Department
for Environment
Food & Rural Affairs

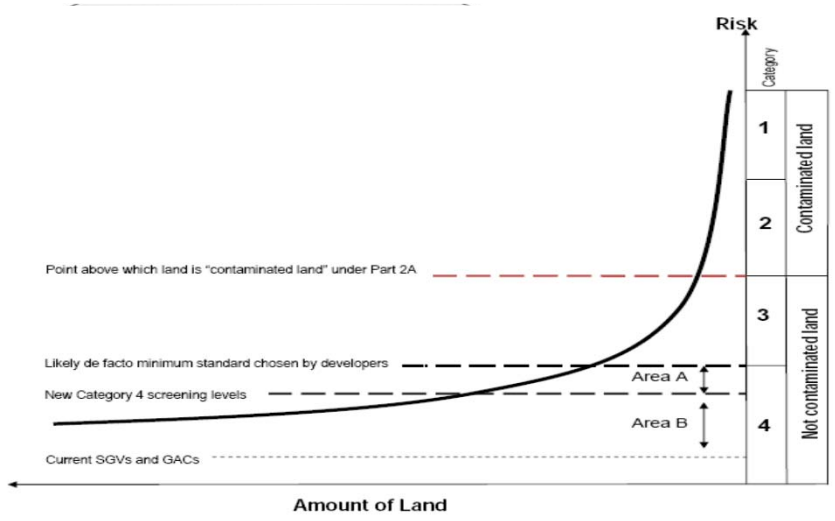
Category 4 Screening Levels

Presented by: Morwenna Carrington
Date: 30th April 2013

Use of SGVs and GACs

- Local authorities may use GACs and other technical tools to inform certain decisions provided:
  - They understand how they were derived and how they can be used appropriately
  - They have been produced in an objective, scientifically robust and expert manner by reputable organisations
  - They are only used in accordance with Part 2A and the guidance
- New technical tools and advice may be developed to help regulators and others apply and conform to this Guidance

Summary of Category 1-4 System



Impact Assessment

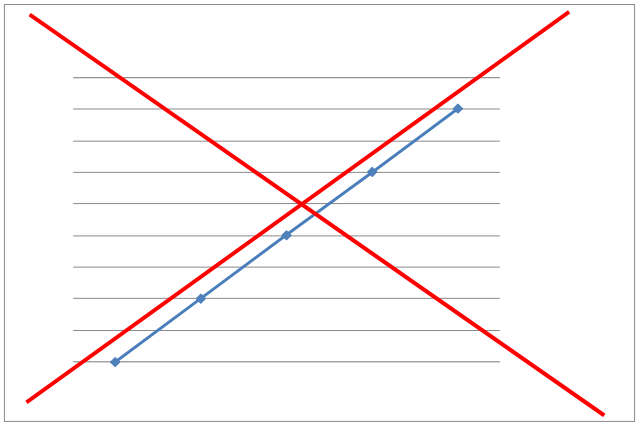
- "The new statutory guidance will bring about a situation where the current SGV/GACs are replaced with more pragmatic (but still strongly precautionary) Category 4 Screening Levels (C4SLs) which will provide a higher simple test for deciding that land is suitable for use and definitely not contaminated land"
- "In the many consultation meetings held in developing the Category 1-4 system, all the developers, landowners and consultants we spoke to were strongly of the view that they would want to ensure their land is safely within Category 4 (even though in theory they could remediate to a level within Category 3 and still satisfy Part 2A and planning rules)"

Estimated benefits of changes to SG

- Estimated that the annual cost of remediating land affected by contaminated in England and Wales to be £700 million per annum (2008)
- Estimated that 20-40% of this remediation was "unnecessary" = potential benefits of changes to the Statutory Guidance (estimated savings to business of £140m per annum)
- Assumes 85% benefits realisation
  - 30% of benefits will be realised as soon as the statutory guidance comes into force
  - Another 40% of benefit will be realised when the C4SLs are published
  - Thereafter, steady rise in benefit (to 85%) as the new regime and supporting tools bed-in and become common practice

Benefits realisation

- Relationship between C4SLs and benefits realisation of changes to the Statutory Guidance:



National Planning Policy Framework

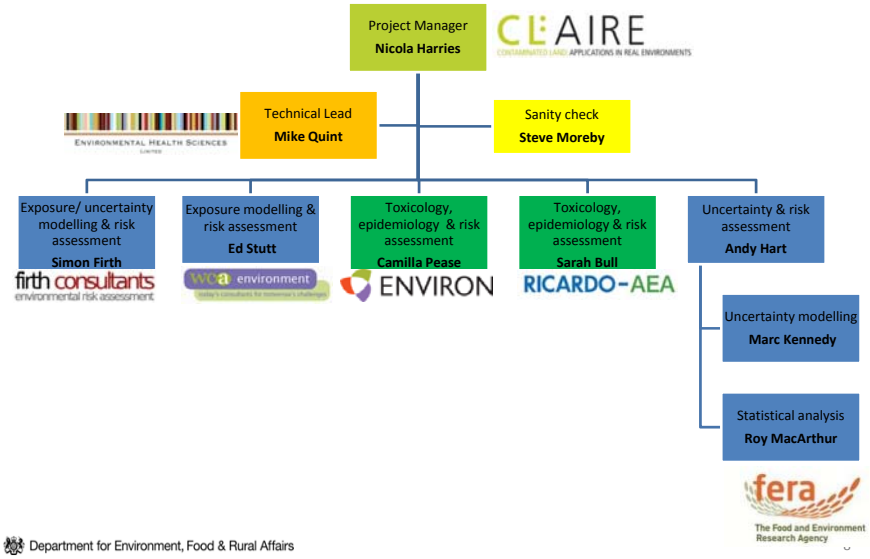
120. To prevent unacceptable risks from pollution and land instability, planning policies and decisions should ensure that new development is appropriate for its location. The effects (including cumulative effects) of pollution on health, the natural environment or general amenity, and the potential sensitivity of the area or proposed development to adverse effects from pollution, should be taken into account. Where a site is affected by contamination or land stability issues, ***responsibility for securing a safe development rests with the developer and/or landowner****.*

121. Planning policies and decisions should also ensure that:

the site is suitable for its new use *taking account of ground conditions and land instability, including from natural hazards or former activities such as mining, pollution arising from previous uses and any proposals for mitigation including land remediation or impacts on the natural environment arising from that remediation;*

after remediation, as a minimum, land should not be capable of being determined as contaminated land under Part IIA of the Environmental Protection Act 1990*; and adequate site investigation information, prepared by a competent person, is presented.*

Consortium



Steering Group

- Defra
- Environment Agency
- DCLG
- Food Standards Agency
- Public Health England (formerly Health Protection Agency)
- Homes and Communities Agency
- Natural Resources Wales
- Welsh Government

Timings

- Project advertised by Defra – 17th May 2012
- Bids received – 25th June 2012
- Inception meeting – 26th July 2012
- Steering Group meetings:
  - 24th September 2012
  - 28th January 2013
  - 22nd April 2013
- Work Package 1 report (draft methodology) published on Defra website – 14th February 2013
- Final reports to be submitted to Defra and Steering Group for consideration - 7th June 2013 (extended from 31st May 2013)

Work packages

1. Design of methodology (model) for determining Category 4 Screening Levels
2. Develop methodology using at least 2 test substances
   - Cadmium
   - Benzo(a)pyrene
3. Determine Category 4 Screening Levels for an initial suite of 6 substances
   - Benzene
   - Arsenic
   - Chromium VI
   - Lead

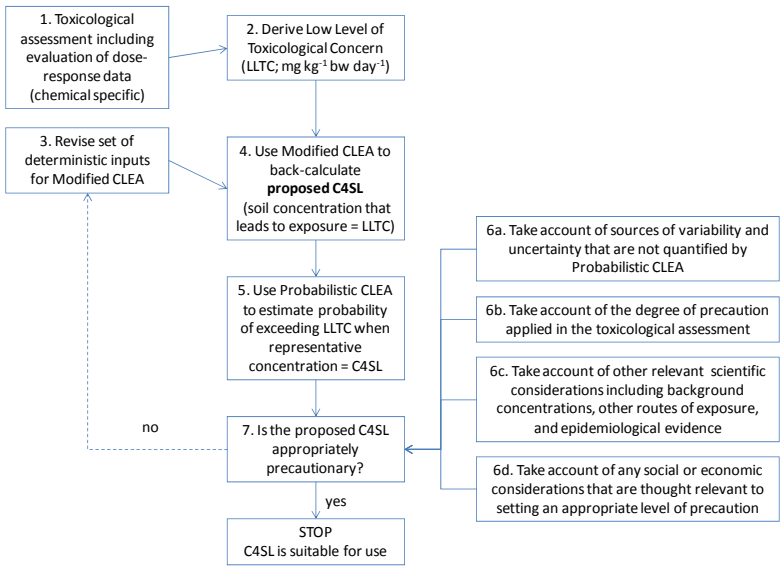
Land Uses

- Residential (further divided into with and without home-grown produce)
- Allotments
- Commercial
- Public Open Space (residential)
  - Green space close to housing (includes tracking back of soil) and therefore similar to residential land use discounting consumption of home-grown produce and vapour ingress to the building
- Public Open Space (parks)
  - Park-type scenario where park is of sufficient distance that there is negligible tracking back of soil

Overview of methodology

- Review of CLEA
  - CLEA relies on input of Health Criteria Values (HCVs), representative of 'minimal' risk
- Proposed changes to exposure parameters, e.g.
  - Updating parameter values with new data where available, e.g. produce consumption rates, inhalation rates
  - Adjusting some parameter values to better reflect reasonable maximum exposure, e.g. dermal exposure
- Proposed changes to toxicology aspects
  - Development of 'Low Level of Toxicological Concern', representative of low risk

Overall approach to developing C4SLs



Stakeholder engagement

- Stakeholder engagement was built into the project specification, with stakeholder workshops being incorporated into each Work Package of the research
- Stakeholder workshops held on:
  - 6th November 2012
  - 4th February 2013
  - 2nd May 2013
- Feedback and comments from stakeholders were incorporated and taken into account in the development of the project

SGVs, NBCs & pC4SLs (WP2 draft)

Substance	Soil Guidelines Value / GAC (mg/kg)		Normal Background Concentration (mg/kg)		Proposed Category 4 Screening Level (mg/kg)	
Cadmium	Residential	10	Principle domain	1.0	Residential	30
			Urban domain	2.1		
	Allotments	1.8	Chalk south domain	2.5	Allotments	5.8
			Mineralisation Group 2	2.9	Commercial	390
	Commercial	230	Mineralisation Group 1	17	POS 1	220
					POS 2	850
Benzo(a)pyrene	Residential	0.83	Principle domain	0.5	Residential	1.2 – 5.1
	Allotments	0.6			Allotments	1.8 – 7.4
	Commercial	14	Urban domain	3.6	Commercial	18 – 76
					POS 1	3 - 10
					POS 2	5.1 - 21

Concerns raised?

- ENDS article – April 2013
  - Lack of transparency
  - Failure to adequately explain approach to others
  - Link to planning
- SiLC letter – 15th April 2013
  - Dearth of explanatory material
  - Short timescales for stakeholder comment
  - High cost of undertaking fundamental reassessments of the toxicology of each substance for any new C4SLs

Peer review

- Defra uses peer review of selected evidence proposals and outputs to help ensure the evidence it funds is good quality and fit-for-purpose
- Toxicology methodology (development of Low Level of Toxicological Concern) is being considered by the Committee on Toxicology on 14th May 2013
- Once the final reports have been received in June, these will be submitted for further peer review

Next steps

- Final research reports to be submitted to Defra for consideration by Steering Group - 7th June 2013
- Peer review process
  - Committee on Toxicology
  - Peer review of final reports
- Publication on Defra website (*"the 12-week publication window should commence from the end of the peer review process"*) of:
  - Final reports
  - COT opinion
  - Anonymised stakeholder comments and feedback
  - Policy view (e.g. companion document)

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Soil Framework Directive and Contaminated Land

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