SiLC – Promoting regulatory and commercial confidence in Brownfield risk management and reporting

Shaun Grey
www.silc.org.uk

SPECIALIST IN LAND CONDITION

Your presenter

Shaun Grey is a Chartered Environmentalist, Full Member of IEMA and SiLC with 30 years experience in land quality, environmental risk assessment and sustainability.

He has been the IEMA Technical Representative on the SiLC PTP for around 8 years.

He has worked in contracting, consultancy and as a Local Authority regulator. He is now the Deputy Chief Environment and Safety Officer in Strategic Command (MOD) leading on environmental matters, having first joined the Department in Defence Estates in 2004 working on land condition and environment risk assessments.

Acknowledgements

Thank you to:

- Roger Clark and Dr Paul Nathanail (SiLC and PTP members) for both contributing material to this webinar, and to Roger for reviewing this webinar and the supporting article contributed to Transform
- Transform article due to be published in September

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Your panel members

Roger Clark is a Chartered Civil Engineer, SQP and SiLC with 50 years of experience.

He is an independent consultant providing geo-environmental and geotechnical services to developers, contractors and the public sector.

He has represented AGS for the last 12 years on the SiLC PTP and is the AGS Director on the SiLC Board.

Roger is a SiLC Assessor and also assists with the preparation of questions for the SiLC exam.

He was previously the Director of CL Associates, consultants in contaminated land, environmental management, geotechnical engineering, and waste management which became the Geo-environmental Consulting Division of ESG, now SOCOTEC.

Jo Strange MEng, CEng, CEnv, FICE, FWES, MIEnvSci, SiLC

Jo is a chartered civil engineer and environmentalist with over 30 years of experience in civil and environmental engineering with both major multi-disciplinary consultancies and currently a specialist geotechnical and geo-environmental consultancy, CGL (Card Geotechnics Ltd), with whom she is a Technical Director. Jo is also a registered environmental auditor with IEMA, with experience of contaminated land and due diligence audits and has acted as an Expert Witness. Jo is a Fellow of the Women's Engineering Society (WES) and supporter of WES and WISE (Women in Science and Engineering).

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Todays presentation

- Set the scene with our specific interest, or ‘challenge’
- What is SiLC; the qualifications and becoming a SiLC
- Quality Mark for Brownfield risk management records
- Skills Framework for defining competence
- Benefits of SiLC & Quality Mark to our profession, industry & environmental receptors
- Questions to the panel & discussion

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Brownfield development – Our challenge

- Brownfield ‘previously used &/or developed land’
- Why develop Brownfield? Government policy, local plans, clean up historic use (funding), economic returns (profit), reduce use of Greenbelt & Greenfield
- Brownfield legacy; former land uses; manufacturing, bulk fuel storages, waste processing and deposit substances, often in concentrations that are harmful to environment and human health (some Brownfield hosts valued ecosystems & species)

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Land contamination - Legal framework

- Development - Town and Country Planning Act 1990 and subordinate legislation – material consideration, developer responsible for safe occupation of the site (LA regulator, EA Statutory Consultee)
- Historic land contamination – Environmental Protection Act 1990 Part 2A & Contaminated Land (England) Regulations 2006 as amended (removal of significant pollutant linkages) (LA regulator, EA Special sites)
- Overlapping regimes – Water Resources Act, Environmental Permitting (EA regulator)

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Managing a land contamination legacy

- Assess and manage risks associated with substances
- Policy, standards, body of formal guidance and Industry practice (CLR11, SGV's, C4SL)
- Phased site investigation, Source-Pathway-Receptor based assessment to determine necessary remediation and verification of activities and suitable outcome
- Visible identification of quality records for regulatory and financial liability demonstration
- Records support planning and land transfer – warranty/insurances

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Demonstrating risk management

- Town & Country Planning regime provides a framework
- Land contamination is a material consideration ('should be taken into account' in deciding permission and at appeal)
- Planning Consent with conditions
- All sorted! Well not always……
- Issues around scope and quality of investigation, the risk assessment, remediation and records. Timely supply of information. Transfer of sites during development and change in advisor/currency of previous information

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‘Industry practice & guidance’ Land Contamination: risk management (www.gov.uk)

- https://www.gov.uk/guidance/land-contamination-how-to-manage-the-risks

This guidance is based on the Model procedures for the management of land contamination – contaminated land report (CLR11). The scope, framework and purpose remain the same.

The Environment Agency expects you to follow this guide if you’re managing the risks from land contamination.

- Before you startWhat you need to know before you start the risk management process.
- Stage 1: Risk assessment How to do a land contamination risk assessment (RA).
- Stage 2: Options appraisal How to do a land contamination options appraisal (OA).
- Stage 3: Remediation How to develop a remediation strategy, implement it and verify remediation has worked.
- Site investigation How to plan for a site investigation.
- Reporting requirements The reports you must produce and the information they can include.

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Reporting requirements (www.gov.uk)

- https://www.gov.uk/guidance/land-contamination-how-to-manage-the-risks/reporting-requirements

For large, complex sites, or if you're phasing remediation works or site investigations, you may need to produce individual reports for each tier or phase.

When reporting your findings and decisions, you can use the NQMS. This is a voluntary scheme set up by the National Brownfield Forum and administered by CL:AIRE. We support its use.

- **Stage 1: Risk assessment reports**
- **Stage 2: Options appraisal (OA) report**
- **Stage 3 Remediation reports**
- **Long term monitoring and maintenance reports**
- **Site investigation reports**

Improving the process; a role for SiLC

- Lift and drive the quality, define skills and promote consistency in Brownfield assessment and records
- Provide visible identification of quality checked documents
- Objective demonstration of competency (cf NPPF)
- Common data sets for all parties to use (time and cost benefits)
- Reduce the load on LA Officers and budgets checking complex document sets (also speeds process)

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SiLC - Background

- The Specialist in Land Condition (SiLC) scheme has been operating since 2000, focused on setting high standards in the brownfield industry.
- SiLC qualification provides registered practitioners and the industry with evidence they are capable of providing land condition advice in the context of their professional background.
- Supported by professional and industry bodies.

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Current Supporting Organisations

- AGS - Association of Geotechnical and Geoenvironmental Specialists
- CIEH - Chartered Institute of Environmental Health
- CIWEM - Chartered Institution of Water and Environmental Management
- GS - Geological Society
- ICE - Institution of Civil Engineers
- IEMA - Institute of Environmental Management and Assessment
- IES - The Institution of Environmental Sciences
- RSC - Royal Society for Chemistry

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The SiLC Register

- The Register is a limited company in order to protect the liabilities of those who give their time and support to enable SiLC to operate. A Director is appointed from each supporting organisation.
- The SiLC Register now offers two forms of qualification which are of benefit to brownfield industry professionals:
  - ***SilC***
  - ***Suitably Qualified and experienced Person (SQP) under the NQMS***

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Managing SiLC - PTP

- The SiLC Register is run and administered by a Professional and Technical Panel (PTP) which comprises representatives from the supporting professional bodies.
- The PTP develops and implements the registration process and is the ruling committee for individual registrations. SiLC is administered by Forum Court Associates.
- Currently seeking an IEMA SiLC to join as Technical Representative on PTP (shadowing present member)

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~~What~~ Who is a SiLC?

- Senior professional – not a Company
- High level of competency in investigating and assessing land contamination and other aspects of land condition

  - can delegate collation and assembly

  - cannot delegate responsibility for quality
- Skills to interpret, brief and advise
- Not an expert in all fields of conveyancing
- Ability to identify gaps in data
- Ability to know when to seek assistance

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SiLC Criteria

A SiLC will have an awareness of the roles of individuals working in land condition across the range of professional bodies that make up the PTP and other related professions (e.g. law or valuation).

A SiLC should:

- Be able to demonstrate a thorough knowledge of their particular area of expertise
- Be able to demonstrate awareness and some understanding of other relevant fields and professions required in land management
- Be able to demonstrate objective judgement in information and data management
- Be able to communicate well and manage effective interaction between interested parties
- Show familiarity, understanding and ability to assess and summarise complex data
- Know and demonstrate a willingness to comply with all sections of the SiLC Code of Practice.

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SiLC CODE OF PRACTICE

The SiLC Code of Practice is designed to ensure the commitment of individuals to the aims and objectives of SiLC, which are to:

- continuously improve the competence of land condition practitioners
- establish, enhance and uphold the land condition professions' reputation

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A Specialist in Land Condition will:

1. Uphold and promote the INTEGRITY of their profession.
2. Exercise HONESTY, DILIGENCE and IMPARTIALITY in their professional work.
3. Seek to understand and comply with all LEGISLATION/STANDARDS in the country in which they are practising.
4. Not allow CONFLICTS OF INTEREST to influence decisions/judgement, to make parties aware.
5. Not ACCEPT anything of VALUE from clients, employer or third party which may influence professional judgement.
6. CONTINUAL work to maintain and improve KNOWLEDGE; give reasonable ASSISTANCE to candidates entering the profession.

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A Specialist in Land Condition will:

7. Maintain and enhance levels of PROFICIENCY, both individually and throughout the profession.

8. In giving ADVICE, make relevant persons aware of the potential CONSEQUENCES and ALTERNATIVES.

9. ACKNOWLEDGE the LIMITATIONS of COMPETENCE and not undertake any work which he/she knows is beyond their professional capability.

10. ENSURE all INFORMATION given to and contained within reports is, to the best of their knowledge, CORRECT and ACCURATE.

11. NOT ENDORSE any information or deductions from clients or third parties which they CANNOT VERIFY as ACCURATE and TRUE.

12. ENDEAVOUR to uphold and enhance the REPUTATION of the register.

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NQMS

- A SiLC (Specialist in Land Condition) can also be/qualify as a SQP (Suitably Qualified and experienced Person) for NQMS? ….
- So, What is NQMS?

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The National Quality Mark Scheme (NQMS) for Land Contamination Management

- Developed by the National Brownfield Forum to provide visible identification of documents that have been checked for quality by a Suitably Qualified and experienced Person (SQP).
- Introduced in January 2017, with SiLC Register supporting the Forum by qualifying professionals as SQPs.
- NQMS increases confidence and improves quality of submissions made under regulatory regimes, particularly planning applications, related to previously used land.

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NQMS

- Recognition, importance and drive from the EA – referenced within Planning Responses as a recommendation and supported by its Chief Exec.
- Increasing Local Authority (LA) take up and signposting, for instance:
  - Staffordshire LAs (9)
  - Herts and Beds LAs (17)
  - Worcs Regulatory Services
  - Tunbridge Wells Borough Council
  - YALPAG (46 LAs) in Yorkshire, NE England, Norfolk and NW England
- 114 declarations to date

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Some supporters & statistics

The initiative is supported in principle by:

- Department for Communities and Local Government (DCLG)
- Department for Environment, Food and Rural Affairs (DEFRA)
- Environment Agency (EA)
- Positive response from individual devolved administrations
- Currently 113 SQPs
- 114 Declarations, by 31 SQPs in 23 companies (including Atkins, Advisian, AECOM, Leap and RSK)

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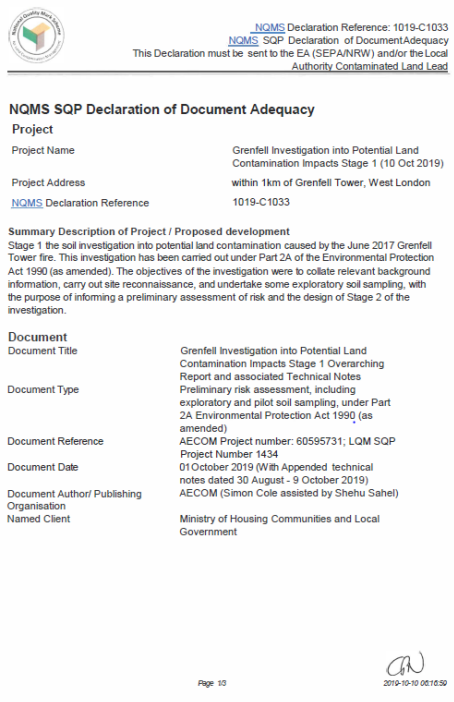
SQP Declaration



NQMS SQP Declaration of Document Adequacy

Project

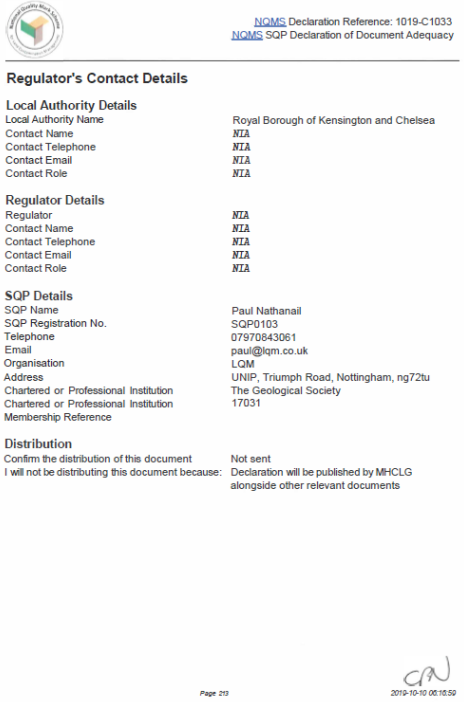
Project Name	Grenfell Investigation into Potential Land Contamination Impacts Stage 1 (10 Oct 2019)
Project Address	within 1km of Grenfell Tower, West London
NQMS Declaration Reference	1019-C1033

Summary Description of Project / Proposed development

Stage 1 the soil investigation into potential land contamination caused by the June 2017 Grenfell Tower fire. This investigation has been carried out under Part 2A of the Environmental Protection Act 1990 (as amended). The objectives of the investigation were to collate relevant background information, carry out site reconnaissance, and undertake some exploratory soil sampling, with the purpose of informing a preliminary assessment of risk and the design of Stage 2 of the investigation.

Document

Document Title	Grenfell Investigation into Potential Land Contamination Impacts Stage 1 Overarching Report and associated Technical Notes
Document Type	Preliminary risk assessment, including exploratory and pilot soil sampling, under Part 2A Environmental Protection Act 1990 (as amended)
Document Reference	AECOM Project number: 60595731; LQM SQP Project Number 1434
Document Date	01 October 2019 (With Appended technical notes dated 30 August - 9 October 2019)
Document Author/ Publishing Organisation	AECOM (Simon Cole assisted by Shehu Sahel)
Named Client	Ministry of Housing Communities and Local Government



Regulator's Contact Details

Local Authority Details

Local Authority Name	Royal Borough of Kensington and Chelsea
Contact Name	*NIA*
Contact Telephone	*NIA*
Contact Email	*NIA*
Contact Role	*NIA*

Regulator Details

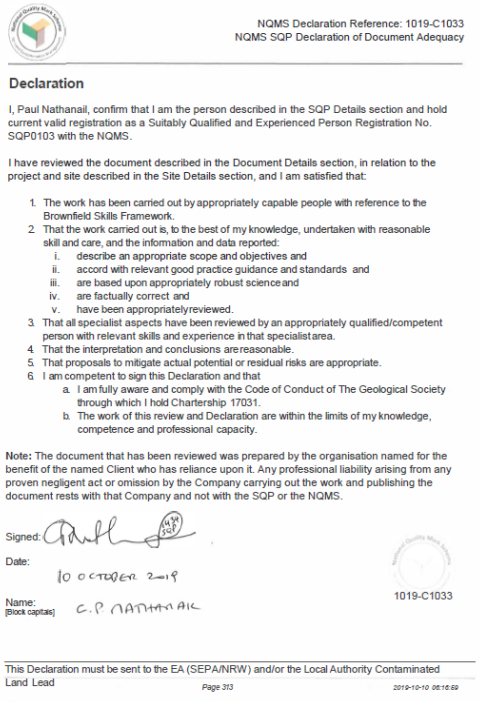
Regulator	*NIA*
Contact Name	*NIA*
Contact Telephone	*NIA*
Contact Email	*NIA*
Contact Role	*NIA*

SQP Details

SQP Name	Paul Nathanail
SQP Registration No.	SQP0103
Telephone	07970843061
Email	paul@lqm.co.uk
Organisation	LQM
Address	UNIP, Triumph Road, Nottingham, ng72tu
Chartered or Professional Institution	The Geological Society
Chartered or Professional Institution Membership Reference	17031

Distribution

Confirm the distribution of this document	Not sent
I will not be distributing this document because:	Declaration will be published by MHCLG alongside other relevant documents



Declaration

I, Paul Nathanail, confirm that I am the person described in the SQP Details section and hold current valid registration as a Suitably Qualified and Experienced Person Registration No. SQP0103 with the NQMS.

I have reviewed the document described in the Document Details section, in relation to the project and site described in the Site Details section, and I am satisfied that:

1. The work has been carried out by appropriately capable people with reference to the Brownfield Skills Framework.
2. That the work carried out is, to the best of my knowledge, undertaken with reasonable skill and care, and the information and data reported:
   i. describe an appropriate scope and objectives and
   ii. accord with relevant good practice guidance and standards and
   iii. are based upon appropriately robust science and
   iv. are factually correct and
   v. have been appropriately reviewed.
3. That all specialist aspects have been reviewed by an appropriately qualified/competent person with relevant skills and experience in that specialist area.
4. That the interpretation and conclusions are reasonable.
5. That proposals to mitigate actual potential or residual risks are appropriate.
6. I am competent to sign this Declaration and that
   a. I am fully aware and comply with the Code of Conduct of The Geological Society through which I hold Chartership 17031.
   b. The work of this review and Declaration are within the limits of my knowledge, competence and professional capacity.

Note: The document that has been reviewed was prepared by the organisation named for the benefit of the named Client who has reliance upon it. Any professional liability arising from any proven negligent act or omission by the Company carrying out the work and publishing the document rests with that Company and not with the SQP or the NQMS.

Signed:

Date: 10 OCTOBER 2019

Name: [Block capitals] C.P. NATHANAIL

1019-C1033

This Declaration must be sent to the EA (SEPA/NRW) and/or the Local Authority Contaminated Land Lead

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CL:AIRE – NQMS Secretariat

- https://www.claire.co.uk/projects-and-initiatives/nqms
- **CL:AIRE** is a respected independent not-for-profit organisation established in 1999 promoting sustainable land reuse.
- Technical secretariat National Brownfield Forum and the National Quality Mark Scheme
- Committed to providing a valuable service for all those involved in sustainable land reuse.
- Develop training resources, disseminate information and act as a credible resource for all stakeholders, ensuring it remains at the cutting-edge of best practice and innovation.

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National Brownfield Skills Framework

(Previously Land Condition Skills Development Framework, 2014 Version 2)

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- **Recommendation 1.2.1 of the Brownfield Skills Strategy (2008):**

'….working with a range of partners, the Specialist in Land Condition (SiLC) Registration Scheme develop and trial a Land Condition Skills Development Framework and establish whether this will provide an effective model for other sectors/areas of expertise that make up the workforce.'

- Funding provided by English Partnerships (now part of Homes England)
- Original version prepared by CL:AIRE in 2009, commissioned by SiLC and under guidance of a Project Board
- Revised and expanded version by SiLC PTP in 2014

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What is the NBSF ?

- A capability based system
- Sets out descriptions of key behaviour and skills and a combination of knowledge and experience that an individual needs in order to be effective at various tasks at a certain level of capability
- Intended to complement existing institutional frameworks
- Supports an individual's career development
- Enables the measurement of progression
- Encompasses Generic and Technical skills
- Tiered assessment to measure consistently the ability of practitioners throughout all stages of their careers
- Referred to in the NQMS page of the CL:AIRE website.
- Referred to in the SQP Declaration of Document Adequacy

Capability Sheets – Categories (Coverage)

CAPABILITY TYPE	CATEGORY
Generic	Personal Effectiveness
	Communication and Interpersonal Effectiveness
	Data and Information Management
	Management and Leadership
	Finance and Commercialism
	Project and Programme Management
	Health and Safety
Technical	Environmental Management
	Legislation and Regulation
	Site Investigation
	Risk Assessment
	Options Appraisal and Design
	Remediation

Capability Levels

LEVEL		DESCRIPTION
1	Aware	Has a knowledge of key principles. Requires instruction and close supervision to deliver on routine tasks. May only need an awareness of this area of capability.
2	Basic	Has a basic level of knowledge that allows a contribution in this area. Requires some supervision to deliver at a moderate level of capability in routine tasks.
3	Proficient	Has a level of knowledge and capability that allows delivery on routine tasks without supervision but may need assistance with more complex tasks.
4	Accomplished	Has a thorough and experiential understanding of the area and underlying principles. Copes well with both routine situations and with new or complex situations.
5	Expert	Has extensive knowledge in the subject area. Widely regarded as a leading authority from whom others can learn.

Risk Assessment – Level 4

Example Capability Sheet

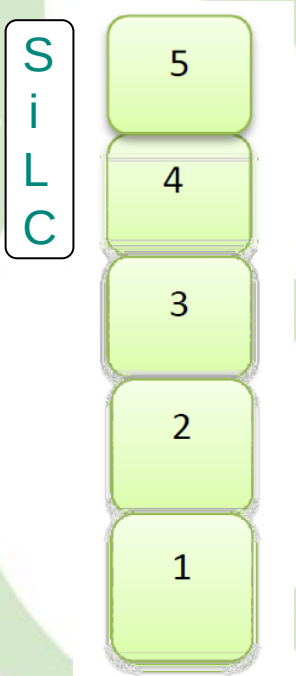
Assessment of the probability, or frequency, of occurrence of defined hazards and the magnitude (including seriousness) of the consequences on site users or the wider environment.

Activities	Tasks	Indicators
Chemical Assessment *Specify Receptor Type:* • **Humans** • **Waters** • **Ecological** • **Buildings & Services**	- Is able to undertake a preliminary risk assessment involving the evaluation of sources, pathways and receptors and identification of relevant pollutant linkages - Is able to develop a conceptual model encompassing contaminant fate, transport and exposure issues - Is able to evaluate site data and develop appropriate and representative risk assessment model/tool input parameters - Is able to undertake a generic or detailed quantitative risk assessment utilising the outputs from available modelling tools and techniques	***Observation by Line Manager to be documented as part of the regular performance review:*** Completion of a training course **OR** learning package that covers the fundamental areas of chemical assessments. Assessment, structured discussion or presentation used to confirm understanding of key principles **AND** provision of examples of successfully completed assessment
Radiological Assessment	- Is able to undertake a preliminary risk assessment involving the evaluation of sources, pathways and receptors and identification of relevant pollutant linkages - Is able to develop a conceptual exposure model encompassing contaminant fate, transport and exposure issues - Is able to undertake a generic quantitative risk assessment using available modelling tools and techniques - Is able to undertake detailed quantitative risk assessment involving the derivation of site specific assessment criteria	***Observation by Line Manager to be documented as part of the regular performance review:*** Completion of a training course **OR** learning package that covers the fundamental areas of radiological assessments. Assessment, structured discussion or presentation used to confirm understanding of key principles **AND** provision of examples of successfully completed assessment
Physical (Geo-Environmental) Assessment *Specify Type:* • **Subsidence/Ground Stability** • **Slope Stability** • **Flooding**	- Is able to identify relevant geo-hazards - Is able to develop conceptual ground models to predict ground behaviour and environmental interaction specific to present or future land use - Is able to undertake quantitative risk assessment utilising the outputs from available modelling tools and/or techniques	***Observation by Line Manager to be documented as part of the regular performance review:*** Completion of a training course **OR** learning package that covers the fundamental areas of physical assessments. Assessment, structured discussion or presentation used to confirm understanding of key principles **AND** provision of examples of successfully completed assessment

Capability levels, Chartership and SiLC

It is expected that ;

- At Level 1, a practitioner would be in the early learning stages of their career following graduation.
- A practitioner with the skills and experience necessary for Levels 3 or 4 (depending on Institution) would be capable of applying for Chartership.
- A practitioner operating at Levels 4 or 5 would be expected to be capable of applying to become a registered SiLC.



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Becoming a SiLC

Registration process

- written application to demonstrate experience:
  - academic qualifications
  - suitable background experience in land condition
  - certificate of membership of a relevant professional body
  - two references sent directly from the referees
- written assessment (open book) to test knowledge, understanding and application of legislations and technical guidance
- peer interview
- approval of results by SiLC PTP

- *Two training days per year to assist potential applicants*
- *Two assessment rounds per year*
- *Annual Forum*

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SiLC Affiliate Scheme

Progression towards Chartership and SiLC Registration

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Advice and Mentoring for Career Progression

- Integrated process to assist graduates, as well as more experienced individuals, to progress towards chartered status and then SiLC/SQP registration with clear objectives.
- Encourage people to recognise the brownfield sector as a career path.
- Mentored access to the National Brownfield Skills Framework.
- Entry can be at any level.

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Affiliate Scheme and NBSF – Tiers and Support

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Roles within the Affiliate Scheme

- Adviser
  - A qualified member of the host Professional Organisation or the Membership Development staff of the host Professional Organisation.
  - Familiar with the requirements of the host Professional Organisation.
  - Does not necessarily need to be professionally qualified or a SiLC.
- Mentor
  - A current SiLC registered on the list of approved mentors.
  - Offer specific guidance on the requirements of becoming a SiLC and SQP beyond Chartership.
  - The Mentor need not be associated with the same Professional Organisation as the applicant.

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Criteria for joining SiLC Affiliate Scheme

- Member of one of the qualifying Professional Organisations.
- Genuine interest in the brownfield sector.
- Aiming to become a full member of a qualifying Professional Organisation and to join the SiLC Register.
- Maintain their commitment to the code of conduct of their Professional Organisation and that of SiLC.
- Payment of an annual fee: £50 plus VAT which includes 20% discount on the attendance fee for the SiLC Annual Forum.

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Affiliate qualifying professional organisations

- CIEH - Chartered Institute of Environmental Health
- CIWEM - Chartered Institution of Water and Environmental Management
- ICE - Institution of Civil Engineers
- IEMA - Institute of Environmental Management and Assessment
- IES - The Institution of Environmental Sciences
- GS - Geological Society
- RSC - Royal Society for Chemistry

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Conclusion - SiLC the merits

SiLC, SQP, NQMS, NBSF and Affiliate scheme:

- Drives quality standards in management of Brownfield risk and land condition; recognised by Government agencies
- Provides professional qualification, personal and professional development
- Promotes regulatory and commercial confidence
- Protects environmental receptors
- Supports and consolidates sustainable communities

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Thank you and questions

- **Affiliate Scheme Application Guide and Application Form**
  - Available from https://www.silc.org.uk/

- **Leaflets are available from silc@silc.org.uk:**
  - Benefits of the National Quality Mark Scheme to Post-Industrial Brownfield Site Development.
  - SiLC Affiliate Scheme.

More information at:

https://www.claire.co.uk/projects-and-initiatives/nqms
https://www.silc.org.uk/
https://www.linkedin.com/groups/4915117/

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