



Department
for Environment
Food & Rural Affairs

Defra Update: Contaminated Land SiLC Annual Forum 2014

Presented by: David Middleton
Date: 13th May 2014

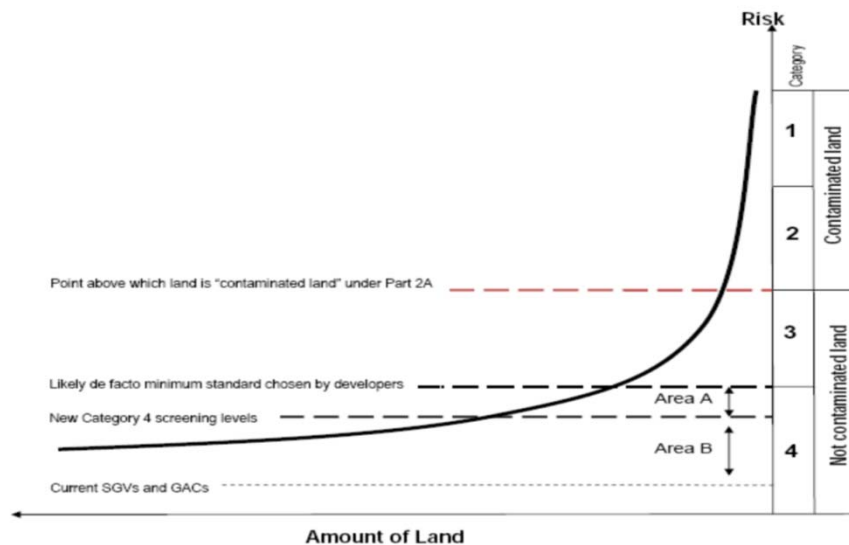
Defra Team Changes

- Maggie Charnley – New Head of Soils and Contaminated Land Policy team
- Mike Rowe - Deputy Director, Sustainable Land and Soils

Part 2A Statutory Guidance

- Broad aims of the regime:
 - (a) To identify and remove unacceptable risks to human health and the environment.
 - (b) To seek to ensure that contaminated land is made suitable for its current use.
 - (c) To ensure that the burdens faced by individuals, companies and society as a whole are proportionate, manageable and compatible with the principles of sustainable development.

Summary of Category 1-4 System



C4SLs – Risk Management Decisions

- Final C4SLs should be derived following changes to both the toxicology and the exposure assessment
- Benchmark Response (BMR)
- Generic Margin (non-thresholded chemicals)
- Excess Lifetime Cancer Risk (ELCR)

C4SLs - Lead

- Three options for the Low Level of Toxicological Concern for blood lead concentrations were presented in the final report: 1.6µg/dL, 3.5µg/dL and 5µg/dL.
- Defra view that 3.5µg/dL should be chosen to derive Category 4 Screening Levels for lead.
- Considered to be more pragmatic, whilst still representing a low level for risk in relation to the toxicological effects of lead on neuro-behaviour and the cardiovascular system

C4SLs – Final Numbers

Final Category 4 Screening Levels based on the risk management decisions outlined above⁹

Substance	Residential (with home-grown produce)	Residential (without home-grown produce)	Allotments	Commercial	Public Open Space 1	Public Open Space 2
Arsenic	37 mg/kg	40 mg/kg	49 mg/kg	640 mg/kg	79 mg/kg	168 mg/kg
Benzene	0.87 mg/kg	3.3 mg/kg	0.18 mg/kg	98 mg/kg	140 mg/kg	230 mg/kg
Benzo(a)pyrene	5 mg/kg	5.3 mg/kg	5.7 mg/kg	76 mg/kg	10 mg/kg	21 mg/kg
Cadmium	26 mg/kg	149 mg/kg	4.9 mg/kg	410 mg/kg	220 mg/kg	880 mg/kg
Chromium VI	21 mg/kg	21 mg/kg	170 mg/kg	49 mg/kg	23 mg/kg	250 mg/kg
Lead	200 mg/kg	310 mg/kg	80 mg/kg	2330 mg/kg	630 mg/kg	1300 mg/kg

This table should be read in conjunction with the Final C4SL R&D report.

C4SLs & 'Normal' background concentrations

- Defra-funded research to determine 'normal' background concentrations (NBCs) of various contaminants in England and Wales
- NBCs & C4SLs - Toolkit
- C4SLs for Residential, Allotments and Public Open Space 1 are lower than the 'normal' background concentration of lead in urban areas

C4SLs – Peer Review

- “Given the policy requirements and context, this appears to be a reasonable approach to the development of Category 4 Screening Levels (C4SLs).”
- “Like all other soil screening values developed by government or other organizations around the world, derivation of Soil Guidance Values (SGVs), and the provisional Category 4 Screening Levels (C4SLs), include an accumulation of many conservative elements.”

C4SLs – Peer Review

- “By design, the approach of applying conservative risk assessment approaches to the “back calculation” of soil screening levels will produce soil concentrations that are well below levels at which any adverse health effects would be expected. Such low levels are certainly “strongly precautionary” and one can have a high degree of confidence that soil with concentrations of chemicals below concentrations calculated using these methods does not pose a significant human health risk.”

C4SLs – Peer Review

- “The project team accepted a substantial challenge and provided a very well thought out and well documented approach, and they clearly identified the scientific uncertainties, as well as the fact that policy considerations are important in the derivation of any soil screening levels.”
- “The discussion of the approach to the evaluation was very thoughtful and very well documented; and the qualitative and quantitative evaluation of the uncertainties associated with soil screening levels and the sensitivity analyses is the most thorough and detailed evaluation I have ever seen.”

C4SLs - SAGTA/SoBRA Workshop

Joint workshop:

- 8th April 2014
- Over 100 attendees

Aims/objectives:

- An active forum to assist practitioners, and those who they represent, to assess the implications of the research results and share views as to how best the results can be applied in practice.
- Opportunity to consider a gap analysis on how far have we now come, coupled with what factors are yet needing to be resolved.

C4SLs – SAGTA/SoBRA Workshop

- Summary of Category 4 Screening Levels Research Project - *Simon Firth & Sarah Bull*
- What is the view of the outside world? - *Mike Quint*
- A legal perspective on the use of C4SL's in planning & enforcement - *Andrew Wiseman*
- Local authority view on the application of C4SLs - *Rob Ivens*
- Landholder's view – getting land managed. What do we now want from the practitioners - *Richard Boyle*
- Applying the research: What remains to be tackled? - *Simon Firth & Sarah Bull*
- Bioaccessibility of contaminants in soil across the UK - *Chris Collins*
- Normal Background Concentrations in England and Wales, and comparison with provisional C4SLs - *Louise Ander*

Brownfield Briefing Site Investigation conference 12th June 2014 - additional evening session on C4SLs: *"This house believes the Defra C4SLs make a viable contribution to the risk assessment of brownfield land in England".*

State of Contaminated Land Report

Aims/ Objectives:

- Underpin the publication of new separate State of Contaminated Land' Reports for England and for Wales by the Environment Agency and Natural Resources Wales respectively.
- Gauge the level of understanding in the sector of key principles that were introduced under revised Statutory Guidance
- Investigate the impact of the revised Part 2A Statutory Guidance on the contaminated land sector in England and Wales

Timings

- Project advertised by Defra – September 2013
- Bids received – September/ October 2013
- Inception meeting – 12th November 2013
- Steering Group meetings:
 - 9th December 2013
 - 7th January 2014
 - 17th March 2014
 - 3rd April 2014
- Final report submitted to Defra and Steering Group for consideration - 9th May 2014

State of Contaminated Land Report

Project team:

Cranfield University

- Frederic Coulon
- Phil Longhurst
- Ying Jiang
- Hayley Shaw

CL:AIRE

- Nicola Harries
- Rob Sweeney

Independent Consultants

- Brian Bone
- Naomi Earl
- Steve Moreby

Steering Group:

- Defra
- Environment Agency
- Welsh Government
- Natural Resources Wales

Work packages

- Design and deliver a survey of all Local Authorities in England & Wales (State of Contaminated Land Report)
- Simultaneous survey for Local Authorities and the wider contaminated land sector to assess the impact of the revised Statutory Guidance
- Review, quality assurance and analysis of the responses
- Provide a finalised State of Contaminated Land draft survey for the Environment Agency to use

Response Rates & Initial Observations

Response

- **61%** Local Authority response rate for the State of Contaminated Land Report Questionnaire
- **254** Stakeholder responses for the impact survey

Initial observations (caveat – taken from raw data):

- A majority of respondents felt they had a good understanding of the revised Part 2A Statutory Guidance
- A large number of respondents feel the guidance now provides greater clarity and has improved decision making

Initial Observations

- There has been an impact on Part 2A following the funding announcement in December
- A majority of respondents would approach the National Expert Panel with category 2/3 boundary determinations
- A majority of respondents see blight as an issue

Next steps

- The Environment Agency and Natural Resources Wales will use the State of Contaminated Land output to produce a **State of Contaminated Land Report 2000 – 2013**
- Defra will use the information to assist in responding to the **Red Tape Challenge** review
 - Have the problems identified in the 2011 Impact Assessment been addressed, and the desired benefits realised?
 - Do further steps, statutory or otherwise, need to be taken?

Asbestos

- Exploring options – possible joint funded projects
- Asbestos R&D gaps in relation to soil contamination that meet Part 2A policy objectives
- Asbestos in Soil - Joint Industry Working Group

Smarter Environmental Regulation Review

- Reforming all Core Defra and Defra network guidance to make it simpler, clearer and more customer focussed
- Transition of Defra, agency and ALB web content to Gov.uk as part of a Govt. wide initiative
- Ensuring we now produce guidance based on what people need to know, rather than what government wants to tell them

“Land as a resource” – Call for Evidence

- Undertaken by Deloitte on behalf of Commission (DG ENV)
- “*Land as a resource*” communication is Commission focus for 2014
- 3 aspects: **land take, land recycling and land degradation.**
- Defra circulated widely to industry
- Conference 19th June in Brussels
- Public and Stakeholder consultation to be launched in June 2014

“Land as a resource”

- Is “land take” or its impacts such as soil sealing or ecosystem fragmentation, specifically monitored in your region or country, at a higher resolution/nomenclature than through Corine Land Cover?
- Are there any policy objectives and quantitative targets related to land take in your country?
- Are there any policy instruments other than land planning specifically relevant to achieve these objectives and targets?
- Is there a definition of a “brownfield” or of land suitable for recycling, in your region/ country?
- What steps have been undertaken to date to identify and quantify brownfield sites or land suitable for recycling? Is a national / regional database of brownfield sites maintained? Is the progress measured?

“Land as a resource”

- What policies / tools (legislation, economic, information and support) have been used to specifically encourage land recycling in your country? Have these proved successful in encouraging brownfield redevelopment and land recycling?
- Have you introduced any specific national or regional targets related to redevelopment of brownfield sites or land recycling?
- Is Land Degradation monitored in your country?
- Are there any policy objectives and quantitative targets related to land degradation in your country?
- Which policy measures (other than targets) have been introduced to reduce land degradation and manage land more sustainably? Have these policies proved successful?

Soil Framework Directive

- The Prime Minister’s Business Taskforce on EU Regulation recommended withdrawal of the proposed EU Soil Framework Directive in October 2013
- The Commission is likely to confirm withdrawal of the proposed Directive following RE-FIT
- Expected that the Commission will table a new initiative in 2015 to coincide with the UN International Year of Soil, in line with 7th Environmental Action Programme (EAP)
- The UK is not convinced that there is a need for new EU legislation in this area.

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