

To:

**NATIONAL BROWNFIELD FORUM**

**SCI EVENING LECTURE BY PAUL NATHANAIL**  
**12 DECEMBER, 18.00 – 20.00**  
**SCI HQ, Belgrave Square, London**

**SCI's Environment medal presentation & lecture -  
Paul Nathanail:**

**Reflections on Eastbourne 1979: Firm foundations for future  
“land contamination risk management”**

SCI's Environment, Health and Safety Group are pleased to announce that Paul Nathanail will receive the SCI Environment Medal at an event held in his honour, on the evening of Thursday 12 December 2019. Paul will give a lecture titled – Reflections on Eastbourne 1979: Firm foundations for future “land contamination risk management”.

The lecture will mark the 40th Anniversary of the UK's first conference on contaminated land held by SCI in October 1979 (*Reclamation of Contaminated Land - RECLAN*) at the invitation of the Department of the Environment on behalf of the Interdepartmental Committee on the Redevelopment of Contaminated Land (ICRCL).

**Book today! Free registration**

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[www.soci.org/events](http://www.soci.org/events)

<https://www.soci.org/events/scis-environment-medal-presentation-and-lecture--paul-nathanail--reflections-on-eastbourne-1979-firm>

## Introduction

A meeting of ISO TC 190 Soil Quality, its Sub-committees and Working Groups was held in Aveiro, Portugal from 15-18 October. The UK was not represented at the meeting.

CEN TC444 (*Environmental characterization of solid matrices*), its Sub-committees and Working Groups, will be meeting in Italy in May 2020.

CEN TC444 has now taken over the work of TC 292 which dealt with all aspects of waste characterization including analysis, testing and sampling. BSI Technical Committee EH4 which shadows CEN TC 444 needs to strengthen its expertise relating to waste by recruiting relevant organisations and experts knowledgeable about the production,

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disposal and characterization of wastes. Any volunteers should contact the Secretary of EH4, Jessy Mathew (Jessy.Mathew@bsigroup.com).

**Proposed BS10176 - Sampling soils for VOCs**

This new standard is on schedule for publication by the end of the year.

**NEW ISO Projects on bioaccessibility/bioavailability**

Two new projects are to be proposed to ISO TC190 to complement (BS) ISO 17924:

**Soil quality – Bioaccessibility of organic and inorganic pollutants from contaminated soil.** This will be based on DIN 19738: 2017 which has been in use for over ten years and is fully validated not only for inorganics but also PAHs and PCBs.

**Soil quality – Simplified method for oral bioaccessibility of metal(loids) in soils.** Proposed by AFNOR as a rapid (and cheaper) first tier method as a decision-making tool to complement (BS) ISO 17924. It uses 0.65% HCl and has been subject to validation testing in France.

**ISO Project on Sampling Soils for Volatiles (NP23987)**

This new ISO project has been approved and will be handled by a new Working Group (TC190/SC7/WG13) under French leadership. The UK supported the proposal which will be wider in scope than BS10176. The first discussions of the draft standard took place in October in Aveiro.

**Proposed ISO EN 24212 Remediation techniques applied at contaminated sites**

The proposal for a guidance document on the selection and application of remediation techniques has been accepted by ISO and CEN and was discussed at a meeting to be held in October in Aveiro.

**Future of BS1377**

The twelve standards in the BS EN ISO 17892 series supersede the equivalent test methods in BS 1377. The corresponding parts, or sub-parts of BS 1377:1990 have been withdrawn. Work has started to revise and consolidate the remnants of BS Parts 1, 2 and 4 to 9 (BS 1377-3 has been recently revised).

*Copies of draft standards are available from the representatives of organisations who are members of BSI Technical Committee EH4 (e.g. AGS, EIC, SCI). If you do not know who represents an organisation to which you belong, you need to ask the organisation – this is not information that BSI is permitted to supply.*

**Mike Smith**



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| <b>BSI PROJECTS</b>   |   |  |
|---|---|--|
| BS 10175  | Currently no plans for revision   |  |
| New British Standard<br>BS10176                               | Sampling of soils for determination of VOCs   | On route to publication  |
| <b>Amendment of BS 5930</b>                                   | <b>Ground investigation</b>   | The list of proposed changes can be found on the online standards development portal:<br><a href="https://standardsdevelopment.bsigroup.com/projects/2019-02393">https://standardsdevelopment.bsigroup.com/projects/2019-02393</a><br><br>The commenting period ends on <b>15 January 2020</b> |
| PAS 128 (revision)  | Underground utility detection, verification and location  | Public consultation awaited.   |
| <b>ISO/CEN GEOTECHNICAL STANDARDS</b>                         |   |  |
| prEN 1997-1   | Geotechnical design – General Rules   | Comments required by 8 January 2020  |
| prEN 1997-2   | Geotechnical design – Ground properties   | Comments required by 8 January 2020  |
| prEN 1997-3   | Geotechnical design – Geotechnical structures   | Comments required by 8 January 2020  |
| BS ISO DIS 18674-4:   | Geotechnical investigation and testing – Geotechnical monitoring by field instrumentation – Part 4: Measurement of pore water pressure: Piezometers                 | Commenting period ended 9 September  |
| <b>BS EN ISO 18674-5: 2019</b>                                | <b>Geotechnical investigation and testing – Geotechnical monitoring by field instrumentation – Part 5: Stress change measurements by total pressure cells (TPC)</b> | <b>Published November 2019</b>   |
| BS EN ISO DIS 22475-1.2                                       | Geotechnical investigation and testing – Sampling of soil, rock and groundwater – Part 1: Technical principles  | FDIS being prepared.   |
| BS ISO DIS 22476-9  | Ground investigation and testing – Field testing – Part 9: Field vane test (FVT and FVT-F)  | Comment period ended 24 September  |
| <b>OTHER ISO STANDARDS ON SOIL &amp; SITE ASSESSMENT Etc.</b> |   |  |
| BS ISO DIS 11063 (revision of 11063:2012)                     | Direct extraction of soil DNA   | Proceeding to publication  |
| BS ISO 12404 (revision)                                       | Selection & application of analytical screening methods for on-site use   | Revision initiated   |
| ISO DIS 16751   | Environmental availability of non-polar organic compounds – Determination of the potentially bioavailable fraction and the non-bioavailable                         | Proceeding to publication  |

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|-----------------------------------|---|---|
|                                   | fraction using a strong adsorbent or complexing agent   |   |
| <b>BS ISO 17616: 2019</b>         | <b>Guidance on the choice and evaluation of bioassays for ecotoxicological characterization of soils and soil materials</b> | <b>Published November 2019</b>                |
| BS ISO FDIS 21266                 | A guideline for screening of soil polluted with toxic elements using soil magnetometry                                      | FDIS published for comment by 8 November 2019 |
| BS EN ISO FDIS 21365              | Conceptual site models for potentially contaminated sites   | Proceeding to publication                     |
| <b>BS EN ISO 21577 (revision)</b> | <b>Soil quality - Field soil description</b>  | <b>Published October 2019</b>                 |
| ISO CD 23400                      | Guidelines for the determination of organic carbon and nitrogen stocks and their variations in mineral soil at plot scale   | Comment period ended 23 August                |
| ISO NP 23987                      | Sampling and measuring of volatiles in soil quality field investigations  | ISO project approved.                         |
| ISO CD 24032                      | In-situ caging of snails to assess bioaccumulation of contaminants  | Comment period ended 26 September             |
| ISO NP 24212                      | Remediation techniques applied at contaminated sites  | Project approved in ISO and CEN               |

*CD = Committee Draft, DIS = Draft International Standard, FDIS = Final Draft International Standard, NWIP = New Work Item Proposal, WD = Working Draft*

**SELECTED DRAFT ANALYTICAL STANDARDS etc.**

|                |   |                                       |
|----------------|---|---------------------------------------|
| ISO DIS 54321  | Soil, treated biowaste, sludge and waste – Digestion of aqua regia soluble fractions of elements              | DIS issued for comment by 20 December |
| CEN prEN 15216 | Environmental matrices – Determination of dissolved solids (TDS) in water and eluates – Complementary element | DIS issued for comment by 9 December  |

**RECENTLY PUBLISHED ANALYTICAL AND OTHER TESTING SOIL QUALITY STANDARDS**

|                                |  |                     |
|--------------------------------|--|---------------------|
| <b>BS EN ISO 21268-1: 2019</b> | <b>Soil quality– Leaching procedures for subsequent chemical and ecotoxicological testing of soil and soil-like materials: Part 1 – Batch test using a liquid to solid ratio of 2 l/kg dry matter</b>  | <b>October 2019</b> |
| <b>BS EN ISO 21268-2: 2019</b> | <b>Soil quality– Leaching procedures for subsequent chemical and ecotoxicological testing of soil and soil-like materials: Part 2 – Batch test using a liquid to solid ratio of 10 l/kg dry matter</b> | <b>October 2019</b> |
| <b>BS EN ISO 21268-3: 2019</b> | <b>Soil quality– Leaching procedures for subsequent chemical and ecotoxicological testing of soil and soil-like materials: Part 3 – Up-flow percolation test</b>                                       | <b>October 2019</b> |

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**Background**

*BSI EH4 Soil Quality* is the BSI technical committee responsible for the production of standards relating to soil quality including contaminated land and natural and near-natural sites (e.g. farm land). Standards cover sampling, chemical analysis, physical testing, biological testing, and soil and site assessment. EH4 also deals with standards for the analysis and testing of wastes.

*BSI EH4* shadows ISO (International Organization for Standardization) Technical Committee *TC 190 Soil Quality* and CEN TC444 (*Environmental characterization of solid matrices*). CEN is the European standards organisation. EH4 has recently assumed responsibility for European standards (ENs) for analysis and testing of wastes produced by CEN TC444.

EH4 is also responsible for BS10175 (investigation of contaminated sites), BS 8576 (ground gas investigations) and BS8454 (protection of buildings against gas). Work is in progress on a BS on sampling soil for determination of VOCs (proposed BS 10176).

There are about twenty organisations (e.g. trade bodies, learned societies, professional bodies, quasi-government bodies etc.) represented on the committee at present together with a handful of individual experts who represent the UK on various ISO and CEN Working Groups (e.g. Paul Nathanail, Mike Ramsey). To find out who represents a particular organisation, the organisation should be contacted.

Nominated representatives of member organisations receive copies of formal drafts of standards, known in the case of ISO as Committee Drafts (CDs), Draft International Standards (DISs) and Final Draft International Standards (FDISs); and in the case of BSI as Drafts for Public Comment. They also receive copies of published standards for personal use.

Those representing an organisation are expected to circulate papers to, and consult, those they represent. Draft standards can be posted on “members-only” sections of web-sites for downloading or can be e-mailed to all members of the organisation that is represented.

EH4 actively seeks to broaden its membership. The wider the membership of EH4, the greater the confidence there can be that the standards produced are technically sound and known about by potential users from a wide variety of backgrounds. It also increases the pool of people from which it might be possible to draw on from time to time to represent the UK in ISO and CEN Working Groups. BSI can nominate one or more experts to each of the numerous Working Groups in ISO TC190 and CEN TC444. Whilst experts will hopefully attend meetings of the WGs, in practice this is not always possible and participation is limited to receipt and review of papers. BSI makes a contribution towards the costs of UK experts attending ISO and CEN meetings.

Member organisations of EH4 include:

Association of Geotechnical and Geoenvironmental Specialists (AGS), British Society of Soil Science, Centre for Ecology & Hydrology, Chartered Institute of Environmental Health, Environment Agency, Environmental Industries Commission (EIC) , EIC Contaminated Land Working Group, Environmental Services Association, Institution of Civil Engineers, Institution of Environmental Sciences, Ministry of Defence, National House Building Council (NHBC), Royal Society of Biology, Society of Brownfield Risk Assessment (SOBRA), Society of Chemical Industry (SCI), the James Hutton Institute, University of Glasgow, Water UK, Yorkshire & Lincolnshire Pollution Advisory Group.

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