Local Authority Requirements

Keep the planning authority happy.... and sell houses more quickly



Best practice for cover systems

- National Planning Policy framework
- Land Contamination Risk Management
- Local Guidance
- What the contaminated land officer looks for
- Who is responsible for what?
- How to discharge conditions (and sell houses more quickly)



National Planning Policy Framework

 Planning policies and decisions should contribute to and enhance the natural and local environment by: preventing new and existing development from contributing to, being put at unacceptable risk from, or being adversely affected by, unacceptable levels of soil, air, water or noise pollution or land instability.



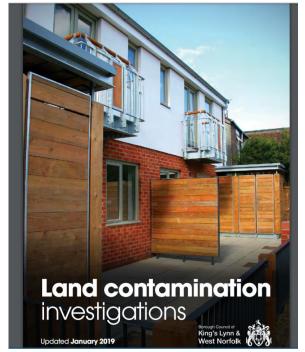
National Planning Policy Framework

- Planning policies and decisions should ensure that a site is suitable for its proposed use taking account of ground conditions and any risks arising from land instability and contamination
- 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
- Adequate site investigation information, prepared by a competent person, is available to inform these assessments.



National Planning Policy Framework

 Where a site is affected by contamination or land stability issues, securing a safe development rests with the developer and/or landowner





Land Contamination Risk Management LCRM October 2020

- The Environment Agency expects you to follow this guidance to manage the risks from land contamination.
- Local authorities may also provide additional guidance.
- Replaces version 1 (published 6 June 2019) and version 2 (published 6 May 2020)
- Updated following feedback. Replaces 'Model procedures for land contamination (CLR11)' which has been withdrawn.



- www.gov.uk/government/publications/land-contamination-risk-management-lcrm
 - → Coronavirus (COVID-19) | National lockdown: stay at home
 - → **Brexit** | Check how the new rules affect you

Home > Environmental planning

Before you start

 LCRM is relevant to all those involved in or responsible for managing land contamination.

These include:

- landowners
- regulators
- developers
- planners
- an 'appropriate person' under Part 2A
- consultants
- professional advisors such as a financial service provider
- remediation contractors
- We expect that the person responsible for applying LCRM is appropriately competent in the tasks they are doing for each stage.

Guidance

Land contamination risk management (LCRM)

How to assess and manage the risks from land contamination.

Published 8 October 2020 From: Environment Agency



LCRM: Competent Person

Use and meet the National Planning Policy Framework definition of a competent person We expect you to have appropriate knowledge, skills, experience and qualifications in the specific area of LCRM you are doing and the type of contamination you are dealing with. You may demonstrate this with qualifications and experience in a specific technical or

scientific discipline or application, or by multidisciplinary qualifications. These include for example:

- a Suitably Qualified Person (SQP) registered under the NQMS
- the Society of Brownfield Risk Assessment (SoBRA) accreditation scheme
- a Specialist in Land Contamination (SiLC)
- membership of a professional organisation relevant to land contamination
- a proven track record of dealing with land contamination*

*A proven track record means a regulator or consultant who regularly deals with land contamination. For example, someone with knowledge and experience of the Part 2A regime or someone who regularly deals with the technical aspects of land contamination.

In chat: If you are SQP, SoBRA, SiLC, professional membership, other

LCRM: National Quality Mark

- NQMS: Voluntary scheme set up by National Brownfield Forum. Admin by CL:AIRE.
- The Environment Agency and the SoBRA accreditation scheme support its use. The scheme can provide increased confidence and ensure that the submitted reports are of the quality we expect.
- You can use the NQMS for any type of land contamination report you produce.
- The NQMS uses a SQP who is an experienced professional in the field of land contamination.
- The registered SQP will quality check your land contamination reports. They will:
 - verify that all factual and interpretative information meets the required technical and regulatory standards
 - provide a declaration that the reports have been checked and verified under the scheme
- Please put in chat if you use NQMS, or regulators, if you've seen NQMS reports



LCRM: 4 Guides, 3 Stages, 3-4 Steps

- LCRM is made up of 4 guides: Before you start, Risk assessment, Options appraisal, Remediation and verification.
- Staged risk based approach. There are 3 stages and each stage is broken down into tiers or steps.



LCRM: Stage 1

- Stage 1: Risk assessment
 - You will use a tiered approach to risk assessment.
 The 3 tiers are:
 - 1 Preliminary risk assessment.
 - 2 Generic quantitative risk assessment.
 - 3 Detailed quantitative risk assessment.
 - Includes information for intrusive site investigations.



LCRM: Stage 2

- Stage 2: Options appraisal
 - There are 3 steps to follow.
 - Identify feasible remediation options.
 - Do a detailed evaluation of options.
 - Select the final remediation option.



LCRM: Stage 3

- Stage 3: Remediation and verification
 - There are 4 steps to follow.
 - Develop a remediation strategy.
 - Remediate.
 - Produce a verification report.
 - Do long term monitoring and maintenance, if required.



LCRM: Sustainable Remediation

Potential to cause environmental, economic and social impacts. Address this by showing:

- the benefit of doing remediation is greater than its impact
- balanced decision making process to select the optimum remediation solution
- remediation manages the unacceptable risks in a safe & timely manner. Maximise the overall environmental, social and economic benefits across whole supply chain.



LCRM: Verification

- When remediation is complete, you will need to produce a verification report.
- Demonstrates that the risk has been reduced and that the remediation objectives and criteria have been met. Include lines of evidence approach as set out in your verification plan.
- The verification report will need to provide a complete record of all remediation activities and evidence that it has been successful.

Local Authority Guidance

Environment

- Standards and guidance
- Promotes consistency





contamination

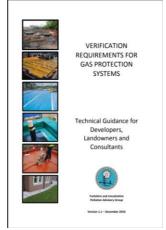
Report: SC030114/R1















- www.west-norfolk.gov.uk/planning-on-contaminated-land
- Materials brought onto a development site for gardens or soft landscaping are suitable for use and do not present harm to people, the environment and/or property.
- Guidance is intended to improve the quality of reports submitted to Local Authorities and give contractors & consultants a point of reference to obtain approval for such work from their client.
- Does not cover the geotechnical suitability of soils or material or chemical suitability that does not affect human health e.g. sulphates



Phase 3 Watch points:

- Obtain and keep details of the removal and correct disposal of contaminated material from the site.
- Obtain details of the imported soils.
 Ensure that test records from the supplier apply to the soil physically intended for importation.
- Imported soil should be sampled once it has been laid on the site to support the analysis provided by the supplier.



Phase 4 - Verification and Validation

A verification or validation report is required when the remediation is complete to prove it is effective. Its content will have been agreed in advance as part of the RMS (above).

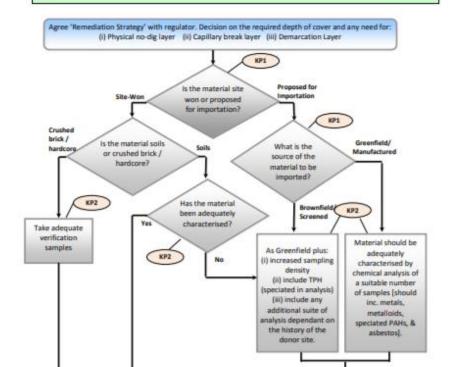
Your verification/validation report should include:

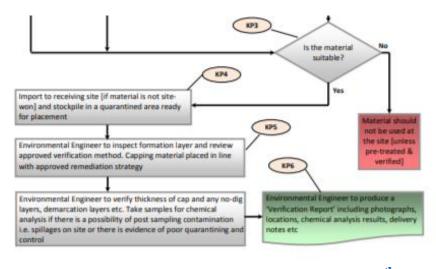
- Evidence that all of the agreed remediation actions are complete and details of who carried out the work;
- Details of any changes made to the RMS and why they were required;
- Verification data including in situ testing and laboratory test results with appropriate interpretation and analysis of the results:
- Plans, as built drawings and photographs demonstrating the work carried out;
- Key items of correspondence, meeting or site visit notes. Waste transfer notes and certificates for topsoil;
- Details of any ongoing verification or long term management;
- Confirmation that remediation objectives have been met and the site's status at completion of the work.





Overview Flowchart







Appendix 1a - Sampling & Testing Matrix

Туре	Number of Samples	Assessmen Criteria		
Virgin Quarried Material	1 or 2 depending on the type of stone utilised, to confirm the inert nature of the material.	Standard metals/metalloids (should include as a minimum As, Cd, Cr, CrVI, Cu, Hg, Ni, Pb, Se, Zn)	This needs to	
Crushed Hardcore, Stone, Brick	Minimum 1 per 1000m ³	Standard metals/metalloids (As above) PAH (16 USEPA speciation) Asbestos	be agreed with the Local Authority. The Assessment criteria needs	
Greenfield/ Manufactured Soils	Minimum 3 or 1 per 250m ³ (whichever is greater)	Standard metals/metalloids (As above) PAH (16 USEPA speciation) Asbestos	to be UK based, e.g. LQM S4UL's, Defra C4SL's or other similarly	
Brownfield/ Screened Soils	Minimum 6 or 1 per 100m ³ (whichever is greater)	Standard metals/ metalloids (As above) PAH (16 USEPA speciation) IPH (CWG banded) Asbestos Any additional analysis dependant on the history of the donor site.	derived GAC's.	

Appendix 1b – Questions to Ask Your Soil Supplier Relating to Soil Quality

- . What is the source of the material (refer to KP1)?
- . Will all of the material be coming from the same source?
- Are you satisfied that the material is a suitable growing medium for the proposed end use?
- Has the supplier used an appropriate sampling protocol to ensure a representative sample is analysed? What volume of soil is represented by the analysis and does it comply with Appendix 1a?
- . Does the testing include analysis of contaminants identified in Appendix 1a?
- Does the laboratory conducting the analysis have UKAS and MCERTS accreditation for the tests they are carrying out?
- Can I have a copy of the whole analysts report and does it include an interpretive section?
- Will the provided certificate be dated within the last 2 months?

Verification Requirements for Cover Systems

YALPAG Technical Guidance for Developers, Landowners and Consultants

Page | 10



Appendix 2 – Checklist tor Veritication Reports

Example only. Not to be considered as typical minimum requirements. Additional information should be included for non cover systems aspects of the remediation i.e. gas protection measures etc.

Site Details	
Site Name / location	
Developer name	
Development use	
Plot No / description of landscaped area (inc plan of inspection areas)	
National Grid Reference	
Inspection visit date	
Supporting Evidence	
Description of remediation (as per agreed Remediation Method Statement including depths / thickness checks, topographical readings)	
Material tracking information (including way tickets etc)	
Name of groundwork's remediation contractor	
Name of supervising environmental consultant	
Site Specific chemical analysis results	
Verification Photographs (inc. remarks)	
Pacammandations	

Recommendations	
Pass / fail	
If material fail, how will this be managed i.e. removed, treated	
Detail any further remedial works and / or inspection	
Signed off	

Failure to provide any of the above information may prevent planning conditions from being discharged.



What the planning authority looks for

- Adequate information
- Any conditions are necessary, reasonable and enforceable
- LPA will have regard to technical advice from the contaminated land officer
- Have the requirements of the conditions been met?



What the contaminated land officer looks for – Key elements

- Check against LCRM
- Stage 1 Desk study, screening assessment, preliminary risk assessment

 Detailed site investigation and risk assessment
 - Detailed site investigation and risk assessment;
- Stage 2 options appraisal
- Stage 3 Remediation, post remediation verification testing and report.



What the contaminated land officer looks for – Key elements

- Check against LCRM
- Stage 1 Desk study, screening assessment, preliminary risk assessment
 - Detailed site investigation and risk assessment;
- Stage 2 options appraisal
- Stage 3 Remediation, post remediation verification testing and report.



Conceptual site model is key

- Iterative process
- Each stage informs the next
- CSM tells us you understand
 the site
- Tells you what needs to be done

Abstraction Direction Brook

Abstraction Doverhole

Chalk

Packaging & Warehousing Brewing Silos & busk tanks

Brook

Alluvium

Alluvium

Drains

Minor Aquiller

Major Aquiller



Example initial conceptual site model

CSM is key

- Remove source
- Break pathway
- Don't put the receptor there?

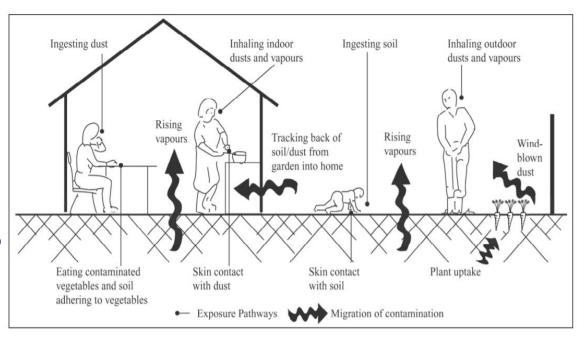


Figure 2.1: Illustration of the potential exposure pathways in the CLEA model



Cover system breaks the pathway

Design based on CSM

Overview Flowchart

Agree 'Remediation Strategy' with regulator. Decision on the required depth of cover and any need for:

(i) Physical no-dig layer

(ii) Capillary break layer

(iii) Demarcation Layer

KP1

Is the material site won or proposed for Importation

for importation?



Who is responsible for what?

- LA, Agent, Developer, Contractor, Consultant
- Where a site is affected by contamination or land stability issues, responsibility for securing a safe development rests with the developer and/or landowner
- If remediation is not effective the site could be investigated under Part 2A EPA 1990
- Recent example



- Site for single house
- Previous agricultural land
- Elevated metals, direct exposure pathway
- Remediation agreed
- Simple remediation by importation of clean cover



- Discharge of conditions
- Photographs and email
- No details of soil used
- Lengthy correspondence
- What happened here?



From

Sent: 2020 14:58

To: planning discharge

Subject: Your Ref 18/01752/Disc B

Good Afternoon

As per our telephone conversation this morning I am responding to questions asked in order to allow you to discharge conditions on the above property.

1/. Soil was excavated from the grassed area as shown in attached photos the soil was then reused under the driveway. No excavated soil left the premises.

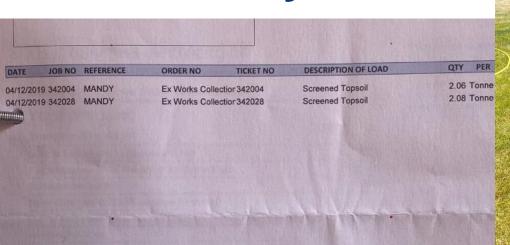
2/. As mentioned above photos attached showing the garden area now turfed. This is the area where contaminated soil was removed and replaced with imported graded topsoil.

3/. Attached are the invoices for graded top soil purchase.

Hopefully this answers all questions, please do contact me if you need anything further.

Best Regards







This addresses most of the points raised. However there is no information to show that the imported topsoil is suitable for use in a residential garden. The applicant will need to provide some chemical analysis or further details of the origin of the imported screened topsoil.

Regards

Fabia Pollard RSoBRA Scientific Officer Environmental Quality Environment & Planning

Supplier Correspondance

'Please accept this as written confirmation that the screened topsoil has gone through our screening process and will be suitable to be used for garden's and much more.

Sales executive'

My correspondance

'The statement from doesn't provide much information about the topsoil. If there is no chemical analysis available then it is even more important to know the source of the topsoil. Is it a recycled product or is it 'as dug'? Can the applicant provide some details from the supplier about this product.'



Correspondance

'Please see attachment, I can confirm the material is a recycled material not as dug, this goes through our screener process before being re sold.

Hope this clears things up for you..'



Sample Details					
Lab Sample ID	20/0313	2/1	1		
Client Sample Number	04010	04010			
Client Sample ID	Topsoil		1		
Depth to Top			1		
Depth to Bottom					
Date Sampled	30-Mar-2	20			ompliant wit
Analyte	Units	Result	Multi-P	Acidic	Calcareous
% Clay	% w/w	11.7			
% Silt	% w/w	26.5			
% Sand	% w/w	61.8			
Textural class	N/A	Sandy Loam			
Acceptable textural classification?	N/A	Yes	Υ	Y	Y
% Coarse Fragment Content >2mm	% w/w	8.4	Υ	Υ	Y
% Coarse Fragment Content >20mm	% w/w	3.6	Υ	Y	Y
% Coarse Fragment Content >50mm	% w/w	0	Υ	Υ	Υ
Loss on Ignition	%	3.3	Υ	Υ	Y
pH	pH	8.36	Υ	N	Υ
Carbonate as CaCO3	% w/w	1.5			Υ
Nitrogen	% w/w	0.052	N	N	N
Extractable Phosphorus	mg/l	13	N	N	N
Extractable Potassium	mg/l	85	N	N	N
Extractable Magnesium	mg/l	40	N	N	N
Carbon:Nitrogen Ratio	at	39.6	N	N	N
Electrical conductivity	μs/cm	1970	Υ	Υ	Υ
Zinc (HNO3 extractable)	mg/kg	39	Υ	Υ	Υ
Copper (HNO3 extractable)	mg/kg	7	Υ	Y	Y
Nickel (HNO3 extractable)	mg/kg	10	Υ	Υ	Υ
% Visible Contaminants >2mm	% w/w	0	Υ	Υ	Υ
% Visible Contaminants Plastics	% w/w	0	Υ	Υ	Υ
Sharps, number	N/A	2	N	N	N

Thanks for the further information. The attachment shows analysis for the properties as a growing medium. There is an issue with recycled soils as they may contain waste materials form the site of origin and we would need to see chemical analysis to show if the soils contains contaminants which could be harmful to human health or the wider environment. This is information that we ask for on all sites when topsoil is imported. There is further information on our webpage https://www.west-norfolk.gov.uk/planningon-contaminated-land

Y Y Y Y Y Y Y Y Y Y Y N N N N

Ν



							1	5	
16-Jul-20								etect	
Soil - B							_	o o	Method ref
6AE							Units	Ē	Meth
4.2							% w/w	0.1	A-T-044
8.12							pH	0.01	A-T-031s
0.09							g/l	0.01	A-T-026s
<200							mg/kg	200	A-T-028s
<1							mg/kg	1	A-T-042sTCN
<0.2							mg/kg	0.2	A-T-050s
<5							mg/kg	5	A-T-52-e
<5							mg/kg	5	A-T-029s
9.4							% w/w	0.1	A-T-032 OM
8							mg/kg	1	A-T-024s
<1.0							mg/kg	1	A-T-027s
<0.5							mg/kg	0.5	A-T-024s
10							mg/kg	1	A-T-024s
14							mg/kg	1	A-T-024s
<1							mg/kg	1	A-T-040s
39							mg/kg	1	A-T-024s
0.27							mg/kg	0.17	A-T-024s
10							mg/kg	1	A-T-024s
<1							mg/kg	1	A-T-024s
38							mg/kg	5	A-T-024s
	Soil - B 6AE 4.2 8.12 0.09 <200 10 - 0.2 - 0.5 - 10 - 14 1 - 0.7 - 10 1 - 1	\$00 - B 6AE 4.2 8.12 8.12 8.00 <10 60 41 42 43 45 46 8 47 48 8 41 41 41 41 41 41 41 41	\$00-8 6AE 4.2 8.12 8.12 8.00 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <100 <	\$60 - B	\$60 - B	\$60 - B	\$60 - B	Soil - B	Soil - B

Client Sample ID	Snettisham				1		
Depth to Top							
Depth To Bottom						6	
Date Sampled	16-Jul-20					Limit of Detection	
Sample Type	Soil - B					of D	Method ref
Sample Matrix Code	6AE				Units	Ē	Meth
PAH-16MS							
Acenaphthene, No.	<0.01				mg/kg	0.01	A-T-019s
Acenaphthylene _A ^{Ma}	<0.01				mg/kg	0.01	A-T-019s
Anthracene _A ^{MW}	<0.02				mg/kg	0.02	A-T-019a
Benzo(a)anthracene _A M#	0.09				mg/kg	0.04	A-7-019s
Benzo(a)pyrenex ^{M#}	0.14				mg/kg	0.04	A-T-019s
Benzo(b)fluoranthenex ^{Ma}	0.14				mg/kg	0.05	A-T-019s
Benzo(ghi)perylenex ^{M#}	0.09				mg/kg	0.05	A-T-019s
Benzo(k)fluoranthene, had	0.07				mg/kg	0.07	A-T-019s
Chrysene, Mar	0.14				mg/kg	0.06	A-T-019s
Dibenzo(ah)anthracene _A ^{M#}	<0.04				mg/kg	0.04	A-T-019s
Fluoranthene, Mar	0.16				mg/kg	0.08	A-T-019s
Fluorene	<0.01				mg/kg	0.01	A-T-019s
Indeno(123-cd)pyrene, M#	0.07				mg/kg	0.03	A-T-419s
Naphthalene Aller	<0.03				mg/kg	0.03	A-T-019s
Phenanthrene ^{M#}	0.04				mg/kg	0.03	A-T-019s
Pyrenex ^{MM}	0.17				mg/kg	0.07	A-T-419s
Total PAH-16MSAM#	1.11				mg/kg	0.01	A-T-019s

'Thank you for this further information. We had requested some analysis to show that the soil on site was suitable for use in residential gardens. I discussed the sampling and analysis proposal with the suppliers of the recycled topsoil. Can you confirm that the sample was taken from imported topsoil at the site as there is no information about the source of the sample.

Providing this confirmation is given, this would be sufficient to discharge the outstanding condition.'



From: Bowsers

Sent: 13 September 2019 11:14

To: Search

Subject: [DPS:88:SAL0001/002:F] Kings Lynn PE30 5GE

Importance: High

I am not sure if you can help me on this one. I am acting on the sale of the above property. The buyer's environmental search has revealed that there may have been contamination I believe it was the former Muck Works. The buyer is saying that she will pull out unless we can provide her with evidence that there is no contamination. We have explained to the solicitors and estate agents that the planning permission would not have been grated if there were any issues but the buyer is not satisfied. Is there any written documentation with the planning documents which confirms that there are no contamination issues.

I would be most grateful (yet again!) to receive any help on this one.

Kind regards

Chartered Legal Executive











- Stockpile testing
- Post placement analysis

MCERTS Preparation							
			394134 001	394134 002	394134 00		
		Custon	ner Sampl	e Reference	Topsoil 1 (stockpile)	Topsoil 2 (stockpile)	Topsoil 3
0			07-MAY-2014	07-MAY-2014 07-MAY-2	07-MAY-20		
				Type	Topsoil	Topsoil	Topsoil
Determinand	Method	Test Sample	LOD	Units			
Moisture	T277	AR	0.1	%	7.9	8.9	22
Moisture @ 105 C	T162	AR	0.1	%	8.5	9.9	23

SAL Reference: 394134

F	roject Site:	18No. Pla	ts, Kings L	ynn			
Customer	Reference:	30078					
Soil		Analysed	as Soil				
Geodyne Suite 1							
			SA	L Reference	394134 001	394134 002	394134 00
		Custon	ner Sampl	e Reference	Topsoil 1 (stockpile)	Topsoil 2 (stockpile)	Topsoil 3
i.			ate Sampled	07-MAY-2014	07-MAY-2014	07-MAY-20	
				Туре	Topsoil	Topsoil	Topsoil
Determinand	Method	Test Sample	LOD	Units	S S Com	CVS-ECS	
Arsenic	T6	M40	2	mg/kg	8	9	9
Cadmium	T6	M40	1	mg/kg	<1	<1	<1
Chromium	T6	M40	1	mg/kg	11	12	15
Chromium VI	TG	AR	1	mg/kg	<1	<1	<1
Copper	T6	M40	1	mg/kg	13	13	11
Lead	T6	M40	1	mg/kg	22	23	15
Mercury	T6	M40	. 1	mg/kg	<1	<1	<1
Nickel	T6	M40	8 1	mg/kg	9	10	11
pH	T7	AR	9	1 5	7.6	7.9	7.8
Selenium	T6	M40	3	mg/kg	<3	<3	<3
Total Organic Carbon	T21	M40	0.1	%	0.8	1.0	2.2
Zinc	те	M40	1	mg/kg	44	47	36

Customer Re		8No. Plots, 0078	Kings Lyni	1			
Soil	. A	nalysed as	Soil				
BTEX GRO MTBE							
d.			SA	L Reference	394134 001	394134 002	394134
		Topsoil 1 (stockpile)	Topsoil 2 (stockpile)	Topsoi			
	07-MAY-2014	07-MAY-2014	07-MAY-				
				Type	Topsoil	Topsoil	Topso
Determinand	Method	Test Sample	LOD	Units			
Benzene	T209	M105	10	μg/kg	(13) <10	(13)<10	(13)<1
Toluene	T209	M105	10	µg/kg	<10	<10	<10
EthylBenzene	T209	M105	10	μg/kg	<10	<10	<10
M/P Xylene	T209	M105	10	µg/kg	<10	<10	<10
O Xylene	T209	M105	10	µg/kg	<10	<10	<10
Methyl tert-Butyl Ether	T209	M105	10	µg/kg	<10	<10	<10
Gasoline Range Organics	T/54	M105	100	umika	<100	<100	<100

Soil	Analyse	ed as Soil					
Geodyne TPH (CWG)							
			SA	L Reference	394134 001	394134 002	394134 003
		Custon	ner Sampl	e Reference	Topsoil 1 (stockpile)	Topsoil 2 (stockpile)	Topsoil 3
			Di	ate Sampled	07-MAY-2014	07-MAY-2014	07-MAY-201-
			10	Type	Topsoil	Topsoil	Topsoil
Determinand	Method	Test Sample	LOD	Units			
TPH (C5-C6 aliphatic)	T209	M105	0.100	mg/kg	<0.100	<0.100	<0.100
TPH (C6-C8 aliphatic)	T209	M105	0.10	mg/kg	<0.10	< 0.10	<0.10
TPH (C8-C10 aliphatic)	T209	M105	0.10	mg/kg	<0.10	<0.10	<0.10
TPH (C10-C12 aliphatic)	T206	M105	1	mg/kg	<1	<1	<1
TPH (C12-C16 aliphatic)	T206	M105	2	mg/kg	<2	<2	<2
TPH (C16-C21 alphatic)	T206	M105	1	mg/kg	<1	<1	<1
TPH (C21-C35 aliphatic)	T206	M105	4	mg/kg	<4	<4	<4
TPH (C35-C44 alphatic)	T8 .	M105	1	mg/kg	<1	<1	<1
TPH (Aliphatic) total	T85	M105		mg/kg	N.D.	N.D.	N.D.
TPH (C6-C7 aromatic)	T209	M105	0.10	mg/kg	<0.10	<0.10	<0.10
TPH (C7-C8 aromatic)	T209	M105	0.10	mg/kg	<0.10	<0.10	<0.10
TPH (C8-C10 aromatic)	T209	M105	0.10	mg/kg	<0.10	<0.10	<0.10
TPH (C10-C12 aromatic)	T206	M105	1	mg/kg	<1	<1	<1
TPH (C12-C16 aromatic)	T206	M105	1	mg/kg	<1	<1	<1
TPH (C16-C21 aromatic)	T206	M105	- 1	mg/kg	<1	<1	<1
TPH (C21-C35 aromatic)	T206	M105	1	mg/kg	<1	<1	<1
TPH (C35-C44 aromatic)	T8	M105	1	mg/kg	<1	<1	1
TPH (Aromatic) total	T85	M105		mg/kg	N.D.	N.D.	1.0
TPH (Aliphatic+Aromatic) (sum)	T85	M105		mg/kg	N.D.	N.D.	1.0

Project Site: 18No. Plots, Kings Lynn

			SA	L Reference	394134 001	394134 002	394134 003	Г
		Custon	Topsoil 1 (stockpile)	Topsoil 2 (stockpile)	Topsoil 3	Т		
			07-MAY-2014	07-MAY-2014	07-MAY-2014	T		
				Туре	Topsoil	Topsoil	Topsoil	Ι
Determinand	Method	Test Sample	LOD	Units		188		
phthalene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	Γ
enaphthylene	T207	M105	0.1	mg/kg	<0.1	<0.1	<8.1	Τ
enaphthene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	Ι
orene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	Ι
enanthrene	T207	M105	0.1	mg/kg	<0.1	<0.1	0.2	Ι
thracene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	Ι
ioranthene	T207	M105	0.1	mg/kg	0.2	<0.1	0.3	Ι
rene	T207	M105	0.1	mg/kg	0.1	<0.1	0.3	Ι
nzo(a)Anthracene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	Ι
rysene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	Ι
nzo(b/k)Fluoranthene	T207	M105	0.1	mg/kg	0.1	<0.1	0.1	Ι
nzo(a)Pyrene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	Γ
teno(123-cd)Pyrene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	Ι
benzo(ah)Anthracene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	Γ
nzo(ghi)Perylene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	Г
H(total)	T207	M105	0.1	mg/kg	0.4	<0.1	0.9	Т



 Condition discharged

CONCLUSIONS

On the basis of the above information it is considered that the recommendations within our RMS have been generally adhered to within the soft landscaping areas of the development, and evidence of remedial capping placed within the soft landscaping has demonstrated compliance with the requirements of the RMS.

We therefore consider that the required remedial measures applicable to the soft landscaping areas within the 18No. plot development have been appropriately implemented.

REGULATORY CONSULTATION

We would recommend that a copy of this validation letter is issued (by the Client) to the Local Planning Authority (BCKL&WN) and the NHBC for comment/approval, and to facilitate the discharge of the relevant planning condition for the development.

COMMENTS

This letter concludes the validation works for the 18No. plot development, and no further validation works are considered to be necessary for the site.

We trust the above report is suitable for your current requirements; however should you have any questions or queries please do not hesitate to contact us.



From: Fabia Pollard

Sent: 13 September 2019 16:07

Subject: RE: [DPS:88:SAL0001/002:E] Kings Lynn PE30 5GE

Due to the previous industrial use of the land, conditions were placed on planning permission requiring investigation and remediation of any contamination. This was carried out. The Environmental Quality Team were consulted on each stage of the works and received sufficient information to recommend that the conditions relating to contamination could be discharged. We do not intend to revisit the site under Part 2A of the Environmental Protection Act and do not consider the land to be contaminated land.

All reports and correspondence with planners is available on our website under planning reference 09/02010/F. I understand that during development the above address was identified as Plot X and the relevant discharge of conditions application was DISC_M. I have attached the verification report from the public record.

regards

Fabia Pollard RSoBRA Scientific Officer Environmental Quality Environment & Planning



Is the planning authority happy?

- Include a description of the final site condition at completion and the final extent of remediation,
- the implications of the final site condition on the future use of the site
- new development not at unacceptable risk from, or adversely affected by, unacceptable levels of soil pollution
- site is suitable for its permitted use



Can I sell these houses?

- lines of evidence used to verify completion include how remediation objectives & criteria have been met
- an updated conceptual model to demonstrate that all pollutant linkages have been mitigated
- Adequate information, prepared by a competent person
- Not capable of being determined as contaminated land under Part IIA EPA1990



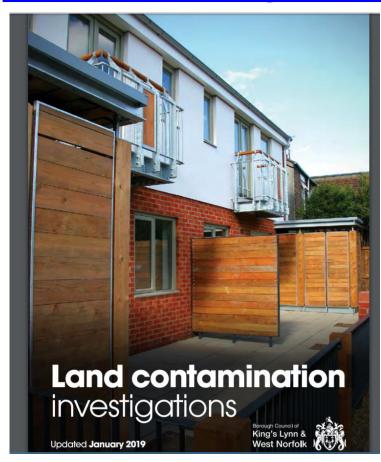
Can I sell these houses?

- Conditions discharged
- Public record
- Buyers happy
- Lender happy
- Good to go





www.west-norfolk.gov.uk/planning-on-contaminated-land



Home > Food, safety and environment > Pollution > Contaminated land > Planning applications on contaminated land

Planning applications on contaminated land

How to carry out a contaminated land assessment as part of a planning application

Dealing with land contamination

Most development takes place on land that has already had one use. The <u>National Planning Policy</u> <u>Framework</u> (NPPF) sets out the government's policy on dealing with land contamination through the planning process. The NPPF states that:

- · a development site should be suitable for its new use
- responsibility for securing a safe development rests with the developer and/or landowner

When considering an application for planning consent, the planning authority will take into account ground conditions and proposals for mitigation. In order to do this, you must submit adequate site investigation information prepared by a competent person in support of the application.

We recommend early discussions with us to help you provide the information needed to support your planning application. If you don't have the expertise to submit the information, you may need to hire an environmental consultant.

Submitting a planning application

Within the existing use section of your planning application, you'll be asked if:

- · the land is known to be contaminated
- contamination is suspected for all or part of the site, or
- · the proposed use is particularly vulnerable to contamination

For any sites that have had a use that could cause contamination we'll need additional information with your planning application. Please see our tables for what we require.

Requirements for types of development on potentially contaminated land

Type of development	Submit with your planning application
New build	Desk study and preliminary risk assessment report
Site with previous agricultural use	Screening assessment form

Sensitive developments

If the proposed use is particularly vulnerable to the presence of contamination, you'll need to submit the following with your application:

Recently visited pages

- Contaminated land
- Contaminated Land Part 2A

Related pages

- Advice for home buyers
- Contaminated Land
 Part 2A

