concedere l'autorizzazione ad un'installazione?

Esempio di valutazione settoriale regionale

SECTORS: 1.1. <input type="checkbox"/>	Per each industrial sector, does the SW include all needed contents to grant a permit to an installation?										Observations (O: Officer Guidelines; A: Applicant Guidelines; T: Template)	Per each industrial sector, which fields/sections should be activated to grant a permit to an installation?
Index	AAI.1	AAI.2	AAI.3	AAI.4	AAI.5	AAI.6	AAI.7	AAI.8	AAI.9	AAI.10		
1.GENERAL INFORMATION	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
1.1.DESCRPTION OF THE INSTALLATION	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Date of the installation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Location of the installation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Characteristics of the installation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Description of the production process, activities and products	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Main aspects and environmental impacts produced	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
1.2.GENERAL CONDITIONS	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
File	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Period of validity of the MED-IPPC-NET Permit	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Disciplinary proceeding	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Environmental discipline procedure	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
General obligations of the owner of the installation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Procedure costs of the MED-IPPC-NET Permit granting	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
1.3. FACTUAL BACKGROUND	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
1.4. LEGAL BACKGROUND	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		



Esempio di valutazione settoriale interregionale



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Sectional & Interregional report of the conclusion obtained through the validation process of the common methodology:

A) Per each industrial sector, does the SW include all needed contents to grant a permit to an installation? YES NO

1. General information	1.1. Description of the installation		<input checked="" type="checkbox"/>
	1.2. General conditions		<input checked="" type="checkbox"/>
	1.3. Factual background		<input checked="" type="checkbox"/>
	1.4. Legal background		<input checked="" type="checkbox"/>
	1.5. Declarations		<input checked="" type="checkbox"/>
	1.6. Authorities involved in the MED-IPPC-NET permit-granting process		<input checked="" type="checkbox"/>
	1.7. Other authorizations, licences and environmental permits		<input checked="" type="checkbox"/>
2. Environmental conditions	2.1. Atmospheric emissions	2.1.1. Channelled emissions	<input checked="" type="checkbox"/>
		2.1.2. Non-channelled emissions (diffuse)	<input checked="" type="checkbox"/>
		2.1.3. Environmental requirements for noise	<input checked="" type="checkbox"/>
		2.1.4. Environmental requirements for odours	<input checked="" type="checkbox"/>



2. Environmental conditions	2.2. Electromagnetic emissions		<input checked="" type="checkbox"/>
	2.3. Wastewaters (discharges)	2.3.1. Discharges of industrial waters	<input checked="" type="checkbox"/>
		2.3.2. Discharges of sanitary waters	<input checked="" type="checkbox"/>
		2.3.3. Discharges of rainwaters	<input checked="" type="checkbox"/>
	2.4. Consumptions	2.4.1. Water consumption	<input checked="" type="checkbox"/>
		2.4.2. Energy consumption	<input checked="" type="checkbox"/>
		2.4.3. Fuel consumption	<input checked="" type="checkbox"/>
		2.4.4. Other consumptions	<input checked="" type="checkbox"/>
	2.5. Soil protection and groundwater		<input checked="" type="checkbox"/>
	2.6. Wastes production	2.6.1. Hazardous wastes	<input checked="" type="checkbox"/>
		2.6.2. Non-hazardous wastes	<input checked="" type="checkbox"/>
		2.6.3. Containers and container wastes	<input checked="" type="checkbox"/>
		2.6.4. Other types of wastes	<input checked="" type="checkbox"/>





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La validazione è stata conclusa nell'estate ed è stata discussa nel meeting dei partner che si è svolto a settembre.

Le conclusioni tratte saranno utilizzate per apportare modifiche/correzioni alle linee guida ed al software ed ottenere la **versione finale, che potrà essere utilizzata da tutti i soggetti interessati che fanno parte della rete del progetto.**





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I documenti del progetto sono disponibili sul sito

<http://www.medippcnet.eu/>



Project | Activities | Partnership | Events | Publications | Contact Us | The Network | Links



News

- 14th September, International Conference MED-IPPC-NET
- The third issue of the MED-IPPC-NET project Newsletter is online now!
- The second issue of the MED-IPPC-NET project Newsletter is online now!

[More news](#)

Events

October 2011

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MED-IPPC-NET

MED-IPPC-NET is a 30-month project co-financed by the European Regional Development Fund through the MED Programme for interregional cooperation.

Its main goal is to identify key aspects in the implementation of the **IPPC Directive** concerning **Integrated Pollution Prevention and Control** (96/61/EC) within the Mediterranean area, in order to establish a set of common criteria that should be taken into account by all regions wishing to enhance its implementation. These common criteria will be the inputs for the development of a common methodology (guidelines) for the implementation of the **IPPC Directive**, which will be validated in the industrial sector, supporting thus the harmonisation of permit issuing across the Mediterranean.





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Settori IPPC coinvolti

GRAZIE PER L'ATTENZIONE !

1. Numero di infrastrutture presenti
2. Numero di autorizzazioni IPPC emesse



11

Impianti di combustione



35

Impianti per la
fabbricazione di
prodotti ceramici



54

Discariche



61

Impianti per la
fabbricazione di carta
e cartoni



26

Impianti per il trattamento
di superfici di metallo e
materie plastiche

IPPC EPIGRAPH

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