

April 2017

## To whom it may concern

1. I have reviewed the details as set out in your apparent building related illness with specific interest in the legal obligations of landlords, their consultants and local authority EHO response.
2. Should you engage me my investigation will focus on building defect and or design or maintenance issues with technical support for your conditional fee legal team.
3. From preliminary assessments I suspect lifestyle issues can be excluded.
4. I expect Local Authority Environmental Health Officers may undertake a logarithmic assessment using the Housing Health and Safety Rating System 2006.(HHSRS)
  - 4.1. I should point out here that the Secretary of State has previously mentioned mould is a class 1 hazard and that section 1.26 of the HHSRS specifically states that measurement may or may not be required but should be assessed by professional judgement. (see appendix)
  - 4.2. The training required to fulfil compliance of the HHSRS does not include professional judgement and I have attached my CV biography as evidence of my competence.
5. **The risk and hazard of water damage and mould**
  - 5.1. The World Health Organisation in its internationally accepted and peer reviewed document Guidelines to Dampness and Mould (IAQ 2009) categorically state that water or moisture damage in a property can lead to serious health risks from mould, live or dead, spores, their fragments and synergistic effects of other associated contaminants.
  - 5.2. This risk can be identified from air sampling and following British Standards 1600 18-19 and PAS 64
  - 5.3. Following intentionally accepted published protocols from sources such as Centre of Disease Control, Environmental Health Agency and Health Protection Agency, mould and associated contamination should be removed to prevent health risks which are internationally recognised as including:
    - 5.3.1. Chronic Fatigue Syndrome (ME)
    - 5.3.2. Flu like symptoms
    - 5.3.3. Asthma
    - 5.3.4. Upper respiratory problems etc.
    - 5.3.5. Those under 11 or over 60 years of age are at particular risk as are those with reduced immune systems often due to long term prescription drugs, although the atopic population and prolonged exposure can increase health risks to many more.

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## 6. Legal obligations

Of special interest is the following information taken from the DIRECT LINE INSURANCE company

<https://www.directlineforbusiness.co.uk/landlord-insurance/knowledge-centre/running-your-property/landlords-maintenance-obligations-for-damp-and-mould>

**In this advert for landlord insurance the leading insurer quotes legal obligation and liability regarding mould. This is a major issue for insurers.**

### 6.1. Section 11 of the Landlord and Tenant Act 1985

Not only is it a good idea for a landlord to take responsibility for solving any damp issues, it's also a legal requirement under the 'repairing obligations' set out in Section 11 of the Landlord and Tenant Act 1985. The Act states that the "structure and exterior of the dwelling-house" as well as "the supply of water, gas and electricity" and "heating and heating water" need to be kept in working order.

As rising and penetrating damp are caused by structural issues, landlords must secure a correct diagnosis and get the problem fixed. If condensation is a major problem, especially if mould is forming, it can also be considered a structural issue. This means moisture clearly can't escape from the property. Ventilation should therefore be installed to prevent mould from forming, because that can be harmful to the tenant.

### 6.2. Landlord responsibilities for damp

The key responsibilities a landlord has when there are damp issues is to make sure a correct diagnosis is obtained and to carry out the treatment if it's their responsibility – see above section on how to decide whose responsibility it is. This is because treating damp is a mandatory repair under the (HHSRS).

[https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/9425/150940.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/9425/150940.pdf)

### 6.3. Landlord responsibilities for mould

When mould forms in a tenanted property it's important to make sure you deal with it quickly and effectively, once you have accurately identified the cause.

The HHSRS, which landlords need to abide by, stresses that landlords must ensure mould doesn't affect a tenant's physical and mental health. Mould is a nasty fungus to live with and is known to cause breathing difficulties. Tenants who suffer from asthma or rhinitis conditions, or are taking any cancer treatment, may suffer serious health problems if exposed to it, so it is best to tackle it quickly and correctly. There is now international consensus that some people are genetically prone to the effects of mould and others can be sensitised from chronic exposure.

## 7. Landlord property management and repairs

A landlord's duty to repair and maintain a property should be set out in the tenancy agreement. Obviously, a landlord can't carry out repairs unless they know there is a problem, so the tenant has a responsibility to highlight issues as soon as they notice them.

If the tenancy started after 1st October 2015, once a problem has been reported, the landlord is legally obliged to respond to the tenant within 14 days. In writing they are required to state what they're going to do and by when.

If the landlord doesn't respond, the tenant can report the problem to their Local Authority, who can issue the landlord with a notice to fix the damp and mould. Under the new [Retaliatory Eviction and the Deregulation Act 2015](#), if a landlord tries to evict the tenant within six months of a problem being reported in writing and not fixed, then it's likely any Section 21 notice served can't be enforced.

Source: [www.gov.uk/private-renting/repairs](http://www.gov.uk/private-renting/repairs)

## 8. Drying and Decontamination

- 8.1. I should state here that cleaning and decontamination of the affected property may result in the requirement to comply with CDM 2015 (Phase plan) and CoSHH assessments for the presence of skin and respiratory sensitisers, and asthmagens and or possible carcinogens.
- 8.2. Whoever undertakes the repair drying and sanitation of the property they must comply with the legally required CDM and CoSHH assessment plus should conform to British Standards for drying and sanitation with relevant verification see BSI BS12999 and BSI PAS 64
- 8.3. With the WHO stating that inhalation and exposure risk can only be accurately assessed by using PCR-DNA and Total Spore Counts the historic use of visual or logarithmic assessments cannot be substantiated in regard to sub-micron and invisible biological hazard.
- 8.4. The use of swabs and culture plates to assess mould growth and or residual health impact should be avoided as the WHO and leading authorities (Prof Malcolm Richardson) , state this form of measurement has serious limitations.

Ref Letters in Applied Microbiology 2005, 41, 367–373 doi:10.1111/j.1472-765X.2005.01764.x “Comparison of populations of mould species in homes in the UK and USA using mould-specific quantitative PCR”

- 8.5. The specification of bleach to remove mould may be illegal under biocides directives and various peer reviewed papers have proven **NO** fungicide or biocide will destroy all moulds and their associated pathogens and may indeed result in the future growth of toxic mould.
- 8.6. Of significant importance here is the WHO Bulletin 77 which states fragments of spores and mycelia are considered 40x more hazardous than live (whole) spores.
- 8.7. I propose we undertake investigation in line with WHO recommendations and following British Standard for mould investigation which includes inhalation and exposure risk by “Total Spore Counts and PCR-DNA” sampling in association with Infra-red thermal imaging and moisture mapping to assess causation.
- 8.8. These environmental results may, subject to confirmation lead to legal action, be utilised to compare toxins in the blood and or urine and be used with GPs medical records to substantiate personal injury and material damage claims.

## 9. Warning

- 9.1. The use of culture plates and swabs to assess mould and biological exposure has serious limitations and should not be considered. REF WHO Dampness and Mould IAQ 2009

## 10. Conclusion

- 10.1. The property appears to be grossly contaminated and the landlord has failed in their legal obligations

## 11. Recommendations

- 11.1. Call in the local authority Environmental Health Officer and ask them to review the health hazards under the Housing Health and Safety rating System and warn that section 1.26 which requires professional judgement must be substantiated with regard to competence (see section 13)

## 12. Proposals

- 12.1. We propose to assess the cause of mould and water damage or condensation issues
- 12.2. We will undertake sampling and testing in line with international and British Standards with laboratory analysis through ISO government approved laboratories

## 13. Note for Environmental Health Officer

- 13.1. I have continuously seen EHO's dismiss scientific reports based on recognised internationally accepted protocols
- 13.2. I have seen EHO's dismiss my reports which are based on British Standards and repeatable evidence
- 13.3. While it is acceptable to challenge or refute a professional's report, it is not acceptable to ignore it.
- 13.4. In all cases EHO's believe the HHSRS 2006 logarithmic visual assessments trump all other reports and this is a serious mistake. The microscopic hazards below visual detection limits cannot be assessed without scientific evaluation.
- 13.5. The HHSRS 2006 states in section 1.26 that professional judgements may be required in reference to sampling. This does not mean a guess but should be
- 13.6. by professional evaluation which may include competence in Indoor Environmental Health etc as described by ACGIH, which HSE recognise as a source of competence.
- 13.7. In my opinion section 1:26 refers to the following issues:
  - 13.7.1. If mould is visible the identification of genus and species is unnecessary as the end result will be the same which is remove it and its hazards.
  - 13.7.2. All mould is allergenic and or toxic, therefore a health hazard and risk exists which must be reduced to lowest practical level.
  - 13.7.3. Testing is unnecessary if professional surface and air decontamination is undertaken, however with sub-micron spores and fragments being below visual detection limits the professional judgement will simply mean presumption of the hazard present rather than the typical "I can't see a risk"
- 13.8. Where EHO's dismiss scientific findings and replace with HSSRS calculations they should be reported to their professional body and the relevant ombudsman
- 13.9. Where EHO's are subsequently proved to have failed in their duties and people's health has been jeopardised they should form part of any personal injury and material damage claim along with the landlord.

## Appendix

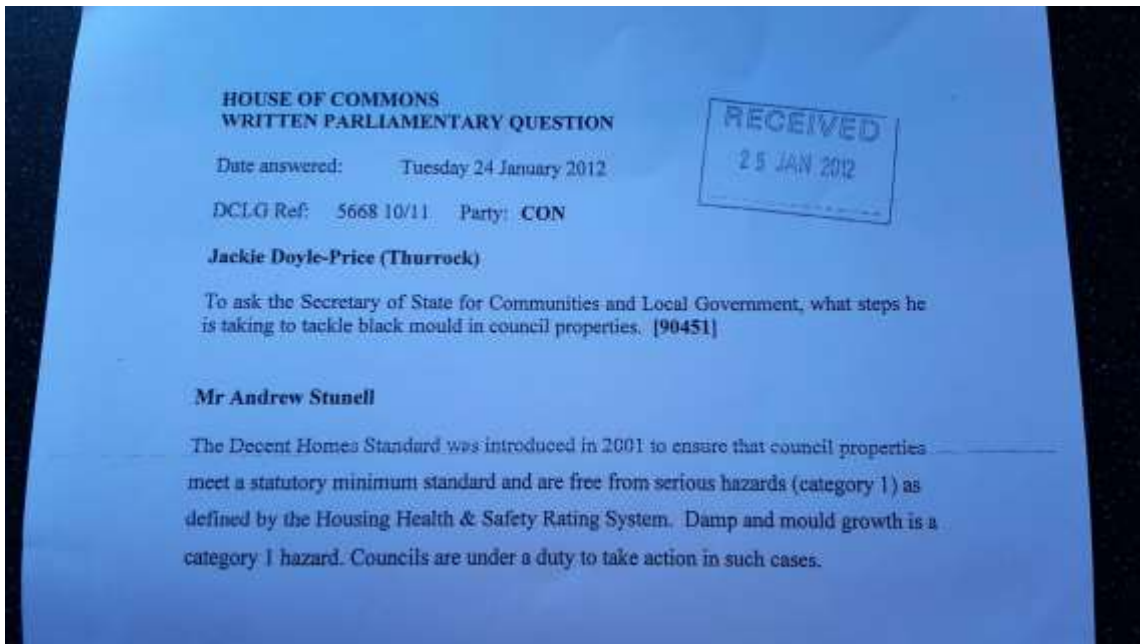
The following two photos clearly show the legal position of HHSRS 2006 and the clear ambiguity is the assessment of "Serious" category 1 hazards.

Considering the note goes on to include the assessment of recognised risk of “potential harm” there is a clear requirement for professional judgement of a competent indoor environmental hygienist, typically as described by ACGIH.

The EHO who completes a two day training course on the application of the HHSRS would not be competent in this assessment.

It should be quite obvious that health hazards which are below visual detection limits and may include, biological components, asthmagens and sub-micron particulates, CoSHH regulated substances, asthmagens and possible carcinogens can be measured by logarithmic assessment or feet and inches.

It should also be understood that if a hazard may exist, it should be presumed present until such time as evidence to the contrary exists.



ensuring a fair return for the taxpayer.

## Correction to Parliamentary Question 90451

### Statement

**The Parliamentary Under-Secretary of State, Department for Communities and Local Government (Baroness Hanham):** My right honourable friend the Parliamentary Under-Secretary of State for Communities and Local Government (Andrew Stunell) has made the following ministerial Statement.

I regret to inform the House that the answer I gave to parliamentary question 90451 from my hon. Friend the Member for Thurrock (Jackie Doyle-Price) on 24 January 2012, *Official Report*, column 135W, could be inadvertently misleading.

The answer should read:

The housing health and safety rating system (HHSRS) allows local authorities to assess properties against 29 different hazards, including damp and mould growth. If following an inspection a property is found to contain a serious, "category 1", hazard, we would expect the local authority to take action in relation to the hazard. The assessment for whether damp is a hazard takes into account factors such as the state of repair of the dwelling, the extent of existing dampness and the effect it could have on mould growth, and the consequent potential for harm.

#### 14. CV Biography of author Jeff Charlton

#### **DISASTER RECOVERY, WATER & FLOOD DAMAGE, INDOOR AIR QUALITY RISK ASSESSMENT, DECONTAMINATION, RESTORATION AND CBR DEFENCE**

- Over 30 years worldwide experience in disaster recovery and restoration involving floods, fires and explosions as well as general and specific decontamination and sanitation, including mould and associated biological contaminants.
- Trained with internationally recognised industry leaders such as Cliff Zlotnick, Pat Moffat, Marty King, Jim Holland and Professor Ronald Alvin and Tony Gibbs (Porton Down) in all areas of disaster recovery, restoration and decontamination.
- Obtained highest practical and technically appropriate qualifications throughout career. I have been involved with mould & biological health issues since 1999. Initially obtained US qualifications, as Britain had none.
- Made initial funding available and became founding chairman of British Damage Management Association UK.
- Achieved accredited associate membership with Chartered Institute of Environmental Health and USA Board Certified (ANSI) Certified Indoor Environmental Hygienist
- Post-Gulf War in Kuwait at times employing over 500 decontamination personnel working in hazardous conditions to restore hotels, oil fields and strategic government buildings. Provide scope of works to US Corps of Engineers for restoration of Emirs' palaces, Ministries of Electricity and Water and ministry of Awqaf and Islamic affairs.
- Working with world-wide organisations, exposed to the very best technology and forensic investigators and have applied their technologies, approach and resources in the UK.



- Skilled in using state of the art analysis and measurement technology and equipment, having established strong links with specialists in affiliated industries to provide supporting expertise and evidence, including utilising ISO accredited laboratories, particularly in Indoor Air Quality (IAQ) testing.
- Acted as both consulting and testifying expert in various disputes, including testimony as Sole Joint Expert under Part 35 and including the Financial Ombudsman, in cases involving building related damage, design and construction defects, toxic mould identification and analysis, and related health effects.
- Successfully challenged UK experts and laboratories on possible building contamination and exposure issues, providing clear evidence and repeatable laboratory analysis complying with the World Health Organization Guidelines for Indoor Air Quality “Dampness and Mould” (2009) and reflecting British Standards.
- Peer-voted awards, including CIR Lifetime Achievement Award (2013), CIR Disaster Recovery of the Year (2001, 1999) shortlist (2002), as well as awards for Innovative Product (BANG 2010, CIR 2010, and CBON 2001, training in counter terrorism).
- Participate on Standards Setting professional bodies; training; emergency planning seminars.
- Invited to speak in House of Commons at Parliamentary Joint Committee on Flood Insurance headed by Jonathan Evans MP to provide evidence on flood restoration and criticising industry response February 2014
- Frequent guest on Sky TV, BBC TV and radio, ITV and Channel 4.
- Participated as invited technical expert to EU and British standards committees on diverse issues covering Business Continuity, Disaster Recovery and Counter Terrorism and victim support and response to terrorist CBR event.
- Visiting lecturer in counter terrorism at Cranfield Royal Military College under Tony Moore, speaker at various international conferences on counter terrorism and specializing in CBRN events and pandemic contingency planning, including FBI and Homeland Defence.
- Short listed Emergency Planning Society in 2014 Innovative training awards in disaster recovery
- Designed and presented novel solutions to Car bomb and road side IEDs to Ministry of Defence at Porton Down 2011

- **SELECTED PROFESSIONAL QUALIFICATION AND ACCREDITATIONS**

- **Please note all subscriptions and positions ceased**

- **Recovery and Restoration.** The following 0certifications cover all aspects of disaster recovery and restoration:
  - Certified Restorer USA (highest recognised industry certification)
  - BDMA Senior Technician UK (Co-founded BDMA; Honorary Fellow; wrote the syllabus and exam questions)
- **Business Continuity.** Certified member BCI (relinquished)
- Chair London Forum Business Continuity Institute (relinquished)
- Co-founder BANG (alternative to BCI)

**Water Damage.**

- Water Loss Specialist (RIA ASCR) Highest USA certification
- Applied Structural Drying Hydro lab USA
- Achieved Instructor status (95%+ with: IICRC; RIA; Drieaze;
- Provided technical input to IICRC S500 ANSI and S520 standards
- Wrote BDMA's current Technical Guidelines and Standards 2014, (BDMA refused to accept at executive level due to my refusal to drop toxic mould issues)

**Environmental Hygienist**

- Accredited Associate Chartered Institute of Environmental Hygienists (UK)
- Council Certified Indoor Environmental Hygienist (USA) (ANSI)

**Fire Damage.**

- IICRC Instructor status

**Mould.**

- Indoor Environmental Surveys ET&T USA
- American Congress of Governmental Industrial Hygienists 2002
- Applied Microbial remediation Technician Restoration Consultants S520 USA
- IICRC AMRT
- American Council for Accredited Certification Indoor Environmental Hygienist

**Asbestos.**

- Qualified and certified by British Institute of Occupational Health P405& P401
- Licensed Asbestos removal supervisor; licensed asbestos contractor (ceased)

**Engineering.**

- ONC engineering
- City & Guilds Mechanical Craft Practice 1 & 11
- Certified associate member Institute of Engineers and Hon Fellow (relinquished)

**Sanitation and Decontamination.**

- Certified Mechanical hygienist RIA USA
- Accredited Associate Chartered Institute Environmental Hygienists
- American Indoor Air strategies
- Odour destruction and sanitation INTYG Sweden

**Counter Terrorism and Contingency Planning.**

- Certified Homeland security (National Response Teams) USA
- Certified member Emergency Planning Society Professional working Group CBRN terrorism UK
- Visiting Lecturer Cranfield Royal military college under Tony Moor



**Forensic Investigation.**

- Level 1 American College of Forensic Examiners
- Member Institute of American Forensic Examiners

**Crime Scene Meth Labs and Cannabis Farms.**

- National Institute Decontamination (USA)
- Bio Recovery and Decontamination (UK)

**STANDARDS SETTING**

**2013.** Wrote industry Guidelines and Standards for British Damage Management Association (“BDMA”) "Technical Ref Manual" and the portions of British Standards Institute (“BSI”) PAS 64 guidelines relating to national flood restoration guidelines.

**2011** Wrote a presentation to Emergency Planning conference on novel approach to Anthrax (White Powder) event.

**2012.** Wrote and presented to Emergency Planning conference a desk top exercise on Chemical, Biological, Radiological and Nuclear Centre (“CBRN”) simulation of terrorist attack to shopping centre in association with HPA Cabinet office and Government Decontamination Service

**2007 to 2016 –** Assistance in writing various papers for British Standard Institute, BDMA, Insurance Industry Audits for flood restoration.

Responsible for the formation and initial funding and founding chairman of the BDMA, Institute of Inspection Cleaning & Restoration (UK Fire & Flood) and Restoration Industry Association. Actively taken part in committees, debates and presentations.

Previous chairman of BSI Business Continuity Institute London Forum and certified member of Emergency Planning Society CBRNe counter terrorism planning.

Founder of Bio Recovery Decontamination International, Member of BSI standards committee on BS25999 on business continuity.

Recognised expert on CBRN terrorism CEN and technical committee member for European Commission in Brussels etc CWA 16106:2010.

Provided expert support to committees on:

- HVCA Ventilation and indoor air quality. Committee on ductwork sanitation standard TR17
- IICRC S520 mould standard for decontamination and clearance
- BSI PAS 64 Disaster restoration
- BSI Business continuity
- CEN (European Standards) CWA 16106, technical input on protection of EU citizen (600 million) in terrorist CBRN attack
- British Damage Management Association Exam questions and, mission statement.
- BDMA Technical Guidelines and Standards Disaster restoration and recovery

(refused but not explained other than my refusal to comply with their requirements that mould is not toxic)

2016 Input to BS12999 and resultant complaint to Secretary of State and HSE with agreement the standard should be re written, leading tom HSE industry investigation 2017

2017 HSE invited JC to provide input into British water damage industry protocol with emphasis on CDM and CoSHH compliance regarding contamination

## **SELECTED INDUSTRY AWARDS**

2013 awarded most prestigious Certified Indoor Environmental Consultant through American Council Accreditation Certification, recognised by US government agencies and UK NHS Aspergillus Centre as most appropriate qualification for mould and IAQ investigation

Won, as lead technician, two UK (CIR) Disaster Recovery of the Year awards 1999-2001; runner up in three other years

In 2013 won two awards with "Security on line emag" CBRN counter terrorism/contingency Trainer of the Year and Disaster Recovery trainer of the year awards.

Won 'Lifetime achievement' award at the prestigious CIR awards and on 'Trainer of the Year' award for 'Counter Terrorism and Contingency' planning in 2013

2015 Contingency Insurance Awards "Innovative product shortlisted 7 CPD training modules on water damage and contamination

2013 Lifetime Achievement industry voted CIR magazine

2013 Security Industry E-Mag Award - CBRN Training and Consultancy Provider of the Year

2010 BANG Innovative Product of the Year Award

2010 CIR Innovative Product of the Year Award

2003 Innovative Product of the Year Award

2002 UK (CIR) Disaster Recovery of the Year Award - shortlisted

2002 UK (CIR) Product Designer CBON Terrorist Attack –Software training product

2002 UK (CIR) Disaster Recovery of the Year Award – Lead Technician – shortlisted

2001 Innovative Product of the Year – CBON Terrorism Building Defence Program

2001 UK (CIR) Disaster Recovery of the Year Award – Lead Technician - winner

1999 UK (CIR) Disaster Recovery of the Year Award – Lead Technician – winner

1. I have been engaged in worldwide disaster recovery involving flooding, explosion, contamination and fire for over 25 years.

1.1. I have attained the highest internationally recognised qualification as:

1.1.1. Certified Restorer, **CR**

1.1.2. Water Loss Specialist, **WLS**

- 1.1.3. Certified Mechanical Hygienist **CMH**
  - 1.1.4. Accredited Associate Chartered Institute of Environmental Health
  - 1.1.5. Certified Indoor Environmental Consultant through American Council of Accredited Certification (ANSI-ISO) **IEH (Indoor Environmental Hygienist)**
  - 1.1.6. Senior Tech and Hon Fellow BDMA in the UK and founding chairman.
  - 1.1.7. Applied Microbial Restoration Technician IICRC **AMRT**
- 1.2. I have attained a level 1 certification in Infra-red thermography.