



EUROPEAN COMMISSION
JOINT RESEARCH CENTRE

Sustainable Resources Directorate D
Land Resources Unit D.3

Ispra/10/11/2016

3rd Eionet NRC Soil Ad-hoc Working Group on Contaminated Sites and Brownfields

Minutes

23rd of September 2016

Venue: Exhibition and Congress Centre, Ferrara Fiera Congressi, Ferrara (Italy)

Location: Room B

Chair: Ana Payá Pérez (DG JRC)

Rapporteurs: Josiane Masson (DG ENV)

1. SETTING THE SCENE

a) Ana Payá Pérez welcomed the participants, Dietmar Müller-Grabher (AT), Johan Ceename (BE-Flanders), Bernard Lemaire (BE-Brussels), Antonio Callaba de Roa (ES), Marco Falconi (IT), Antonella Vecchio (IT), Jorge Santos Garcia (PT), Dragana Vidojevic (Serbia), Katarina Paluchova (SK), Christian Andersen (DK), Morten Sørensen (DK), Outi Pyy (FI) and Christiane Wermeille (CH) and presented the objectives of the meeting which are, firstly, to discuss the questionnaire on indicator LSI003, secondly to inform on the European ratification process of the UN Minamata Convention on mercury, exchange of information on the existing contaminated sites with mercury in member countries and to discuss the possible new mandate of the group.

Excused: Sophie Capus (LU), Christophe Reuser (replaced by Christiane Wermeille) (CH), Milan Sanka (CZ), Bernarda Podlipnik (SI), Veronique Antoni (FR), Kine Martinsen (NO), Andreja Steinberger (Croatia), Frank Swartjes (NL), Gokhan Oktem (TK), David Middleton (UK), Borislava Borisova (Bulgaria), Mina Patsalidou (CY)

b) The agenda was adopted with the addition to the Country Forum of a presentation on Mercury from Serbia, an information point from the Slovakia International Conference on Contaminated Sites and a proposal from DK to launch a study on the circular economy and the re-use of contaminated soils. A particular interest was expressed in the benchmarking the varying cost of depositing contaminated soil in landfills.

2. ON-GOING AND PLANNED SOIL ACTIVITIES

a) DRAFT questionnaire on the establishment of the indicator LSI003 (discussion)

Question 1.- Which year did your country initiate a national programme to deal with contaminated sites?

Explanation: Probably in some countries it has been a process with various steps. With this question we would like to know when the country started to address "contaminated sites" in a systematic way and *to identify the date considered as starting point*.

Question 2 (site status 1): In your country how many sites have been recorded [(a) registered and (b) estimated] where polluting activities took place?

Explanation: 'Polluting' activities are those activities that have been identified in the country as potential sources of contamination (these activities were listed in the Annex II of the "withdrawn proposal" Soil Framework Directive). It may be the case that not all "polluting activities" have been registered and the country has made an "estimation" of them. Here countries may provide 1 or 2 values, in case they have "(a) counted sites" and "(b) estimated sites".

Question 3 (site status 2): How many sites are in need of investigation/still to be investigated or under investigation?

Explanation: We need to have trends on the progress of the overall process of soil remediation. Every country may have different criteria for deciding if a site needs or not to be investigated.

Question 4 (site status 3): How many sites have been investigated but no remediation is needed?

Explanation: An investigation is intended by means of soil sampling and test study.

Question 5 (site status 4): How many sites need (1) or might need* remediation (2) including risk-reduction measures (RRM) and natural attenuation? (Monitoring shall be part of the preparative investigations on how to remediate); (*) it can be an estimate.

Explanation: The concept of risk may change depending on the actual land use and the remediation has to fit the purpose (recreational area, commercial or industrial area) by considering adequate risk reduction measures in view of the protection goals to be achieved like the protection of the groundwater/drinking water, human population, or of vulnerable ecosystems...

Question 6 (site status 5): How many sites are under/with on-going remediation including RRM and natural attenuation?

Question 7 (site status 6): How many sites have been remediated including those with completed RRM or natural attenuation or under after-care measures ((i.e. sites that are monitored after remediation)? (Monitoring shall be performed to confirm that remediation and RRM goals are achieved).

Question 8: (Only to be filled in if data were not provided before or if there have been significant legislative changes in this respect): **Is there any date envisaged (at political or technical level) when remediation, including RRM and natural attenuation is to be achieved and what target is linked with this date (e.g. management of the biggest sites, management of all sites etc.)?**

Question 9 (a) : **In case your country does not have a register, do you have an alternative way for dealing with sites as defined in one of the six site status described above (Q2,3,4,5,6,7)?** Please explain briefly.

Question 9 (b): **Since when?**

Question 10: Is the competence at national or at regional level or at municipal level?

10 (a): of the register

10 (b): of the management of contaminated sites

Explanation: The Country may have the situation that the competence of managing the register is different from the competence of managing the contaminated sites; we would like to understand in a brief explanation on how the countries are organised, for example some competences may be managed at regional or local level.

Question 11: Does your country/region have or use a formal national/regional list of quality standard (threshold/target/risk-based...) values? If yes, please explain briefly if the Country has information on targets of remediation, standards for decision making on remediation, investigation etc.

Please explain briefly.

Question 12: Does your country have formalised procedures to evaluate clean hazardous substances found on site (soil, groundwater, sediment, land) but not occurring in the list of quality standards?

Please explain briefly.

Question 13: Does your country/region have formalised procedures to assess site-specific risks?

Please explain briefly.

Additional Question 14: Could you please provide a reference(s) of your country for any of the answers above?

Additional Question 15: Has your country an approach to deal with “orphan sites” (where the polluters pays principle cannot apply)? Has your country a specific budget to deal with "orphan sites"?

Time schedule

The Questionnaire will be submitted to EIONET NRC Soil for endorsement at the EEA meeting on **4 October 2016** in Copenhagen. We expect to have it adopted and to launch the questionnaire to all EIONET countries.

In order to catch the figures of the year 2016 we propose countries to reply to the Questionnaire by the **deadline 3/04/2017**.

This action can achieve the objective of EEA/reporting for the deadlines of the 7th EAP that "by 2020 (...) (e) land is managed sustainably in the Union, soil is adequately protected and the remediation of contaminated sites is well underway".

b) JRC open calls on soil contamination (link to JRC Website) ([SNE](#), [Traineeship](#))

2.b.1. Seconded National Expert - Land Resources Scientific researcher on soil contamination

Category: **Seconded National Expert**

Location: **Ispra, Italy**

Duration: **Initial contract duration of 12 months** (possible starting date 1st quarter 2017)

Deadline: **25/10/2016** (Deadline is established internally by the Commission/DG HR. Please check with your Permanent Representation/Diplomatic Mission of Non-Member Country/the EFTA Secretariat/IGO Administration to see if an alternate date preceding this date has been set)

REF: JRC D.3 Land Resources

3. COUNTRY FORUM

- a) **Presentation by Ana Paya Perez of the UN Minamata Convention on mercury and the EU ratification package.** The presentation is available to download in the EIONET Forum

Summary points:

- UN Convention signed by 128 countries includes 26 EU MS
 - Now ratification package is under discussion in EU Parliament and Council
 - EU emits a tiny proportion of Hg, <5% of the Global total emissions
 - Over last 15 years EU has developed legislations on chemicals including Hg (REACH, Import-Export of hazardous Substances, Classification, Labelling and Packaging Regulations...
- Currently 23 ratifications

3.a.1. Presentation by Johann, BE, title: Soil contamination with mercury on sites with historical hat making activities in Lokeren-Flanders (it is available for download in the EIONET Forum)

Summary points:

- Historical activities with Hg almost everywhere in EU, started in XVIII century
- All hats in the past were produced using Hg nitrates and Hg chlorate
- In Flanders Lokeren sites – good inventory made – 35 locations
- Exposure to mercury contamination in soil around factories happened to be more important than for people working in factory.
- Soil remediation value 4.8 mg/kg
- Remediation done in 10 locations – had to dig deep in the garden. Demolition and excavation had a high costs (up to 1.5 M€ per site).
- Hg was spread around the city

Conclusions

- ✓ Hg exposition can be high as result of the contamination of soils by historical activities

- ✓ Difficult to get historical information (kind of activity, pattern of spreading of the contamination) – don't know where it is precisely
- ✓ Remediation of Hg in a city can be very challenging.

3.a.2. • *Situation in other countries*

Italy needs to find the form of Hg in soil to assess where the remediation should be done and to prioritise interventions.

Switzerland a very large contamination found in the Alps. After an investigation analysing human blood it was found that the concentration was below threshold levels, resulting in no concern for human health.

3.a.3. *Presentation by Dragana Vidojevic (Serbia) – monitor Mercury. Problems with two factories near the Danube River and another one in Central Serbia. (it is available for download in the EIONET Forum)*

Summary points:

- Since NATO Military campaign in 1999 electrolysis factories have reduced its production, but have released approximately 16T of metallic mercury;
- During bombardments Hg spread over the sites. Sludge also contaminated with Hg.
- Water quality – mercury risk to be transported in the groundwater.
- 2014 flood events in Serbia: monitoring and management of contamination by mercury needs to be investigated.
- GEF-UNEP project – 39 priority sites for investigation with Italian cooperation.
- Serbia has two regulations with max value for Hg concentration: one for agricultural land, the other for industrial sites.

3.a.4. *Country updates on policy tools to deal with soil contamination and prevention*

This will be part of the work of the Soil legislation inventory (DG ENV) which will be concluded by the end of 2016.

3.a.5. *County best practices on how to deal with accidental soil contamination;*

Presentation by Johan Ceenaeme BE (Flanders) is available for download in the EIONET Forum.

3.a.6. *Information, on-going Collaborative projects and Networks*

INSPIRATION project presentation by Johan Ceenaeme BE (Flanders) is available for download in the EIONET Forum. INSPIRATION project will be reported to NRC Soil meeting on 4th October 2016 in Copenhagen.

3.a.7. *Int. Conference Contaminated Sites 2016- Bratislava (Slovakia) conference* proceedings and some presentations are available on the website of the conference <http://contaminated-sites.sazp.sk/node/58>

3.a.8. *Circular economy and resource efficiency (point proposed by Christian Andersen)*

Some interesting discussions took place during the Conference RemTech Europe the day before (22 September 2016, Ferrara) after UK presented that landfill deposit on soil almost stopped when the Government introduced a taxation. A particular interest was expressed in the benchmarking the varying cost in Europe of depositing contaminated soil in landfills.

Action: Christian proposed to submit a short note to request DGENV to perform a Cost – Benefit Study of taxation of remediated soil – issue to be further developed in the context of a further Impact Assessment.

ANNEX I

3rd Eionet NRC Soil Ad-hoc Working Group on Contaminated Sites and Brownfields

Final Agenda

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<i>Welcome and setting the scene</i>		
09:00	Registration	
	<ul style="list-style-type: none"> a) Welcome and objectives of the meeting b) Adoption of Agenda 	Ana Payá Pérez (DGJRC)
<i>On-going and planned soil activities</i>		
9:30	a) DRAFT questionnaire on the establishment of the indicator LSI003	Ana Payá Pérez (DGJRC)
	b) JRC open calls on soil contamination (SNE, Traineeship)	
<i>Country forum</i>		
	UN Minamata Convention on mercury: <ul style="list-style-type: none"> a) Contaminated sites by Hg – information from countries (the extend of the problem, available policy measures, methodologies and threshold values) <ul style="list-style-type: none"> i. Soil contamination with mercury on sites with historical hatmaking activities in Lokeren-Flanders ii. Contaminated sites by Hg in Serbia 	Ana Payá Perez Johan Ceenaeme Dragana Vidojevic
11:00	Coffee break	
	<ul style="list-style-type: none"> a) Country updates on policy tools to deal with soil contamination and prevention b) County best practices on how to deal with accidental soil contamination; c) Information, on-going Collaborative projects and Networks i. Int. Conference Contaminated Sites 2016- Bratislava (Slovakia) conference proceedings and some presentations are available on the website of the conference http://contaminated- 	All Johan Ceenaeme Katarina Paluchova

	sites.sazp.sk/node/58 ii. INSPIRATION d) Circular economy and resource efficiency	Johan Ceenaeme Christian Andersen
13:00	End of the meeting	