

Preg.mi

Provincia della Spezia  
Settore Gestione Ambiente e Tutela Ambientale  
Via Vittorio Veneto, 2  
19124 La Spezia  
Att.ne Ing G. Benvenuto

Comune della Spezia  
Dipartimento II "Territorio e politiche ambientali"  
Piazza Europa, 1  
19124 La Spezia  
Att.ne Ing C. Canneti

**OGGETTO: trasmissione dati metalli relativi al II, III e IV TRIMESTRE 2015 e riepilogo anno 2015.**

Si trasmettono in allegato i dati relativi alla ricerca dei metalli nell'aria ai sensi del D.Lgs. 155/2010.

Si precisa che i dati relativi al II Trimestre erano già stati inviati con nota della scrivente nr. 0061 del 05/01/16: tali dati sono stati rivisti a seguito del cambio della metodica di analisi avvenuta in tale periodo. In particolare le modifiche hanno riguardato alcuni valori inferiori al limite di quantificazione, con conseguenze praticamente trascurabili nei valori medi del sopraccitato trimestre.

Rimanendo a disposizione per ulteriori chiarimenti, si porgono cordiali saluti.

***Il Responsabile Settore Agenti Fisici-  
Inquinamento Atmosferico***

***dott. Ing. G.C. Leveratto***

Allegati:

- dati metalli II TRIMESTRE 2015
- dati metalli III TRIMESTRE 2015
- dati metalli IV TRIMESTRE 2015
- dati metalli riepilogo anno 2015

Il Dirigente Responsabile U.O Territorio: dott.ssa. F.Colonna

Il Dirigente Responsabile Settore Agenti Fisici-Inquinamento Atmosferico: dott.G.C. Leveratto

Estensore Provvedimento: dott. R.Cresta

**Dipartimento Provinciale della Spezia**

Via Fontevivo, 21 L - 19125 La Spezia  
Tel. +39 0187 2814 207- fax. +39 0187 2814 230  
roberto.cresta@arpal.gov.it - www.arpal.gov.it  
C.F. e P.IVA 01305930107



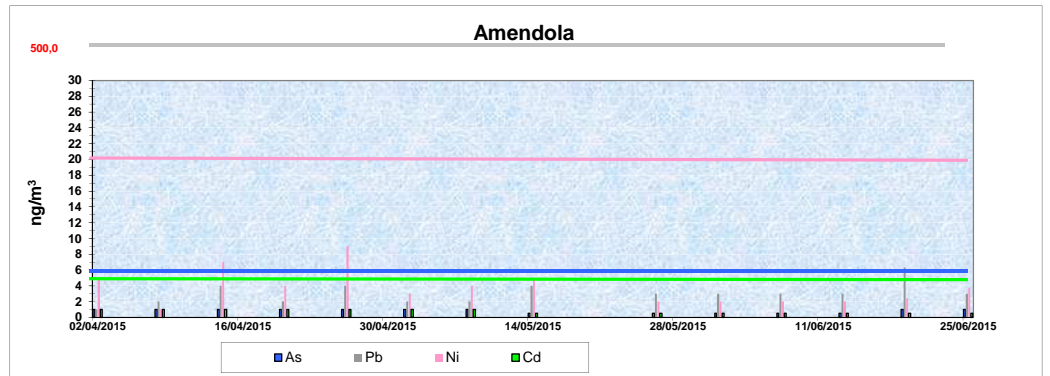
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### Metalli anno 2015

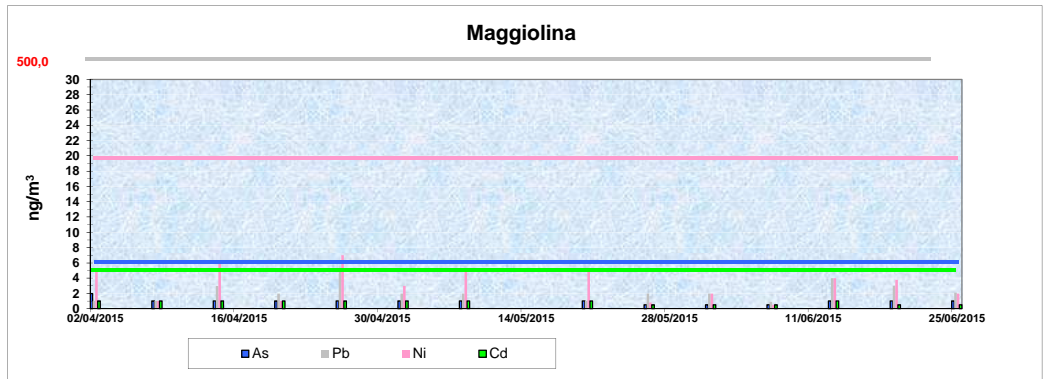
### Valori obiettivo annuale per As, Ni, Cd e valore limite per il piombo ai sensi D.Lgs. 155/2010

Arsenico: 6 ng/m<sup>3</sup> - Cadmio 5ng/m<sup>3</sup> - Nichel 20 ng/m<sup>3</sup> - Piombo 500 ng/m<sup>3</sup>

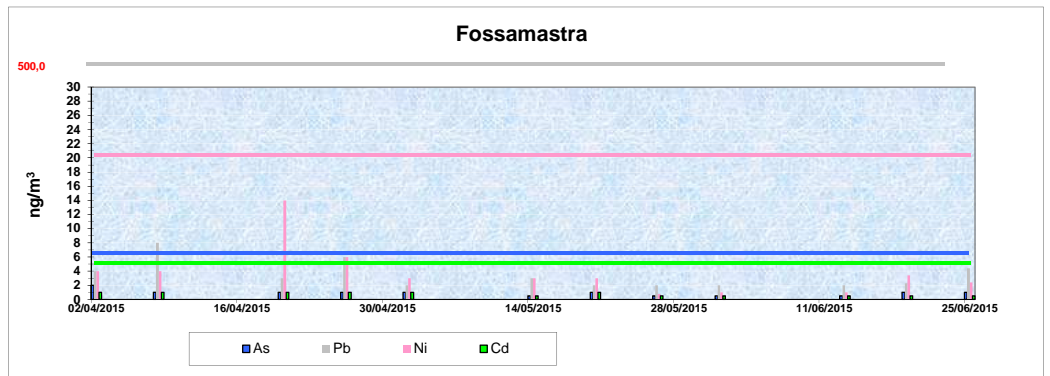
Amendola				
	As	Pb	Ni	Cd
2-apr-15	< 1,0	1,0	5,0	< 1,0
8-apr-15	< 1,0	2,0	1,0	< 1,0
14-apr-15	< 1,0	4,0	7,0	< 1,0
20-apr-15	< 1,0	2,0	4,0	< 1,0
26-apr-15	< 1,0	4,0	9,0	< 1,0
2-mag-15	< 1,0	2,0	3,0	< 1,0
8-mag-15	< 1,0	2,0	4,0	< 1,0
14-mag-15	< 0,5	4,0	5,0	< 0,5
20-mag-15	-	-	-	-
26-mag-15	< 0,5	3,0	2,0	< 0,5
1-giu-15	< 0,5	3,0	2,0	< 0,5
7-giu-15	< 0,5	3,0	2,0	< 0,5
13-giu-15	< 0,5	3,0	2,0	< 0,5
19-giu-15	< 1,0	6,3	2,4	< 0,5
25-giu-15	< 1,0	3,0	3,7	< 0,5
media (*)	0,8	3,0	3,7	0,8



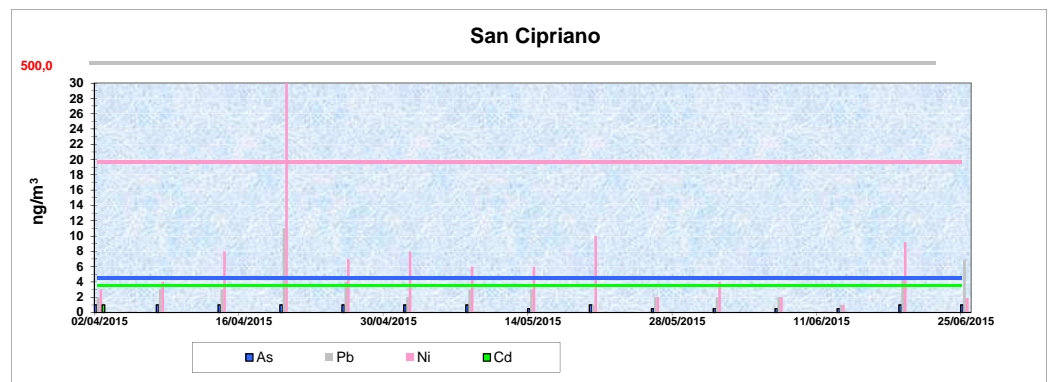
Maggiolina				
	As	Pb	Ni	Cd
2-apr-15	2,0	1,0	5,0	< 1,0
8-apr-15	< 1,0	< 1,0	1,0	< 1,0
14-apr-15	< 1,0	3,0	6,0	< 1,0
20-apr-15	< 1,0	2,0	1,0	< 1,0
26-apr-15	< 1,0	5,0	7,0	< 1,0
2-mag-15	< 1,0	2,0	3,0	< 1,0
8-mag-15	< 1,0	2,0	5,0	< 1,0
14-mag-15	-	-	-	-
20-mag-15	< 1,0	1,0	5,0	< 1,0
26-mag-15	< 0,5	2,0	0,8	< 0,5
1-giu-15	< 0,5	2,0	2,0	< 0,5
7-giu-15	< 0,5	0,9	< 0,5	< 0,5
13-giu-15	< 1,0	4,0	4,0	1,0
19-giu-15	< 1,0	3,0	3,8	< 0,5
25-giu-15	< 1,0	2,1	2,0	< 0,5
media (*)	1,0	2,2	3,3	0,8



Fossamastra				
	As	Pb	Ni	Cd
2-apr-15	2,0	4,0	4,0	< 1,0
8-apr-15	< 1,0	8,0	4,0	< 1,0
14-apr-15	-	-	-	-
20-apr-15	< 1,0	3,0	14,0	< 1,0
26-apr-15	< 1,0	6,0	6,0	< 1,0
2-mag-15	< 1,0	2,0	3,0	< 1,0
8-mag-15	-	-	-	-
14-mag-15	< 0,5	3,0	3,0	< 0,5
20-mag-15	< 1,0	2,0	3,0	< 1,0
26-mag-15	< 0,5	2,0	0,8	< 0,5
1-giu-15	< 0,5	2,0	1,0	< 0,5
7-giu-15	-	-	-	-
13-giu-15	< 0,5	2,0	1,0	< 0,5
19-giu-15	< 1,0	2,3	3,4	< 0,5
25-giu-15	< 1,0	4,4	2,4	< 0,5
media (*)	0,9	3,4	3,8	0,8



San Cipriano				
	As	Pb	Ni	Cd
2-apr-15	1,0	2,0	3,0	< 1,0
8-apr-15	< 1,0	3,0	4,0	< 1,0
14-apr-15	< 1,0	3,0	8,0	< 1,0
20-apr-15	< 1,0	11,0	44,0	< 1,0
26-apr-15	< 1,0	4,0	7,0	< 1,0
2-mag-15	< 1,0	2,0	8,0	< 1,0
8-mag-15	< 1,0	3,0	6,0	< 1,0
14-mag-15	< 0,5	3,0	6,0	< 0,5
20-mag-15	< 1,0	< 1,0	10,0	< 1,0
26-mag-15	< 0,5	2,0	2,0	< 0,5
1-giu-15	< 0,5	2,0	4,0	< 0,5
7-giu-15	< 0,5	2,0	2,0	< 0,5
13-giu-15	< 0,5	1,0	1,0	< 0,5
19-giu-15	< 1,0	4,5	9,2	< 0,5
25-giu-15	< 1,0	6,9	1,9	< 0,5
media (*)	0,8	3,4	7,7	0,8



(\*) calcolata tenendo conto anche dei valori sotto il limite di rilevabilità strumentale espresso in ng/m<sup>3</sup> come da tabella

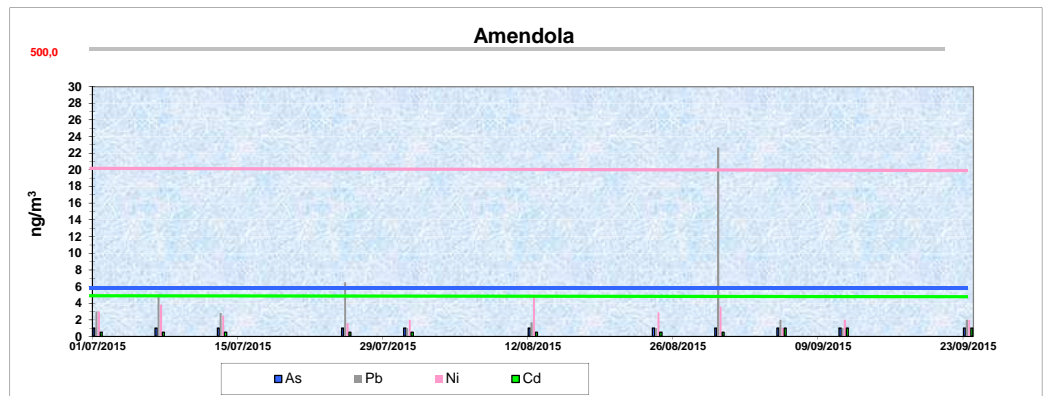
metodo	As	Pb	Ni	Cd
EPA 3051A + EPA 6010C	1,0	1,0	1,0	1,0
UNI EN 14902:2005	0,5	0,5	0,5	0,5

### Metalli anno 2015

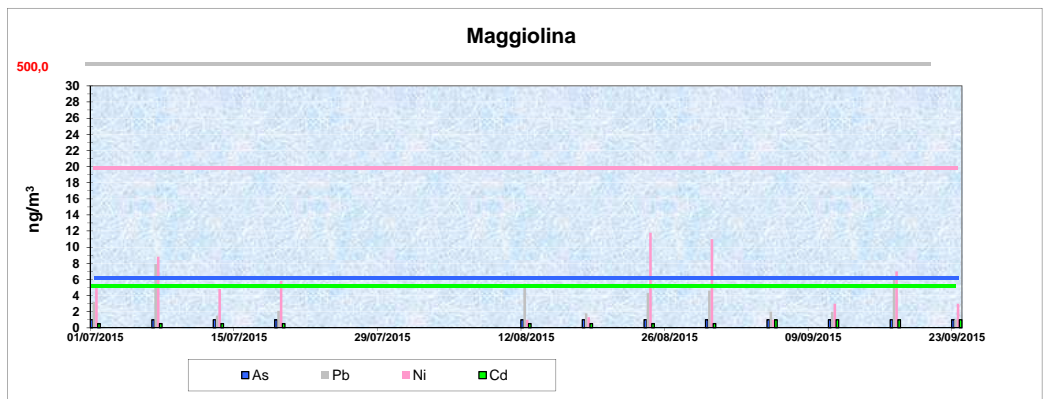
### Valori obiettivo annuale per As, Ni, Cd e valore limite per il piombo ai sensi D.Lgs. 155/2010

Arsenico: 6 ng/m<sup>3</sup> - Cadmio 5ng/m<sup>3</sup> - Nichel 20 ng/m<sup>3</sup> - Piombo 500 ng/m<sup>3</sup>

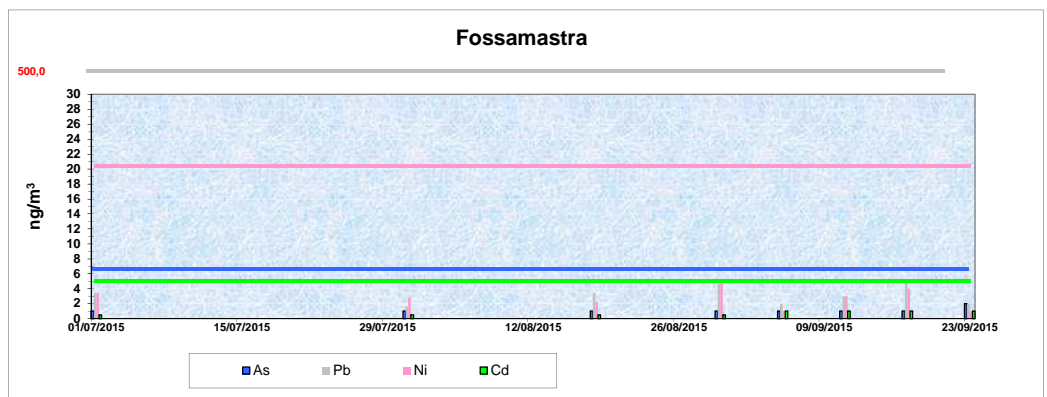
Amendola				
	As	Pb	Ni	Cd
1-lug-15	< 1,0	3,0	3,0	< 0,5
7-lug-15	< 1,0	4,8	3,8	< 0,5
13-lug-15	< 1,0	2,8	2,5	< 0,5
19-lug-15	-	-	-	-
25-lug-15	< 1,0	6,5	1,6	< 0,5
31-lug-15	< 1,0	< 1,0	< 2,0	< 0,5
6-ago-15	-	-	-	-
12-ago-15	< 1,0	1,7	4,9	< 0,5
18-ago-15	-	-	-	-
24-ago-15	< 1,0	< 1,0	< 2,9	< 0,5
30-ago-15	< 1,0	22,7	3,6	< 0,5
5-set-15	< 1,0	2,0	1,0	< 1,0
11-set-15	1,0	1,0	2,0	< 1,0
17-set-15	-	-	-	-
23-set-15	1,0	2,0	2,0	< 1,0
29-set-15	< 1,0	2,0	2,0	< 1,0
media (*)	1,0	4,4	2,7	0,6



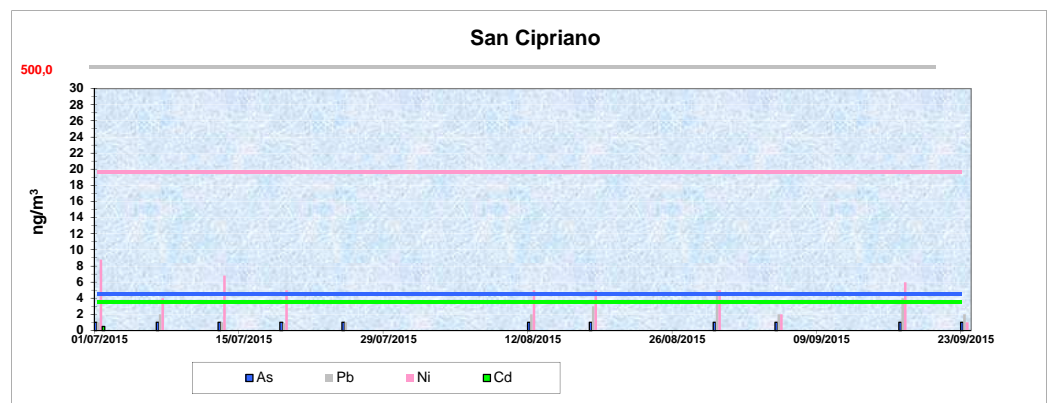
Maggiolina				
	As	Pb	Ni	Cd
1-lug-15	< 1,0	3,2	5,2	< 0,5
7-lug-15	< 1,0	7,9	8,8	< 0,5
13-lug-15	< 1,0	1,5	4,8	< 0,5
19-lug-15	< 1,0	2,1	5,8	< 0,5
25-lug-15	-	-	-	-
31-lug-15	-	-	-	-
6-ago-15	-	-	-	-
12-ago-15	< 1,0	5,5	1,0	< 0,5
18-ago-15	< 1,0	1,8	1,3	< 0,5
24-ago-15	< 1,0	4,3	11,8	< 0,5
30-ago-15	< 1,0	4,6	11,0	< 0,5
5-set-15	< 1,0	2,0	1,0	< 1,0
11-set-15	< 1,0	2,0	3,0	< 1,0
17-set-15	< 1,0	6,0	7,0	< 1,0
23-set-15	< 1,0	1,0	3,0	< 1,0
29-set-15	< 1,0	3,0	1,0	< 1,0
media (*)	1,0	3,5	5,3	0,7



Fossamastra				
	As	Pb	Ni	Cd
1-lug-15	< 1,0	3,4	3,4	< 0,5
7-lug-15	-	-	-	-
13-lug-15	-	-	-	-
19-lug-15	-	-	-	-
25-lug-15	-	-	-	-
31-lug-15	< 1,0	1,6	2,8	< 0,5
6-ago-15	-	-	-	-
12-ago-15	-	-	-	-
18-ago-15	< 1,0	3,4	2,2	< 0,5
24-ago-15	-	-	-	-
30-ago-15	< 1,0	4,6	5,0	< 0,5
5-set-15	< 1,0	2,0	1,0	< 1,0
11-set-15	< 1,0	3,0	3,0	< 1,0
17-set-15	< 1,0	5,0	4,0	< 1,0
23-set-15	2,0	2,0	1,0	< 1,0
29-set-15	2,0	2,0	< 1,0	< 1,0
media (*)	1,1	3,1	2,8	0,8



San Cipriano				
	As	Pb	Ni	Cd
1-lug-15	< 1,0	1,0	8,8	< 0,5
7-lug-15	< 1,0	2,0	4,0	< 0,5
13-lug-15	< 1,0	1,0	6,8	< 0,5
19-lug-15	< 1,0	0,9	5,0	< 0,5
25-lug-15	< 1,0	1,0	-	< 0,5
31-lug-15	-	-	-	-
6-ago-15	-	-	-	-
12-ago-15	< 1,0	2,0	< 5,0	< 0,5
18-ago-15	< 1,0	3,0	< 5,0	< 0,5
24-ago-15	-	-	-	-
30-ago-15	< 1,0	5,0	< 5,0	< 0,5
5-set-15	< 1,0	2,0	2,0	< 1,0
11-set-15	-	-	-	-
17-set-15	< 1,0	4,0	6,0	< 1,0
23-set-15	< 1,0	2,0	< 1,0	< 1,0
29-set-15	< 1,0	3,0	2,0	< 1,0
media (*)	1,0	2,2	4,9	0,6



(\*) calcolata tenendo conto anche dei valori sotto il limite di rilevabilità strumentale espresso in ng/m<sup>3</sup> come da tabella

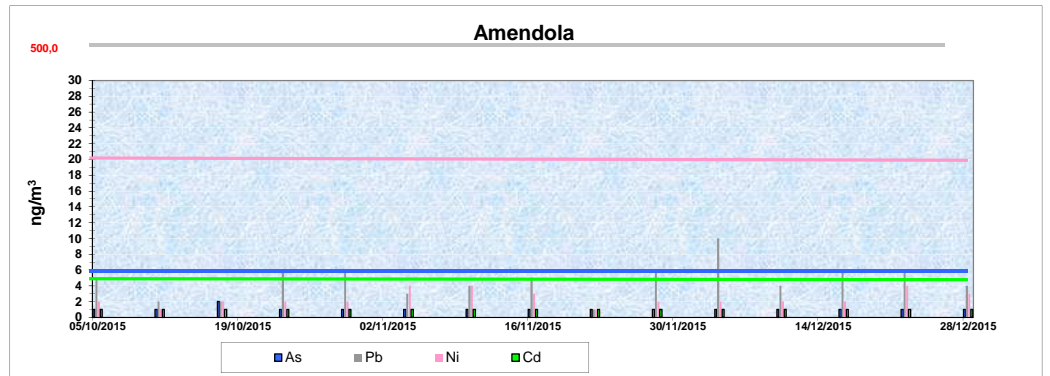
metodo	As	Pb	Ni	Cd
EPA 3051A + EPA 6010C	1,0	1,0	1,0	1,0
UNI EN 14902:2005	0,5	0,5	0,5	0,5

### Metalli anno 2015

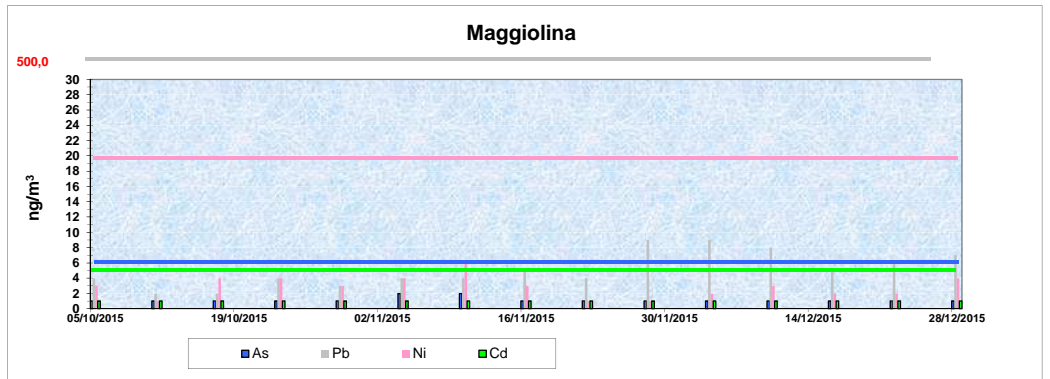
### Valori obiettivo annuale per As, Ni, Cd e valore limite per il piombo ai sensi D.Lgs. 155/2010

Arsenico: 6 ng/m<sup>3</sup> - Cadmio 5ng/m<sup>3</sup> - Nichel 20 ng/m<sup>3</sup> - Piombo 500 ng/m<sup>3</sup>

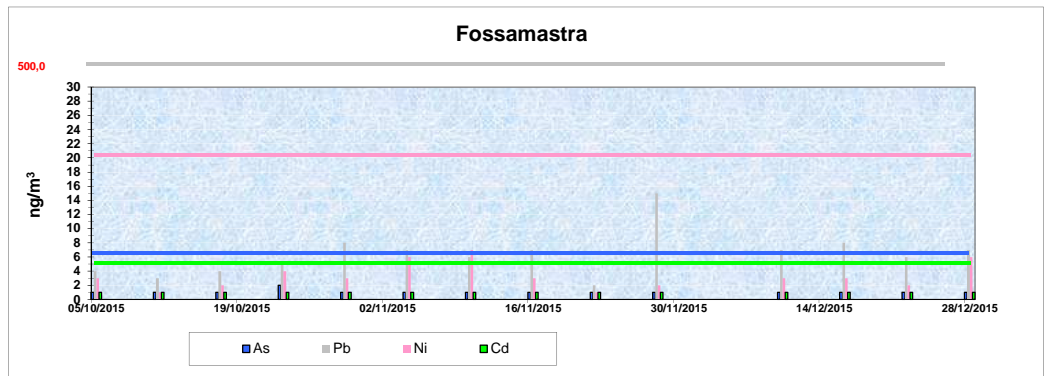
Amendola				
	As	Pb	Ni	Cd
5-ott-15	< 1,0	5,0	2,0	< 1,0
11-ott-15	< 1,0	2,0	1,0	< 1,0
17-ott-15	2,0	2,0	2,0	< 1,0
23-ott-15	1,0	6,0	2,0	< 1,0
29-ott-15	< 1,0	6,0	2,0	< 1,0
4-nov-15	< 1,0	3,0	4,0	< 1,0
10-nov-15	< 1,0	4,0	4,0	< 1,0
16-nov-15	< 1,0	5,0	3,0	< 1,0
22-nov-15	< 1,0	1,0	< 1,0	< 1,0
28-nov-15	< 1,0	6,0	2,0	< 1,0
4-dic-15	1,0	10,0	2,0	< 1,0
10-dic-15	< 1,0	4,0	2,0	< 1,0
16-dic-15	< 1,0	6,0	2,0	< 1,0
22-dic-15	< 1,0	6,0	4,0	< 1,0
28-dic-15	< 1,0	4,0	3,0	< 1,0
media (*)	1,1	4,7	2,4	1,0



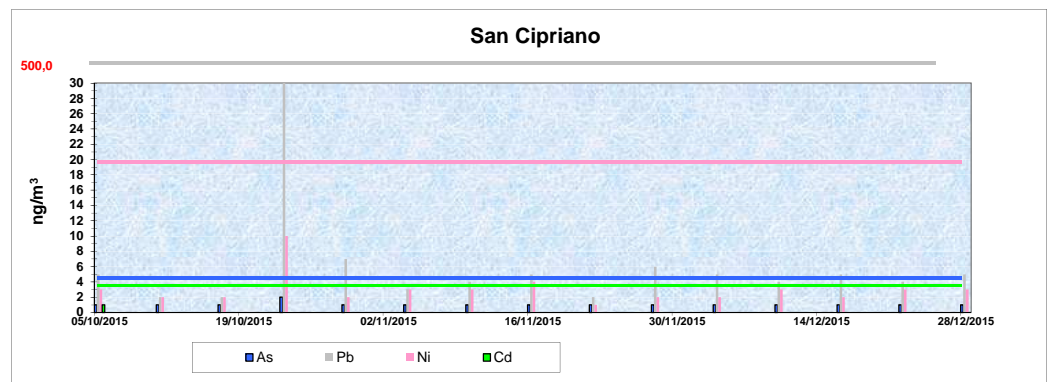
Maggiolina				
	As	Pb	Ni	Cd
5-ott-15	< 1,0	4,0	3,0	< 1,0
11-ott-15	< 1,0	2,0	< 1,0	< 1,0
17-ott-15	1,0	2,0	4,0	< 1,0
23-ott-15	1,0	4,0	4,0	< 1,0
29-ott-15	< 1,0	3,0	3,0	< 1,0
4-nov-15	2,0	4,0	4,0	< 1,0
10-nov-15	2,0	4,0	6,0	< 1,0
16-nov-15	< 1,0	5,0	3,0	< 1,0
22-nov-15	< 1,0	4,0	< 1,0	< 1,0
28-nov-15	< 1,0	9,0	1,0	< 1,0
4-dic-15	< 1,0	9,0	2,0	< 1,0
10-dic-15	< 1,0	8,0	3,0	< 1,0
16-dic-15	< 1,0	5,0	2,0	< 1,0
22-dic-15	< 1,0	6,0	2,0	< 1,0
28-dic-15	< 1,0	7,0	4,0	< 1,0
media (*)	1,1	5,1	2,9	1,0



Fossamastra				
	As	Pb	Ni	Cd
5-ott-15	< 1,0	4,0	3,0	< 1,0
11-ott-15	< 1,0	3,0	1,0	< 1,0
17-ott-15	< 1,0	4,0	2,0	< 1,0
23-ott-15	2,0	5,0	4,0	< 1,0
29-ott-15	< 1,0	8,0	3,0	< 1,0
4-nov-15	< 1,0	7,0	6,0	< 1,0
10-nov-15	< 1,0	6,0	7,0	< 1,0
16-nov-15	< 1,0	7,0	3,0	< 1,0
22-nov-15	< 1,0	2,0	< 1,0	< 1,0
28-nov-15	< 1,0	15,0	2,0	< 1,0
4-dic-15	-	-	-	-
10-dic-15	< 1,0	7,0	3,0	< 1,0
16-dic-15	< 1,0	8,0	3,0	< 1,0
22-dic-15	< 1,0	6,0	2,0	< 1,0
28-dic-15	< 1,0	7,0	6,0	< 1,0
media (*)	1,1	6,4	3,3	1,0



San Cipriano				
	As	Pb	Ni	Cd
5-ott-15	< 1,0	5,0	3,0	< 1,0
11-ott-15	1,0	2,0	2,0	< 1,0
17-ott-15	< 1,0	2,0	2,0	< 1,0
23-ott-15	2,0	30,0	10,0	< 1,0
29-ott-15	< 1,0	7,0	2,0	< 1,0
4-nov-15	< 1,0	3,0	3,0	< 1,0
10-nov-15	< 1,0	4,0	3,0	< 1,0
16-nov-15	< 1,0	5,0	4,0	< 1,0
22-nov-15	< 1,0	2,0	< 1,0	< 1,0
28-nov-15	< 1,0	6,0	2,0	< 1,0
4-dic-15	1,0	5,0	2,0	< 1,0
10-dic-15	< 1,0	4,0	3,0	< 1,0
16-dic-15	< 1,0	5,0	2,0	< 1,0
22-dic-15	< 1,0	4,0	3,0	< 1,0
28-dic-15	< 1,0	5,0	3,0	< 1,0
media (*)	1,1	5,9	3,0	1,0



metodo	As	Pb	Ni	Cd
EPA 3051A + EPA 6010C	1,0	1,0	1,0	1,0
UNI EN 14902:2005	0,5	0,5	0,5	0,5

(\*) calcolata tenendo conto anche dei valori sotto il limite di rilevabilità strumentale espresso in ng/m<sup>3</sup> come da tabella

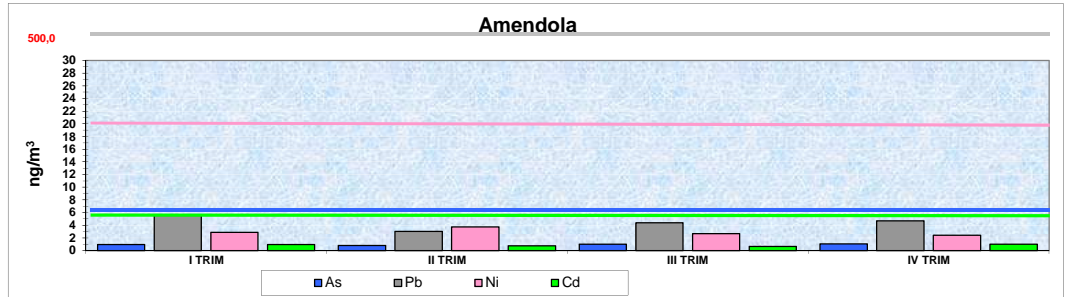
## Metalli anno 2015

**Valori obiettivo annuale per As, Ni, Cd e valore limite per il piombo ai sensi D.Lgs. 155/2010**

Arsenico: 6 ng/m<sup>3</sup> - Cadmio 5ng/m<sup>3</sup> - Nickel 20 ng/m<sup>3</sup> - Piombo 500 ng/m<sup>3</sup>

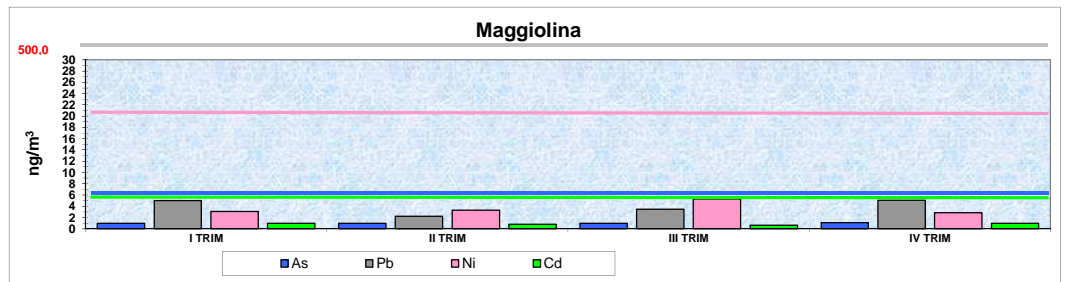
### Amendola

	As	Pb	Ni	Cd
I TRIM	1,0	5,5	2,9	1,0
II TRIM	0,8	3,0	3,7	0,8
III TRIM	1,0	4,4	2,7	0,6
IV TRIM	1,1	4,7	2,4	1,0
media (*)	1,0	4,4	2,9	0,8



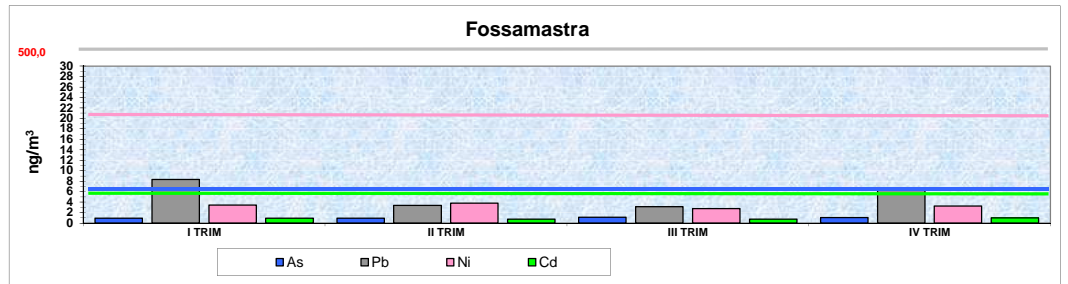
### Maggiolina

	As	Pb	Ni	Cd
I TRIM	1,0	5,0	3,1	1,0
II TRIM	1,0	2,2	3,3	0,8
III TRIM	1,0	3,5	5,3	0,7
IV TRIM	1,1	5,1	2,9	1,0
media (*)	1,0	3,9	3,6	0,9



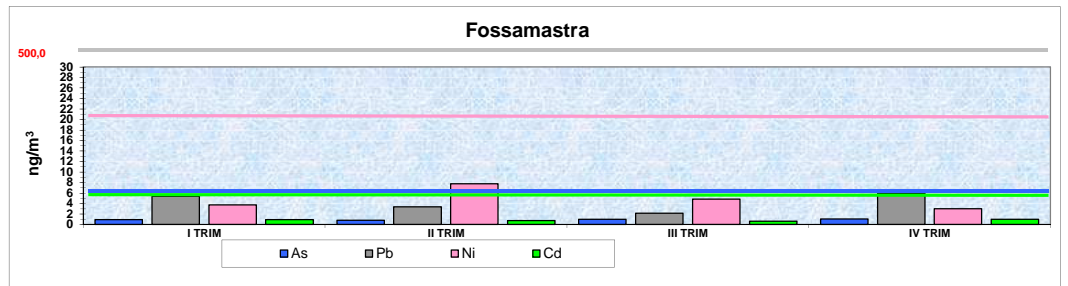
### Fossamastra

	As	Pb	Ni	Cd
I TRIM	1,0	8,3	3,5	1,0
II TRIM	0,9	3,4	3,8	0,8
III TRIM	1,1	3,1	2,8	0,8
IV TRIM	1,1	6,4	3,3	1,0
media (*)	1,0	5,3	3,3	0,9



### San Cipriano

	As	Pb	Ni	Cd
I TRIM	1,0	5,4	3,7	1,0
II TRIM	0,8	3,4	7,7	0,8
III TRIM	1,0	2,2	4,9	0,6
IV TRIM	1,1	5,9	3,0	1,0
media (*)	1,0	4,2	4,8	0,8



(\*) calcolata tenendo conto anche dei valori sotto il limite di rilevabilità

metodo	As	Pb	Ni	Cd
EPA 3051A + EPA 6010C	1,0	1,0	1,0	1,0