THE REPUBLIC OF TRINIDAD AND TOBAGO

IN THE HIGH COURT OF JUSTICE

Claim No. C.V. 2008-01945

BETWEEN

JOANN BERKELEY

Claimant

And

GUARDIAN LIFE HOLDINGS LIMITED

And

GUARDIAN LIFE OF THE CARIBBEAN LIMITED

Defendants

BEFORE THE HONOURABLE MR. JUSTICE PETER A. RAJKUMAR

APPEARANCES:

Mr. Kijana De Silva instructed by Ms. Gillian Seecharan-Scott for the Claimant.

Mr. Elton Prescott S.C., Mr. Simon de la Bastide instructed by Ms. Sashi Indarsingh for the defendants.

BACKGROUND

The claimant was employed by the second defendant. She was transferred to the defendants' building at Long Circular Road, St. James, from February 3rd 2006 to November 2006, and thereafter to the defendants' head office at Westmoorings from the **end of February 2007** until **April 2008.**

The claimant suffered "attacks" with various symptoms including:

Angioneurotic Edema - Airway Obstruction,

Anaphylaxis and severe Anaphylactic Reaction with

Tightening of the throat,

Shortness of breath,

Tightening of the chest,

Hardening of the breasts,

Tongue swelling and

Coughing, the onset of which she believed to be related to those buildings.

ISSUES

At issue therefore was

a. What was the claimant's condition?

b. What was the cause of such condition?

c. Whether the claimant's condition was **caused** by any factor at her workplaces.

d. Whether the claimant's condition was **contributed to** by factors at her workplaces.

e. Whether any factor at her workplaces caused **deterioration** in or **aggravation** of her condition.

f. Whether any factor at her workplaces **contributed to deterioration** in or **aggravation** of her condition.

DISPOSITION

I find that there is no causation, contribution or deterioration in either of the claimant's medical conditions of recurrent episodic anaphylaxis/ angioedema or allergic rhinitis attributable to the defendants' buildings.

I find further in respect of aggravation of triggers of the claimant's medical conditions of dust, heat, humidity or paint fumes that the defendants were not in breach of any duty to her either at common law or under statute.

In the circumstances the claimant's claim is dismissed with costs on the basis prescribed by the Civil Proceedings Rules.

ANALYSIS AND REASONING

(a) The Claim

The Claimant claims against the Defendants damages for pain, injury and loss and damage by reason of their negligence and/or breach of statutory duty.

The basis of the Claimant's claim is detailed in her Statement of Case, relevant extracts of which are set out hereunder [Formatting altered, emphasis added]

1. *At all relevant times the Claimant was employed by the Defendants as a Claims Assistant at premises at Long Circular Road, St. James and 1 Guardian Drive, Westmoorings.*

2. *In the course of her employment from* ***February 3rd 2006 to November 26th 2008,*** *the Claimant* ***was continuously exposed to:***

   (1) *dust,*

   (2) fumes,

   (3) air contaminants and fugitive emissions,

   (4) microbial and fungal growth produced in her working area which had inadequate ventilation systems,

   (5) poor indoor air quality and by the system of work where construction work,

painting and tiling liberated,

(6) dust,

(7) paint and /or chemical fumes, and

(8) environmental contaminants into the working environment which the Defendants laid down for her and required her to follow.

3. By reason of her exposure to dust, fumes, air contaminants and fugitive emissions, microbial and fungal growth the Claimant has been caused injury loss and damage, and there are serious risks of deterioration in the Claimant's physical condition.

4. The Claimant's injury, and consequential loss, and the risks of deterioration in her ***physical condition*** *were* ***caused*** *by or* ***contributed*** *to or* ***aggravated*** *during the course of her employment by the negligence and/or breach of statutory duty of the Defendants and their employees or agents acting in the course of their employment.*

DETAILS OF NEGLIGENCE

1) The Defendants failed to give any or any adequate or timely warning to the Claimant of the <u>prior use</u> to which the abovementioned premises were put and failed to take any or any adequate action for rendering harmless any attendant risks and to provide for a safe working environment before entry into the said premises.

2) *The Defendants failed to make and keep the Claimant's place of work safe for her and continuously exposed her to a working environment that was unsafe and/or might be dangerous.*

3) *The Defendants failed to provide any or any adequate breathing equipment, face masks or respirators.*

4) *The Defendants failed to take notice of the dangers presented by dust, fumes, air contaminants and fugitive emissions, microbial and fungal growth to the health of workers such as the Claimant brought to their attention by the findings, expert opinions and recommendations of the Caribbean Industrial research Institute CARIRI dated November 14th 2006 and December 21st 2006,* ***(Appendix 1),*** *Medical Practitioners who attended on the Claimant and the Claimant herself.*

5) *The Defendants failed to provide any or any adequate or timely warning to the Claimant prior to or when the power supply was disrupted and/or when there was no air conditioning system in place and/or when building operations and painting were to be or being carried out at the said premises.*

6) *The Defendants failed, in the circumstances to provide the Claimant with a safe place of work or safe system of work, safe plant or equipment, failed to instruct or supervise her in appropriate safety precautions, and exposed her to an unnecessary risk of injury.*

7) As a result of the matters stated above, the Claimant has suffered injury and consequential loss and the risk of further injury.

DETAILS OF BREACH OF STATUTORY DUTY

The Claimant's injury, and consequential loss, and the risks of deterioration in her physical condition were **caused** by or **contributed** to or **aggravated** during the course of her employment by the negligence and/or breach of statutory duty of the Defendants and their employees or agents acting in the course of their employment. ….

1. *The Defendants and/or their employees and/or agents* ***knew from June 2006*** *that the Claimant had developed and suffered from Anaphylaxis, a life threatening illness due to environmental conditions in the workplace and failed to ensure her health, safety and welfare in the workplace.*

2. *The Defendants failed to take reasonable care or willfully and without reasonable cause failed to ensure the safety, health and welfare of the Claimant by requiring her to work in a working environment where there were:*
    a) ***Air contaminants and fugitive emissions,***
    b) ***Inadequate ventilation and poor indoor air quality,***
    c) ***Microbial and fungal growth,***
    d) ***Inadequately maintained air handler units on which were found pigeon droppings and feathers,***

e) ***Limited lighting which allowed the working environment to become extremely hot, stuffy, dusty and dark when the power supply was disrupted,***

f) ***Dusty boxes, desks, chairs and carpet,***

g) ***Quantities of dust, fumes, air contaminants and fugitive emissions produced and liberated in the working environment to which the Claimant was continuously exposed when there was construction work, painting, tiling and disruption of the power supply, and***

under a system of work which the defendants laid down for her and required her to follow which was unsafe and did not ensure her safety, health and welfare.

3. *The Defendants failed to take reasonable care or willfully and without reasonable cause failed to provide the Claimant with* ***timely and advance warning*** *of any painting or construction works or the presence of dust and fumes at the workplace so that she could leave the working environment.*
4. *The Defendants failed to make a suitable and sufficient assessment of the risks to the safety and health of the Claimant and failed to provide* ***special measures*** *in the working environment such as a health surveillance as was appropriate* ***having regard to the*** *risks to the Claimant's safety and* ***health*** *which were identified and to keep a record of such health surveillance in order to deal with her condition.*
5. *The Defendants* ***failed to take reasonable care*** *or willfully and without reasonable cause failed to bring to the attention of the Claimant as well as to attention of other members of staff arrangements* ***for the provision of prompt and***

immediate medical care *suitable and rapid means of obtaining first aid help and/or transportation from the work place to a hospital in the event of the Claimant suffering injury.*

6. *The Defendants failed to take reasonable care or willfully and without reasonable cause failed* ***to provide any or any adequate information***, ***instructions***, *training and* ***supervision to the Claimant*** *and/or to* ***other members of staff*** *in the interests of the Claimant's health, welfare and safety in the workplace.*
7. *The Defendants failed to take reasonable care or willfully and without reasonable cause failed to provide and maintain a working environment for the Claimant that was safe, without risks to health and adequate as regards amenities and arrangements for her welfare at work such as any or any* ***adequate*** *and* ***suitable protective devices*** *of an approved standard to the Claimant and the provision of any or of any adequate instructions in the use of such protective devices for rendering harmless* ***dust*** *and/or* ***fumes*** *and/or air* ***contaminants*** *and/or fugitive emissions in the workplace.*
8. *The Defendants by their actions and/or inaction and/or failures in relation to all the above mentioned at paragraphs 1-7 caused, permitted, required or suffered the Claimant to be* ***exposed to conditions in the workplace*** *which* ***caused*** *and/or* ***contributed*** *to and/or* ***aggravated*** *and/or led to* ***deterioration*** *in her life threatening medical condition and are in breach of their statutory duty to ensure the safety, health and welfare of the Claimant at work pursuant to Sections 6 (1), 6 (2) (a), 6 (2) (b), 6 (2) (c),6 (2) (d), 6 (2) (f), 8 (2) (b, 10 (1) (a),* ~~*10 (2), 25 G 1*~~

~~*(a), and 25 K (1) and (2)*~~ *of the Occupational Safety and Health Act 2004 as amended.*

DETAILS OF INJURY

As a result the Claimant who is now aged forty five (45) years having been born on April 3rd 1962 developed from June 10th 2006 and is suffering from ***Angioneurotic Edema, Airway Obstruction, Anaphylaxis and life threatening, severe, Anaphylactic Reaction which entail but is not limited to tightening of the throat, shortness of breath, tightening of the chest, hardening of the breasts, tongue swelling and coughing,*** *which require a treatment regime that also includes steroids and which has led to vaginal bleeding, sclerosis and weight gain. By reason of the development of a life threatening condition and an irrevocable and irreparable change in lifestyle the Claimant suffers from severe anxiety and depression and is under the care of a psychiatrist.*

Since her examination on May 5th 2007, the Claimant has had episodes as follows;

a) **June 4th 2007 –Severe Anaphylactic Reaction – Hospitalisation 6 days.**
b) **August 13th 2007- Anaphylactic reaction- Hospitalization 2 days.**
c) **September 8th 2007- Allergic reaction –Observation for a few hours.**
d) **September 23rd 2007-Anaphylactic Attack.**
e) **November 26th 2007- Very Severe Anaphylactic Attack- Hospitalization 8 days.**

(b) The Defence

The Defendants dispute the claims, denying that there was any causative or contributory link between the claimant's condition and conditions at the defendants' premises. They contend that in any event her condition predated her employment with the defendant, and/or that she had failed to inform the defendants of any condition she may have had so as to enable them to take precautions for her health and safety, and thereby contributed to any injury she may have suffered.

They contend that when they were eventually informed they took adequate measures, including inter alia,

a. commissioning reports from CARIRI on indoor air quality, which they acted upon,
b. asking the claimant to indicate what steps they needed to adopt in the event of her suffering a respiratory attack at the workplace, and
c. informing her coworkers when they were so informed, as well as
d. informing her if there were any anticipated works or conditions developing at the workplace that might impinge on her condition,
e. Relocating the claimant to another building.

Their defence in so far as material is set out hereunder [emphasis added]

> *If, which is **not admitted**, at the or any of the Claimant's work locations there was **construction work** or **painting** or **dust** or **paint** and/or **chemical fumes**, or **environmental contaminants** or fugitive emissions or **microbial** and/or **fungal***

growth, *the* ***same was not a causative factor*** *and/or* ***did not contribute*** *to the Claimant* ***contracting any ailment*** *or* ***experiencing any attack or distress*** *or suffering* ***injury*** *or* ***loss****.*

The Claimant was medically diagnosed and/or was ***suffering with allergic rhinitis in or about February, 1995*** *and/or* ***such condition deteriorated or worsened*** *to the extent that the Claimant commenced to undergo medical treatment for associated symptoms in or about* ***June 2003*** *after such associated symptoms had persisted for 6 months.*

The ***Claimant*** *well* ***knew*** *at all material times that the said* ***ailment*** *and her physical condition were such that exposure to chemicals including household chemicals, paint fumes, smoke and dust would and did aggravate her condition and/or lead to attacks or respiratory attacks which required medical intervention or the application of medication and/or emergency clinical treatment.*

The Defendants deny the allegations of the Claimant that her physical condition was caused by the presence of contaminants or by environmental conditions at her work locations and aver that the ***Claimant well knew at all material times prior to and including the commencement date of her employment*** *by the Second-Named Defendant of the severity of her ailment and of the unpredictability of its symptoms.*

The Claimant failed or refused to inform the Defendants *or either of them adequately or in a timely manner or at all* ***of her said condition*** *and/or negligently failed to take any or reasonable care for her own safety or to avoid or to ameliorate any deterioration or aggravation of the said allergic rhinitis or other medical condition or ailment.*

The Claimant's condition and/or ailment was exacerbated over the period June 2003 to December 2005 *to such a degree that on or about December 2005 the Claimant was subject to a global allergic situation and gave symptoms of Multiple Chemical Sensitivity Syndrome.*

The Claimant did not inform the Defendants of her said medical condition or of steps which should be taken, if any, by the Defendants to render the work environment safe or non-threatening *or to ensure her own safety while at the work location notwithstanding that the Claimant received treatment and/or was diagnosed with* ***Allergic Rhinitis*** *by Dr. Wesley Dexter Shim, Otolaryngologist in* ***December 2005****.*

The Defendants admit that during June, 2006 the Claimant experienced an episode of respiratory difficulty while at the work location at Long Circular Road, aforesaid. The said episode occurred at a time when the Second Defendant was engaged in a relocation exercise and there was a breakdown in the air conditioning system at the premises.

The Claimant well knew at all material times that ***environmental conditions, external to the workplace****, including exposure to smoke, chemical fumes and dust, were the cause or major contributors to or factors in the onset of mild and serious episodes of respiratory problems and/or anaphylactic reactions and/or could and did exacerbate allergic rhinitis and/or that* ***such conditions can and do exist outside of the workplace*** *and/or at or in domestic and/or social spaces. The Claimant's condition* ***was caused and/or aggravated by her exposure*** *to such* ***environmental conditions not related to the work place.***

PARTICULARS

(1) In or about ***December, 2003*** *the Claimant was affected by* ***paint fumes*** *but not at or related to the Defendants' work place or conditions there.*

(2) On or about the ***28th day of October, 2006*** *the Claimant experienced a bout of illness or an episode* ***while travelling in a motor vehicle****.*

(3) On or about the ***10th day of March, 2007*** *the Claimant was afflicted by anaphylaxis secondary to* ***smoke inhalation****, the same did not occur at the workplace and/or was not related to conditions there.*

(4) On or about the ***12th day of August, 2007*** *the Claimant suffered an episode or illness but same did not occur at and/or was unrelated to the workplace or conditions there.*

2. ***The Defendants were not alerted*** *about the Claimant's medical condition and/or that such condition may be attributed to or aggravated by environmental conditions at the workplace* ***until on or about November, 2006*** *by letter dated 6th November, 2006 from Dr. Michele Monteil, and by electronic mail from the Claimant dated 27th November, 2006.*

[I accept the defendant's evidence in this regard.]

3. ***The Defendants acted on such report*** *and caused the Claimant to be relocated at Keate Street, Port of Spain and subsequently to a location at Westmoorings.*

4. Thereafter, the First Defendant caused an assessment of indoor air quality to be carried out by experts, The Caribbean Industrial Research Institute (hereinafter called "CARIRI") during November and December, 2006 at its premises at Long Circular Road aforesaid.

5. The said CARIRI recommended specific corrective actions which were conducted by the First Defendant and, after investigation, monitoring and assessment by CARIRI in May, 2007 at the said location, the said CARIRI submitted its report and recommendations dated 11th June, 2007. The Defendants will rely at the trial on the contents of the said report and recommendations.

6. The Defendants will contend that at ***all material times prior to and including November and December, 2006 and May, 2007.***

(a) ***the level of indoor air quality at its location at Long Circular Road aforesaid was within the range of acceptable international standards*** *and*

(b) ***all recommended remedial work was carried out*** *by the Defendants*

(c) all measurements were found to be within internationally acceptable limits.

7. In the premises the ***Defendants deny*** *the Claimant's allegations that they*

(a) failed to make and keep the place of work safe for the Claimant and continuously exposed her to a working environment that was unsafe and/or might be dangerous

(b) failed to take notice of the dangers noted in the opinions and recommendations of CARIRI

(c) failed to provide a safe place of work or safe system of work, safe plant or equipment

(d) exposed the Claimant to an unnecessary risk of injury

(e) failed to ensure her health, safety and welfare in the workplace

(f) required her to work in a contaminated or unsafe working environment.

8. On or about the 31st day of May, 2007. The Claimant was requested to provide relevant information to the said Defendant on her medication, its application, her

condition, emergency treatment measures and contact information for her personal physician.

[I accept the defendants' evidence in this regard].

The Claimant delayed or refused or failed to provide the said information to the Second-Named Defendant.

9. *By internal electronic mail dated the 27th day of July, 2007 the Claimant informed the First-Named Defendant's Health and Safety Operations Officer of steps to be taken in the event of an anaphylactic attack.*

[**I accept the defendants' evidence in this regard].**

10. *The First-Named Defendant informed the Claimant's work colleagues of the Claimant's condition and advised them to follow the Claimant's instructions in the event of an attack and of the available medication and methods of administering the medication.*

11. *The Defendants deny that they failed to provide the Claimant with timely and/or advance warning of the or any alleged painting or construction works (which are denied) or the presence of dust and fumes at the workplace and aver that at all material times the said premises were rendered and maintained in as safe a condition as is reasonably practicable and/or that satisfactory and adequate arrangements were made for the welfare of its workers including the Claimant.*

12. *The Defendants established and maintained a system of warning all of their employees including the Claimant, in advance, of any known or potential hazards. The said advance, warnings were communicated by electronic means throughout the workplace. .* **[I accept the defendants' evidence in this regard].**

13. *On or about the 26th day of November, 2007 the First-Named Defendant experienced an electrical problem at its location at Westmoorings and issued* ***internal communication warning staff that the air conditioning system would not be in operation during the day.*** *The Claimant was not advised of this development by the said internal communication system but the Claimant was* ***provided with a copy*** *of the said internal communication in a timely fashion, whereupon the Claimant left the premises and entered the neighbouring public shopping facility at West Mall where she experienced a respiratory attack and was assisted by work colleagues.*

14. *The Defendants contend that it was not negligent with regard to the said episode and* ***will rely on the fact of the Claimant having been informed of the potential hazard in as timely a manner as was reasonably practicable*** *to enable the Claimant to vacate the premises and/or to administer appropriate medication and/or to take appropriate precautionary or preventative steps.*

Dr. Wheeler's Evidence

Dr. Wheeler was asked to evaluate the claimant's medical history, medical reports, and results of laboratory tests. She did so and produced an extremely thorough analysis of all the available evidence relating to the claimant's medical condition.

It sets out the development of the claimant's condition with the necessary chronology of episodes of attacks both before and after the claimant began working in the building at Long Circular Road of which complaint is made. She also considered various possible causes of that condition in the light of the available evidence. I consider that this report deals comprehensively with the issues of causation contribution, and aggravation and deterioration of the claimant's condition. I accept the findings and analysis therein as it was in no way shaken in cross examination. The report is therefore necessarily quoted at length, (with emphasis added).

Expert Report on Joann Berkeley dated 6th September 2010

Ms. Gillian Wheeler a medical practitioner with expertise in Allergy and Immunology was requested to:

(i) Comment on 2 reports prepared by Dr. Creticos dated the 16th and 23rd days of September 2009

(ii) Review the medical history, laboratory tests and consultations on Ms. Joann Berkeley; and

(iii) Prepare a medical report setting out her opinion as to the possible causes of Ms. Berkeley's medical condition.

She was also to provide an opinion as to whether Ms. Berkeley's work environment(s) (as reported by Ms. Abdullah) while she was employed with Guardian Life of the Caribbean Limited, caused, **or was one of the contributory causes** of her medical condition.

She reviewed inter alia:

1. Joann Berkeley's personal medical history titled Medical history as reported by Joann Berkeley – Undated**.**

…

4. Other reports

   (a) Cariri report dated November 14, 2006 - Preliminary Site Assessment to determine the quality of indoor air at Guardian Life – Employee Benefits Building, Long Circular, St. James

   (b) Cariri report dated December 21, 2006- Indoor Air Quality Assessment at Guardian Life – Employee Benefits Building, Long Circular, St. James (Final Report)

   (c) Cariri Report – June 11, 2007 Indoor Air Quality Assessment at Guardian Life – Employee Benefits Building, Long Circular, St. James.

CHRONLOGY

She set out the relevant chronology as follows:

1. **In February 2006** Ms. Berkeley was employed at a building located on **Long Circular Road, St. James.**
2. At or around the **end of November 2006** Ms. Berkeley was **moved** from the building at Long Circular Road to offices located at Keate Street Port of Spain where she was employed until the **end of February 2007.**
3. At or around the **end of February 2007** Ms. Berkeley was moved to GLOC's headquarters in **Westmoorings** where she was employed until **April 2008.**

Prior to the move into the building at Long Circular Road in February 2006

4. *Ms. Berkeley reports that she had **allergic rhinitis since 1995.***
5. *Records indicate **an escalation in this condition between 2003 and 2005** in terms of increased symptoms and medication use. Ms. Berkeley needed no treatment for allergic rhinitis from 1995 to 2003. However she was given prescriptions for nose sprays on six different occasions between June, 2003 and December 2005. She was also treated for gastro-oesophageal reflux in **January, 2006.***
6. *Ms. Berkeley was also treated for angioedema (swelling) of the tongue in **December 1st, 2005.** This occurred after dental work from Dr. Brian Wallace on November 29th, 2005. Ms. Berkeley was seen in the emergency room at St. Clair Medical Centre at 12.45am on December 1st, 2005 with the complaint of a "**sensation** **of swelling** of the tongue". She was evaluated by Dr. Ahmad*

*Rahman. He noted her anxious appearance and that her **tongue was not particularly swollen** but she was treated with a steroid and an antihistamine and discharged. He also noted in his report that she gave a history of being allergic to "some scents".*

7. Ms. Berkeley also reported allergies/sensitivities to food and smells prior to February, 2006.

Medical Condition Post February 2006

1. *Ms. Berkeley experienced episodes of "anaphylaxis/angioedema" between June, 2006 and August, 2009. These episodes as described by Ms. Berkeley variably involved swelling of the tongue, tightening of the throat, shortness of breath, tightening of the chest, hardening of the breasts, and coughing. These episodes resulted in many hospitalizations/emergency room visits but there are few medical reports describing her physical examination and hospital course during an episode. During the admission of June, 2007, Dr. Trotman reported that Ms.. Berkeley had a relapse after eating "some wheat products (crackers)". Dr. Trotman's identifies Ms.. Berkeley's primary diagnosis as anaphylaxis with known and unknown triggers.*

Dr. Wheeler summarized the episodes by date, trigger and location as reported by Ms. Berkeley.

DATE	*TRIGGER*	*LOCATION*
9-10/06/06	*no electricity/loss of air condition*	*workplace*
6/09/06	*no electricity/loss of air condition*	*workplace*
9/09/06	*preserved fruits*	*home*
28/09/06		*workplace*
27/10/06		*workplace*
28/10/06	*car with no A/C*	*car/mall*
29/10/06	*hotdog, ketchup*	*home*
30/10/06 - 2/11/06	*burning cord on toaster oven*	*home*

[post November 2006]

[ON SICK LEAVE FROM 18/01/07-19/02/07]

13/02/07	*burning rubbish/rubber/smoke*	*home*
23/03/07	*no smell but informed of painting in building*	*workplace*
4-10/06/07	*dust in work area*	*workplace*
	[Wheat (crackers)	*hospital (relapse on 6/6/07)]*
	[As per Dr. Trotman]	
13/08/07	*unknown*	*home*
8/09/07	*unknown*	*home*
23/09/07	*car fumes from 'fresh air'*	*return trip from Maracas*
26/11/07	*no electricity, 'on generator'/ loss of air condition*	*workplace*

DATE	*TRIGGER*	*LOCATION*
9/03/08	*fright from reckless driving*	*car trip from beach house*

20/03/09	*freshly cut grass*	*home*
28/05/09	*"a drink"*	*home*
16/08/09	*no trigger identified*	

She attributed these episodes to environmental conditions at her workplace resulting from air-conditioning malfunction and exposure to fumes/paint/dust. However she also reported that some of these episodes were triggered when she was not at work. She reported having episodes at the mall, in a car and after eating preserved fruits when she was at home. It is noted that Ms. Berkeley reported that construction was ongoing in the filing room at the Long Circular Building from August/September, 2006 and that exposure to dust, paint and chemicals was significant throughout this period for some months. She reports ***three episodes being triggered by conditions in the workplace during this period****. These were in September and October, 2006.* ***During this same period****, she reported that* ***four episodes were triggered at home*** *or at locations outside of her* ***workplace.***

It is also significant that Ms. Berkeley reported "hardening of the breasts" as one of the symptoms she experienced during the severe episodes. Persons experiencing anaphylaxis/angioedema report symptoms involving the respiratory, gastrointestinal and skin systems. The breasts are not commonly reported to be involved in these conditions.

The breasts are affected by female hormones like estrogen. This is significant because one condition which may explain Ms. Berkeley's condition is Type III Hereditary Angioedema. Women with this condition have an unusual reaction to estrogen which may involve oedema (swelling) of some parts of the body.

Wheezing

Ms. Berkeley had recurrent episodes of wheezing from 2006 but these episodes occurred only during the "anaphylactic" episodes. She ***did not wheeze or have symptoms of asthma between*** *the "anaphylactic"* ***episodes***. ***Her lung function tests were also normal***. *Dr. Michelle Trotman stated that Ms. Berkeley* ***is not asthmatic*** *but that her wheezing was part of the anaphylactic episodes.*

Diagnoses

The reports from Dr. Monteil list Ms... Berkeley's diagnoses as anaphylaxis and multiple chemical sensitivity.

It was also reported that her symptoms improved significantly from 2008 (See report of Dr. Creticos dated 23rd September 2009.) ….

Hormonal Involvement

….reports/consultations of her gynaecological history with regards to any diagnosed conditions or changes in menstruation were not provided to me….This history and such conditions are of significance because ***female hormones may affect asthma and allergy***

symptoms... *Women in their forties may undergo significant changes in their hormonal levels as they approach menopause and this* ***may impact on conditions like allergic rhinitis****. It is noted that Ms. Berkeley was in her mid-forties during this period. Conditions like autoimmune progesterone anaphalylaxis and Type III hereditary angioedema can cause symptoms which may include tongue swelling. These conditions may cause symptoms at certain times in the menstrual cycle when hormonal levels are higher. ….*

Exposure to dust/pigeon droppings

The CARIRI report of December, 2006 on the environmental conditions at the workplace Confirmed exposure to dust and suggested possible exposure to pigeon droppings/feathers.

Exposure to pigeon droppings/feathers can cause hypersensitivity or allergic reactions. The symptoms of these hypersensitivity reactions to pigeon droppings include but are not limited to fever, cough and shortness of breath. Ms. Berkeley's symptoms, the lack of exposure to pigeon droppings/feathers for a significant number of episodes and the negative tests done by Dr. Creticos would have eliminated this exposure as a cause of her episodes.

Microbial Involvement

The CARIRI report of June, 2007 on microbial air sampling stated "no microbial amplification occurred inside the building". This means that mold exposure inside the building was less than mold exposure outside the building. This was despite the relative

humidity values which were near the upper recommended limits. A person working in the building would have the same or less mold exposure as when they were outside. Molds can cause hypersensitivity or allergic reactions. Persons with allergic rhinitis may have increased symptoms if they have mold allergy. These symptoms may include stuffy nose, cough, wheeze, shortness of breath and sneezing. ***Swelling of the tongue is not commonly associated with mold allergy.*** *Ms. Berkeley's* ***allergy test for molds were negative.***

Allergic Reaction?

Ms. Berkeley had blood tests for Immunoglobulin E (IgE) which is the allergy antibody. IgE is usually increased in persons with allergies. Ms. Berkeley's IgE was checked on at least five different occasions (12/06, 02/07, 08/07, 11/07, 07/09) and was well within the normal limit on each of these occasions. It is possible for someone with an allergy to have a normal IgE, however, it is very unusual that someone with severe allergic reactions from ***an environmental trigger or food*** *would have a repeatedly normal IgE.* ***Ms. Berkeley's IgE test results would tend to suggest that she not have allergies but are not conclusive in that regard.***

A serum tryptase was done on 13th February 2007 ***during one of the reported 'anaphylactic' episodes*** *which Ms. Berkeley suffered. However the level was* ***normal. The tryptase level*** *is increased in persons having severe allergic reactions and* ***is used to differentiate allergic*** *reactions from other conditions which may mimic allergic*

reactions. ***The serum tryptase performed on Ms. Berkeley indicates that the said episode was not an allergic reaction.***

Dr. Peter Creticos (John Hopkins Medicine- Allergy and Immunology) evaluated Ms. Berkeley in July, 2009. ***The results of all allergy tests performed were negative****. The total level of allergy antibody (IgE) in Ms. Berkeley's blood was well within the normal range. The allergy tests for the foods to which she reported reacting were all negative. Other tests showed no evidence of hypersensitivity reactions. Ms. Berkeley's allergy evaluation was negative and* ***did not confirm*** *an* ***allergic reaction to molds****. She was not tested for allergy to house dust mites at John Hopkins but house dust mites are not reported to cause tongue swelling. Dr. Creticos assessed Ms. Berkeley as having* ***chronic rhinitis*** *and* ***asthma.*** *The diagnosis of both these conditions would have been based on Ms. Berkeley's medical history, physical examination and her use of asthma medications. Tongue swelling does not occur in these conditions. He also assessed her as having* ***episodic angioedema*** *(tongue swelling).* ***This condition is a separate and different from asthma and allergic rhinitis.*** *She was investigated for the usual causes of angioedema at that assessment. These were also negative.*

Ms. Berkley's diagnoses include:-

1) **Allergic Rhinitis**
2) **Gastroesophageal reflux (heartburn)**
3) **Recurrent/Episodic Angioedema/Anaphylaxis**

It has been suggested that her symptoms/signs are a result of ***sensitivity to some environmental agent(s)***. ***This has not been identified*** *after extensive testing which tests include all the tests highlighted in the reports above and the various laboratory reports and include IgE (allergy antibody), serum tryptase and* ***allergy test for molds***.

…..

Ms. Berkeley had swelling of the tongue/anaphylaxis on several occasions and she was managed by various physicians for this condition. ***Various triggers*** *of these episodes have been mentioned. It should be noted that the trigger of a condition is not necessarily* ***the cause of the condition.*** *For example, cigarette smoke and stress can trigger asthma attacks, sweating and stress can trigger atopic eczema and alcohol and stress can trigger chronic hives.* ***The triggers mentioned in these examples are not the cause of the conditions***. ***The exact cause of Ms. Berkeley's recurrent anaphylaxis/angioedema has NOT been identified.*** *So for example it is reported that the smell of burning rubber on one occasion 'caused' Ms. Berkeley to have an 'episode' involving anphylaxis/angioedema. The smell of burning rubber may have* ***triggered*** *the reaction, but what* ***caused*** *her to react in that manner to the smell of burning rubber is not known. Similarly while it may be that the smell of paint at the workplace may have caused (i.e. triggered) her to suffer anaphylaxis/angioedema, the reason why she reacted in that manner to the smell of paint is not known.*

A specific ***cause*** *is not always found in persons with recurrent anaphylaxis.*

Autoimmune progesterone anaphylaxis

There are some less common causes of anaphylaxis. Autoimmune progesterone anaphylaxis has been identified in some women who have anaphylaxis. It is a reaction to progesterone which is a female hormone and can cause anaphylaxis. This can be diagnosed by testing.

Type III Hereditary Angioedema

Type III Hereditary Angioedema is another condition which can cause swelling of the tongue. Some ***triggers*** *for this condition include dental work and stress both of which are reported to have been the triggers of episodes of anaphylaxis suffered by Ms. Berkeley. The results of routine allergy testing are negative in both of these conditions, as was the case with Ms. Berkeley.*

Sick Building SynDr.ome

Sick Building SynDr.ome is the other condition referred to in reports pertaining to Ms. Berkeley. ***Tongue swelling is not a reported symptom in persons with this condition****. A PUBMED search for angioedema and sick building syndrome failed to find even one citation. PUBMED is a listing of over a million medical research articles from all over the world which is maintained by the US National Library of Medicine.*

Ms. Berkeley demonstrated escalation of her disease state prior to 2006. *The environmental work conditions (dust, fumes and heat) alluded to by Ms. Berkeley in 2006/2007* ***may have*** *exacerbated her* ***allergic rhinitis****. These environmental conditions may also lead to the development of asthma, however Ms. Berkeley* ***did not develop***

asthma *as was confirmed by the report of Dr. Trotman.* ***These conditions do not cause tongue swelling.*** *Ms. Berkeley reported swelling of her tongue in 2005* ***before*** *she moved to the alleged incriminated workplace. She also reported swelling of her tongue while at home and at other locations remote from her job.* ***She does have a condition which is undiagnosed at this time but clearly has not been caused by her workplace.***

Dr. Wheeler's evidence was compelling in its thoroughness and its logic. Her analysis and conclusions survived cross examination intact.

Her report clarified the issues of diagnoses, whether there was any **causal** link or **contribution** between her medical possible conditions and conditions in the Defendants' buildings. She clarified inter alia, the following:-

1. W

   hile it was possible that the claimant's symptoms of allergic rhinitis could have been exacerbated by the type of conditions in the building at Long Circular Road of which complaint was made, in fact the evidence tended to suggest otherwise as

   (a) The escalation of that condition pre-dated the claimant's move and exposure to the defendants' buildings at Long Circular Road and Westmoorings.

   (b) Her allergic rhinitis had not deteriorated to asthma.

2. M

   old was unlikely to be a trigger as the Cariri report (June 11 2007) indicated that the level of fungal spores inside the building was lower than that outside it.

3. The claimant's condition remained undiagnosed but allergic reactions to pigeon dropping/feathers and molds/fungi could be excluded as triggers.

4. Sick building syndrome could be eliminated as there was no association between this and angioedema.

5. Two possibilities as to causes of her condition were

a. Type ***III Hereditary Angioedema***

b. ***Autoimmune progesterone anaphylaxis***

as angioedema was a feature of these.

6. The triggers for the claimant's condition were varied and not exclusive to things found at the defendants' premises, as evidenced by the triggering of attacks elsewhere, and by sundry, and in some cases, unknown, triggers.

Causation or contribution

Dr. Wheeler's evidence therefore, which I accept, is that the claimant's condition was not caused, or contributed to, by conditions in the buildings at Long Circular and Westmoorings,

a. because her allergic rhinitis and angioedema predated her entry into the building and
b. because her episodes/attacks did not always coincide with or correlate to her presence at the building and
c. because tests suggested that she was not experiencing an allergic reaction to an environmental trigger
d. because triggers of her attacks were not specific to the buildings of the defendants, for example, the scent of a burning power cord.

Many of the episodes during the period that the claimant was at Long Circular, as identified by Dr. Wheeler, are unconnected to that building. If some triggers present at the building resulted in attacks, that by itself does not in the circumstances establish or even suggest, on a balance of probabilities that the building **caused or contributed** to the claimant's medical condition.

The triggers that gave rise to those attacks were triggers that could have occurred anywhere and in fact did. Multiple triggers were identified, some of which were not exclusive to the building (– for example – heat, humidity), and some of which were not even connected to it, for example, the smell of freshly cut grass.

More of the attacks over the period February 2006 to November 2006 took place outside the Defendants buildings than inside. Most were unrelated to dust exposure.

IGe levels were not elevated after 5 attacks and an allergic response was thereby unlikely, though not ruled out conclusively**.** This would include therefore an allergic response to an environmental factor in the defendants' buildings.

Dr. Creticos' test ruled out an allergic response to a wide range of factors including molds.

The serum tryptase level in her blood during one of her attacks also suggested that the claimant's attacks were not an allergic response. This would include therefore an allergic response to an environmental factor in the defendants' buildings. Dr. Wheeler concluded no causal link between the defendants' building at Long Circular and the claimant's condition, with respect to **causation** or **contribution**.

The fact that it was suggested that one other employee had complained of respiratory ailment connected with the building does not advance the claimant's case - that employee has not testified, and any correlation between the building and her medical condition is similarly not established. At most it suggests that the conditions at the building merited investigation, as was in fact carried out by Cariri.

Causation of or contribution to the claimant's condition is a separate matter from **aggravation** of that condition or contribution to the **deterioration** of that condition. These are all themselves different from **triggering** of an anaphylactic **episode**.

Deterioration

The claimant must establish that there existed conditions in the building that caused deterioration in any condition that she suffered from.

There is the contention by the claimant that there were excessive levels of dust. It was suggested in the CARIRI preliminary November 2006 report that initially there was a presence of a. dust and b. pigeon feathers and droppings.

There is therefore evidence of episodes of

(a) heat and humidity during power failures,

(b) possible dust exposure,

(c) initially at Long Circular Road – pigeon feathers and droppings.

The suggestion in the Cariri November report is that there may have been dust as evidenced by observations on walk through of the building as follows:-

a. Files, folders, and boxes felt dusty to the touch

b. Plastic wrapping and return air grilles were observed to be extremely dusty on the ground floor.

c. Boxes of files were observed on the first floor and the return air grills on this floor were also dusty

d. A black particulate deposit was observed on the air diffusers throughout the floor

The levels of particulate matter in the air are identified in the December Cariri report. All levels of particulate matter measured on December 4 2006 were well within acceptable limits.

Deterioration - Dust and allergic rhinitis

To the extent that the claimant contends that her condition of allergic rhinitis may have deteriorated because of the presence of dust and pigeon feathers and droppings, there is evidence that this condition had began to deteriorate before her entry into the building at Long Circular Road. Pigeon droppings and feathers were ruled out by Dr. Wheeler as a factor in the claimant's condition.

The aspect of the buildings that could be identified as causing **deterioration** in her condition of allergic rhinitis would be dust exposure. However the actual evidence is that any deterioration in this condition predated her entry into the Long Circular building, and that further deterioration to asthma did not occur after her entry therein.

The evidence on balance is that after her move to the building at Long Circular her allergic rhinitis did **not** deteriorate into asthma, which was a possibility, if there had in fact been continued exposure to dust.

Dust and anaphylaxis- deterioration

Dr. Wheeler concluded from the material/tests she examined (*the serum tryptase and IgE readings)* that the Claimant was not exhibiting an allergic reaction during anaphylactic episodes. An allergic reaction to dust as the cause or trigger of her anaphylactic episodes can therefore be ruled out.

Mold and anaphylaxis - deterioration

CARIRI report indicates that mold/fungi levels within the building were no greater than outside the building. Hence even if mold/fungi were a cause or aggravating factor in the Claimant's condition, or deterioration of her condition, it was unrelated to the defendants' building.

Heat and humidity and anaphylaxis - deterioration

The Cariri reports do not reveal excessive heat or humidity. To the extent that there may be minimal departure from recommended guidelines these are de minimis, especially in the context of the everyday levels of atmospheric heat and humidity to which the claimant would be exposed once outside the building.

There is therefore no evidence that her undiagnosed condition which gives rise to her anaphylactic attacks has **deteriorated** as a result of any factor to which she was exposed at the defendants' buildings.

Aggravation

I consider that aggravation could relate to an enhancement or amplification of a **trigger**, leading to an increase in the **likelihood, frequency, or severity** of an attack, for example, **conditions which produce an excess of dust, heat, humidity associated with electricity supply interruptions, or paint fumes, all known triggers of the claimant's attacks.**

It was possible for some of those **triggers** of attacks to be present in the course of the Claimant's employment, for example increased exposure to dust on occasion, or increased humidity and heat on occasion when the electricity supply was disrupted. These were **triggers of attacks** and **not causes of her condition**.

To the extent that the claimant takes issue with the defendants' actions in preventing individual attacks it is necessary to consider the reasonableness of the defendants' actions and precautions in the light of the state of their knowledge in relation

to each such attack to ascertain whether the Defendants were in breach of their duty to the claimant a. either in permitting any such conditions to exist or b. permitting her exposure thereto.

Date of Defendants' Knowledge of Claimant's Condition

The Defendants were informed of the claimant's condition on or about November 6th 2006. I accept the defendants' evidence in this regard.

Specific episodes

June 2006 episode

In relation to the June 2006 episode, even if it occurred as a result of dust/humidity in the Defendant's building.

a. The defendants up to that point in time had no knowledge that the Claimant in fact had any condition, and the claimant herself did not, at that stage, associate the building at Long Circular Road with her attack.
b. While this could have been a **trigger of an attack** it was **not the cause of her condition.**
c. I do not accept that the claimant was required to be present at the building throughout episodes of lack of air conditioning or electricity supply disruption. In this regard I prefer the evidence of the defendants.

September 2006 episode

Even if it occurred as a result of dust/humidity in the Defendant's building

a. The defendants' up to that point in time had no knowledge that the Claimant in fact had any condition, and the claimant herself did not, at that stage, associate the building with her attack.

b. While this could have been a **trigger of an attack** it was **not the cause of her condition.**

c. I do not accept that the claimant was required to be present at the building throughout episodes of lack of air conditioning or electricity supply disruption. In this regard I prefer the evidence of the defendants.

Episode on Saturday October 28th

An attempt was made to suggest a link between construction works which began in August or September 2006 and this attack three months later. I consider that that link has not been established.

Episode on June 4 2007

Dust at the defendants' building

See paragraphs 132 – 136 of the Claimant's witness statement.

On Monday June 4th 2007, *after coming into the office on Monday morning and witnessing dust on my work area, desk, files, chair, carpet, everywhere, you could smell it in the air.* ***I tried to clean up my area****, I began to feel an attack coming on and was unable to remain at work.*

While trying to clean up my *desk I saw Mr. Mark Webster as he was making his way to a meeting, I told him hello and he acknowledged the same as well, whilst on my way to the kitchen area to wet the cloth* ***I was using to clean the desk****.*

While I was trying to clean up *I asked a couple of co-workers if they knew where all the dust had come from.*

My symptoms.. at that time included throat tightness, tongue swelling, coughing and chest tightness. None of my colleagues was able to help me so I left the building, before leaving I told my colleague who was still cleaning his area that I was leaving the building.

As a consequence, I was admitted to West Shore Medical via Accident and Emergency Department. I was treated and hospitalized for six (6) days.

The claimant by this time suspected that dust was a factor in her attacks. It is inexplicable therefore why she would have remained to clean her desk. I do not accept that she was required to remain in the building, and to the extent that she did not immediately leave the building it was her choice. In those circumstances the responsibility for the aftermath would not be the responsibility of the defendants. The defendants could not be responsible for every episode of temporary dust accumulation at their premises. That would be to impose an unacceptably stringent and onerous obligation on them. The claimant with knowledge of her possible reactions in the presence of dust was responsible for taking such steps as necessary to avoid or minimize that possibility.

Episode on November 26 2007

Lack of air conditioning

Paragraph 155- 157 of the claimant's witness statement is as follows:

155. ***On Monday November 26th 2007****, When I arrived at work that morning I went to my work station on the second floor,* ***I realized that there was no electricity*** *and we were on generator, the place was already very hot and stuffy due to very little or no ventilation in the building. There was a disruption in the power supply at Guardian Life, West Moorings.*

156. A co-worker who sits not far from where I was mentioned that an e-mail was sent out advising there would be no electricity until 6:00pm that evening.

157. The attack had started, I went outside the building for fresh air, and walked towards West Mall, trying to contact Anne Marie Bailey on my cell. I got her and explained the conditions at work. I informed her that I was getting difficulty to breathe … I told her I would call her back because I was getting difficulty to breathe properly and hung up. I went into the mall to sit down and take my Epipen Injection...

…. In a very short space of time I experienced a very severe Attack, my symptoms. included: coughing, throat tightness, shortness of breath, chest tightness, tongue swelling, and I was slipping in and out of consciousness.

…

…I felt as if I was drifting, it was so very hard to breathe my chest hurt, I couldn't swallow, my tongue was so heavy in my mouth.

Paragraph 159 of claimant's witness statement is as follows:

I had spent eight (8) days in hospital from Monday to Monday.

The defendants' defence addresses this as follows:

[Paragraph 35-36 of the Defence]

> *On or about the 26th day of November, 2007 the First-Named Defendant experienced an electrical problem at its location at Westmoorings and issued* ***internal communication warning staff that the air conditioning system would not be in operation during the day.*** *The Claimant was not advised of this development by the said internal communication system but the Claimant was* ***provided with a copy*** *of the said internal communication in a timely fashion, whereupon the Claimant left the premises and entered the neighbouring public shopping facility at West Mall where she experienced a respiratory attack and was assisted by work colleagues.*
>
> *The Defendants contend that it was not negligent with regard to the said episode and* ***will rely on the fact of the Claimant having been informed of the potential hazard in as timely a manner as was reasonably practicable*** *to enable the Claimant to vacate the premises and/or to administer appropriate medication and/or to take appropriate precautionary or preventative steps.*

I accept that the defendants did all that was reasonably practical in the circumstances to warn the claimant of the potential hazard to her so as to enable her to take steps to vacate the area. I further accept the evidence of the defendants' witnesses that once they became aware of her condition and possible unusual sensitivity to environmental triggers, they put systems in place to ensure that the claimant would be alerted to any conditions that could have resulted in excessive heat, humidity, paint fumes or dust, relocated her as necessary, alerted her co workers as to her condition, and did not require her to remain in their buildings if there was a breakdown in the air-conditioning or electrical systems.

The defendants' witnesses' evidence, which I accept, reveals that they did all that could be reasonably expected of them once they became aware of the claimant's condition. They were solicitous and accommodating. The claimant was however also required to do her part and not expose herself unnecessarily to known or suspected triggers. The presence of dust or heat/humidity on rare occasions was a matter which she could and should have herself taken precautions against. I find that these were not persistent conditions or exposures, and that the defendants did not require the claimant's continued presence in the buildings when these occurred.

FINDINGS OF FACT

1. As to exposure to microbial and fungal growth the evidence is that there was no enhanced level within the building at Long Circular Road.

2. As to any prior use of that building which may have left residual contaminants there is no such evidence, and this is conceded on the claimant's written submissions.

3. As to failure to warn the claimant of disruption in power supply or air conditioning the Defendants themselves usually had no such warning and the evidence which I accept, is that they took appropriate measures to ensure that staff including the claimant, were not required to stay in their buildings or unnecessarily subjected to an uncomfortable work environment in such event.

4. There is no evidence that the defendants failed to make or keep the claimant's place of work safe or continuously exposed her to an unsafe working environment as alleged.

5. There is no evidence that the claimant's working environment was such that she required breathing equipment or respirators or even face masks. If she did there is no evidence that she ever requested such equipment or made known to the defendants the need for such. In any event there is no reason why the claimant could not have provided herself with a face mask if such was considered a necessity.

LAW

Breach of Duty – Issues:

Whether by causing the Claimant to occupy the building situate at Long Circular Road, St. James, the Defendants were in breach of

a. their common law duty of care;

b. their statutory duty of care.

Breach of Duty – The Law:

Common Law Duty

It was accepted by the all parties that under the common law the test was described in **Stokes v Guest, Keen and Nettleford (Bolts and Nuts) Ltd [1968] 1 WLR 1776** per Swanwick J, stated as follows:

> *"the overall test is still the conduct of the reasonable and prudent employer, taking positive thought for the safety of his workers* ***in the light of what he knows or ought to know****; where there is a recognised and general practice which has been followed for a substantial period in similar circumstances without mishap, he is entitled to follow it, unless in the light of common sense or newer knowledge it is clearly bad; but, where there is developing knowledge, he must keep reasonably abreast of it and not be too slow to apply it; and where he has in fact greater than average knowledge of the risks, he may be thereby obliged to take*

more than the average or standard precautions. He must weigh up the risk in terms of the likelihood of injury occurring and the potential consequences if it does; and he must balance against this the probable effectiveness of the precautions that can be taken to meet it and the expense and inconvenience they involve. If he is found to have fallen below the standard to be properly expected of a reasonable and prudent employer in these respects, he is negligent."

This test was cited with approval by the House of Lords in the case of **Barber v Somerset CC [2004] 1 W.L.R. 1089,** where Lord Walker of Gestingthorpe stated at page 1109:

"Every case will depend on its own facts and the well known statement of Swanwick J in Stokes v Guest, Keen and Nettlefold (Bolts and Nuts) Ltd [1968] 1 WLR 1776, 1783 remains the best statement of general principle."

Statutory Duty

Section 6(1) of the **Occupational Health and Safety Act Chapter 88:08** provides as follows:

"It shall be the duty of every employer to ensure, so far as is reasonably practicable, the safety, health and welfare at work of all his employees."

Subsection 6(2) is as follows:

"Without prejudice to the generality of an employer's duty under subsection (1), the matters to which that duty extends include in particular –

(a) the provision of maintenance of plant and systems of work that are, so far as is reasonably practicable, safe and without risks to health;

(b) arrangements for ensuring, so far as is reasonably practicable, safety and absence of risks to health in connection with the use, handling, storage and transport of equipment, machinery, articles and substances;

(c) the provision of adequate and suitable protective clothing or devices of an approved standard to employees who in the course of employment are likely to be exposed to the risk of head, eye, ear, hand or foot injury, injury from air contaminant or any other bodily injury and the provision of adequate instructions in the use of such protective clothing or devices;"

Sections 6 (2) (d), 6 (2) (f) 8 (2) (b) and 10 (1) (a) were also referred to.

With respect to breach of statutory duty in the case of **Paris v Stepney BC [1951] A.C. 367, 382 -384.** Lord Oaksey stated at pages 382 to 383:

"The duty of an employer towards his servant is to take reasonable care for the servant's safety in all the circumstances of the case… The standard of care which the law demands is the care which an ordinarily prudent employer would take in all the circumstances. As the circumstances may vary infinitely it is often impossible to adduce evidence of what care an ordinarily prudent employer would take. In some

cases, of course, it is possible to prove that it is the ordinary practice for employers to take or not to take a certain precaution, but in such a case as the present, where a one-eyed man has been injured, it is unlikely that such evidence can be adduced. The court has, therefore, to form its own opinion of what precautions the notional ordinarily prudent employer would take."

Causation

The Claimant's case is that that the defendants' breaches of duty caused or contributed to her injuries, or resulted in its aggravation or deterioration.

The difficulties inherent in attributing causation have been considered in a series of cases including:

Bonnington Castings Ltd v Wardlaw [1956] 2 W.L.R **(Bonnington),**

Wilsher v Essex Area Health Authority [1988] A.C. 1074 **(Wilsher)**,

McGhee v National Coal Board (McGhee) [1973] 1 W.L.R. 1**,** and

Fairchild v Glenhaven Funeral Services Ltd (Fairchild) [2002] UKHL 22**;** [2003] 1 A.C. 32, the effect of which has been summarized in **Clerk and Lindsell on Tort, 19th edition.**

As these cases have been the subject of much analysis and debate and this is an essential aspect of the claim it is considered necessary to err on the side of prolixity and set out the relevant paragraphs before considering their applicability in this case.

(Emphasis added)

Clerk and Lindsell on Tort, 19th edition.

Paragraph 2-21

[193] *The impossibility, in a significant number of claims for negligence and/or breach of statutory duty in respect of industrial disease, of quantifying the exact proportion in which competing agents contributed to the onset of disease makes proof of causation particularly difficult.* ***Once there is sufficient evidence that the "guilty" agent does cause the disease*** *or disability to which the claimant has succumbed* ***and*** *that the* ***greater the exposure*** *to* ***that agent the greater the risk of onset of disease****, the claimant will not normally be required to do the impossible and demonstrate exactly why and how his condition arose.*

Paragraph 2-23

Thus, there are ***two stages*** *to the process of establishing causation in cases of disease or adverse reactions to chemical agents, such as Dr.ugs.* ***It must first be demonstrated, on the balance of probabilities, that the event which allegedly gave rise to the claimant's damage can ever cause that type of harm****. It was on this basis that the claim in Kay's Tutor v Ayrshire and Arran Health Board failed, because there was no evidence than an overdose of penicillin can cause deafness. Once it has been established that such an event can cause damage of that nature,* ***the claimant must then prove that his particular damage was caused in this way****. It is the second stage of the process that can present the greatest hurdle to claimants. In some cases, all the claimant will be able to point to is the*

statistical link between particular events or circumstances and the damage to individuals exposed to those events.

Paragraph 2-26

The difficulties facing claimants in proving causation in cases of industrial disease have persuaded the courts to relax the casual rules in some instances (normally where the difficulty of attributing causes is a product of scientific uncertainty). The claimant does not have to prove that the defendant's breach of duty was the sole, or even the main cause of his damage provided he can demonstrate that it made a material contribution to the damage. *The origin of this approach is the decision of the House of Lords in* ***Bonnington Castings Ltd v Wardlaw*** *in which the claimant contracted pneumoconiosis from inhaling air which contained silica dust at his workplace. The main source of the dust was from pneumatic hammers for which the employers were not in breach of duty (the "innocent dust"). Some of the dust (the guilty dust') came from swing grinders for which they were responsible by failing to maintain the dust-extraction equipment. There was no evidence as to the proportions of innocent dust and guilty dust inhaled by the claimant. Indeed, such evidence as there was indicated that much the greater proportion came from the innocent source. On the evidence the claimant could not prove "but for" causation, in the sense that it was more probable than not that had the dust-extraction equipment worked efficiently he would not have contracted the disease. Nonetheless, the House of Lords drew an inference of fact that the guilty dust was a contributory cause, holding the employers liable for the full extent of the loss.* ***The***

claimant did not have to prove that the guilty dust was the sole or even the most substantial cause if he could show, on a balance of probabilities, the burden of proof remaining with the claimant, that the guilty dust had materially contributed to the disease. *Anything which did not fall within the principle de minimis non curat lex would constitute a material contribution. Bonnington Castings is significant for two reasons. First, it was an express departure from the normal requirement to prove "but for" causation. Despite recovering damages in full in respect of the disease* ***the claimant was not required to prove that the defendant's breach of duty caused the disease merely that it contributed to its onset.*** *Secondly, and perhaps more significantly, was the fact that their Lordships were willing to Dr.aw an inference that there must have been a material contribution in circumstances where the connection between the "guilty dust" and the claimant's medical condition was, in reality, little more than speculation.*

Paragraph 2-31

In ***McGhee v National Coal Board*** *the claimant contracted dermatitis from the presence of brick dust on sweaty skin. Some exposure to brick dust was an inevitable result of working in brick kilns in respect of which there was no breach of duty by his employers. But his employers negligently failed to provide washing facilities at the site so that the claimant cycled home coated with abrasive brick dust.* ***Medical evidence established that brick dust caused the dermatitis*** *but it was impossible to prove whether it was the additional "guilty" exposure to dust which triggered dermatitis in this claimant or whether he would have developed the disease in any event as a result of the "innocent" exposure during the normal working day. At best it could be said that the failure to*

provide washing facilities ***materially increased*** *the risk of the claimant contracting dermatitis. The House of Lords held the defendants liable on the basis* ***that it was sufficient for a claimant to show that the defendants' breach of duty made the risk of injury more probable even though it was uncertain whether it was the actual cause****. A majority of their Lordships treated a "material increase in the risk" as equivalent to a material contribution to the damage. Lord Simon, for example, said that "a failure to take steps which would bring about a material reduction of the risk, involves, in this type of case, a substantial contribution to the injury". Lord Wilberforce explicitly recognized that this process involves overcoming an "evidential gap" by drawing an inference of fact which, strictly speaking, the evidence does not support (as was done in Bonnington Castings), and, moreover, that this fictional inference was drawn for policy reasons.*

Paragraph 2-32

The view of Lord Wilberforce that, for policy reasons, the burden of proof should effectively be reversed in such a case was criticized by the House of Lords in ***Wilsher v Essex Area Health Authority****. The infant claimant, a premature baby, on two occasions received excess oxygen as a result of negligence by junior doctors, in monitoring oxygen levels in his blood. He developed retrolental fibroplasia (RFL) rendering him almost blind. The expert evidence suggested that excess oxygen could have toxic effects on the retina, but RLF also occurs in premature babies who do not receive oxygen, and* ***a causal link exists between RLF and at least four other conditions*** *common in very premature babies. The trial judge relied in effect on Lord Wilberforce's judgment in* ***McGhee*** *and held it was for the defendants to prove the claimant's condition did not result from excess*

*oxygen. The Court of Appeal rejected the suggestion that the burden of proof should be reversed, but by a majority relied on McGhee to conclude that as there was evidence that excess oxygen could cause RLF, even allowing for the impact of the other "innocent" causative agents, a court could properly infer that excess oxygen (the "guilty" agent) made a material contribution to the claimant's injury. The House of Lords disagreed, relying heavily on the dissenting judgment of Sir Nicolas Browne-Wilkinson V-C who had observed that: "**A failure to take preventive measures against one out of five possible causes is no evidence as to which of those five caused the injury**." **In McGhee there was no doubt that brick dust caused the dermatitis** and sound evidence that the longer the abrasive dust adhered to the skin, the more likely it was that dermatitis would develop.*

In Wilsher ***it had not been proved that excess oxygen, rather than some different agent such as intraventricular haemorrhage, caused or contributed to the claimant's RLF***. *Nor had it been proven that excess oxygen was likely to increase the risk that any of the other "innocent" agents would trigger RLF.* ***McGhee did not permit a court simply to infer that, where there was a "guilty" and an "innocent" explanation of the claimant's damage, the "guilty" explanation should be preferred.*** *Lord Bridge said of McGhee that that judgment propounded no new principle of law but simply exemplified a robust and pragmatic approach to the undisputed primary facts of the case:*

"where the layman is told by the doctors that the longer brick dust remains on the body, the greater the risk of dermatitis, although the doctors cannot identify the process of causation scientifically, there seems nothing irrational in drawing the inference as a

matter of common sense that the consecutive periods when brick dust remained on the body probably contributed cumulatively the causation of dermatitis"

Lord Bridge's view that McGhee did not establish a principle of law, but was simply concerned with the circumstances in which it is legitimate to draw an inference that causation has been established in fact, has subsequently been rejected by the House of Lords in ***Fairchild v Glenhaven Funeral Services Ltd****. Although in Fairchild it was said that* ***Wilsher*** *was still correct on its facts, their Lordships considered that there can be some circumstances where, for reasons of justice and fairness a claimant should be permitted to succeed on causation even though the "but for" test was not satisfied.*

Paragraph 2-33

The effect of Wilsher

The effect of ***Wilsher*** *was that where the defendant's breach of duty* ***increases an existing risk factor*** *the court could (choosing to take a robust and pragmatic view of the evidence, if necessary) infer that there must have been some material contribution to the claimant's damage (i.e. the court may rely on McGhee in order to apply Bonnington Castings).* ***Where, however, the defendant's breach of duty merely adds a new, discrete, risk factor to the existing risk factor(s) it is not legitimate to infer that it was the "guilty" risk factor which probably caused the damage.*** *This proposition is still correct after Fairchild.*

Paragraph 2-34

There must be some evidence to link the defendant's breach of duty to the claimant's harm*, other than the simple assertion that it increased the general risk of harm****, before***

an inference that it must have made a material contribution can be Dr.awn. In Tahir v Haringey Health Authority the claimant alleged that the delay in providing medical treatment rendered his conditions worse that it would otherwise have been on the basis that, in general terms.., delay in operating in his type of case increases the neurological deficit and impairs the prospect of recovery. The Court of Appeal held that where there has been negligence resulting in delayed medical treatment it was not sufficient for the claimant to show that there was a material increase in the risk or that delay ***can*** *cause damage. He has to go further and* ***prove*** *that damage was actually* ***caused*** *by the delay. In the absence of findings of fact that identify or quantify the additional harm, it was not appropriate for a judge to adopt a proportionate approach by quantifying the total disability and then asking what proportion of that disability is attributable to the delay.*

It was one thing, said Lord Bingham, "to treat an increase of risk as equivalent to the making of a material contribution where a single noxious agent is involved, but quite another where any one of a number of noxious agents may equally probably have caused the damage."

Paragraph 2-45

Lord Rodger suggested that certain conditions were necessary, but may not always be sufficient, for applying the principle. These conditions are clearly at a higher level of generality than those indicated by Lord Bingham or Lord Hoffmann: (1) the principle applies where the claimant has proved all that he possibly can, but the casual link could only ever be established by scientific investigation and the current state of the relevant sciences leaves it uncertain exactly how the injury was caused; (2) ***the defendant's***

conduct must not only have created a material risk of injury to a class of persons but have created a material risk of injury to the claimant himself; *(3) the defendant's conduct must have been capable of causing the claimant's injury; (4) the claimant's injury must have been caused by the eventuation of the kind of risk created by the defendant's wrong doing;* ***it does not apply where the claimant has merely proved that his injury could have been caused by a number of different events, only one of which is the eventuation of the risk created by the defendant's wrongful act or omission (as in Wilsher);*** *(5) the claimant must prove that his injury was caused, if not by exactly the same agency as was involved in the defendant's wrongdoing, at least by an agency that operated in substantially the same way (e.g. where a workman suffered injury from exposure to dusts coming from two sources, the dust being particles of different substances each of which could have caused his injury in the same way); (6)* ***the principle applies where the other possible source of the claimant's injury is a similar wrongful act or omission of another person, but it can also apply where, as in McGhee, the other possible source of the injury is a similar, but lawful, act of omission of the same defendant.*** *Lord Rodger reserved his opinion as to whether Fairchild applies "where the other possible source of injury is a similar but lawful act or omission of someone else or a normal occurrence"*

Paragraph 2-48

There are a number of propositions concerning the effect and application of ***Fairchild*** *that can be advanced, though some of them are necessarily tentative.*

(1) ***McGhee v National Coal Board*** *is good law. It did not involve either reversing the burden of proof or the drawing of an inference of fact, based on a robust and pragmatic view of the evidence, to overcome an evidential gap; it established a principle of law.*

(2) ***Wilsher v Essex Area Health Authority is also good law, and so where these are four "innocent" possible causes of the claimant's damage, and the defendant adds a fifth "guilty" possible cause, the increase in overall risk cannot be equated with a material contribution to the damage (as in Wilsher, approved in Fairchild). Thus, McGhee/Fairchild applies where there are multiple tortfeasors, but probably not where there are multiple causation factors (sed quaere, see Lord Rodger's speech);***

The cases

McGhee v National Coal Board

In **McGhee v National Coal Board** [1973] 1 WLR 1. Lord Wilberforce stated at page 5 G that:

"it was not enough for the [claimant] to establish a duty or a breach of it. To succeed in his claim he had to satisfy the court that ***a causal connection existed between the default and the disease complained****…that the breach of duty* ***caused*** *or* ***materially contributed*** *to the injury. "* (emphasis supplied).

But the question remains whether a pursuer must necessarily fail if, after he has shown ***a breach of duty, involving an increase of risk of disease****, he cannot positively prove that this increase of risk caused or materially contributed to the disease while his employers cannot positively prove the contrary. In this intermediate case there is an appearance of logic in the view that the pursuer, on whom the onus lies, should fail – a logic which*

dictated the judgments below. The question is whether we should be satisfied, in factual situations like the present, with this logical approach. In my opinion, there are further considerations of importance. First, it is a sound principle that where a person has, by ***breach of a duty of care, created a risk****,* ***and injury occurs within the area of that risk****, the loss should be borne by him unless he shows that it had some other cause. Secondly, from the evidential point of view, one may ask, why should a man who is able to show that his employer should have taken certain precautions,* ***because without them*** *there is* ***a risk, or an added risk, of injury or disease****, and who in fact sustains* ***exactly that injury or disease****, have to assume the burden of proving more: namely, that it was the addition to the risk, caused by the breach of duty, which caused or materially contributed to the injury? In many cases, of which the present is typical, this* ***is impossible to prove, just because honest medical opinion cannot segregate the causes of an illness between compound causes.*** *And if one asks which of the parties, the workman or the employers, should suffer from this inherent evidential difficulty, the answer as a matter of policy or justice should be that it is the creator of the risk who, ex hypothesi must be taken to have foreseen the possibility of damage, who should bear its consequences.*

In the House of Lords decision of **Bonnington Castings Ltd v Wardlaw** [1956] 2 WLR 707, 711 Lord Reid stated: (emphasis added)

"*the employee must in all cases prove his case by the ordinary standard of proof in civil actions: he must make it appear at least that on a balance of probabilities the breach of duty* ***caused or materially contributed*** *to his injury.*"

At page 712:

"…in principle that a pursuer or plaintiff must prove not only negligence or breach of duty but also that such fault ***caused or materially contributed*** *to his injury, and there is ample authority for that proposition…What is a material contribution must be a question of degree. A contribution which comes within the exception de minimis non curat lex is not material, but I think that* ***any contribution which does not fall within that exception must be material.*** *I do not see how there can be something too large to come within the de minimis principle but yet too small to be material."* (Emphasis supplied).

Barker v Corus UK (H.L (E) [2006] 2 W.L.R 1027

In **Barker v Corus UK** at pg 1035, per Lord Wilberforce, **Wilsher v Essex Area Health Authority** [1988] AC 1074 was distinguished and **McGhee** and **Fairchild** were considered as follows.

If the Fairchild exception does not require that all the potential causes of the injury should be tortious, what are the conditions which mark out its limits? For this purpose, it is necessary to examine the way in which the House distinguished Wilsher v Essex Area Health Authority [1988] AC 1074. Again, the facts are too familiar to need recitation. It had certain features in common with McGhee [1973] 1 WLR 1 and Fairchild [2003] 1 AC 32: first, the ***excessive oxygen*** *which the negligent doctor had allowed to circulate in the baby's blood* ***had increased the likelihood*** *that he would suffer retrolental fibroplasias ("RLF") and* ***might have caused it****. Secondly,* ***medical science could not establish whether the excessive oxygen or some other possible source of risk was more***

likely than not to have been the cause. *Thirdly, as in McGhee (but not in Fairchild) the other sources of risk were not created by any breach of duty. These similarities were sufficient for a majority of the Court of Appeal to hold that the principle in McGhee was applicable and the plaintiff entitled to recover. But the decision was reversed by the House of Lords on, as it seems to me, two grounds. The first, which I have already discussed, was that McGhee laid down no principle. It only exemplified a robust handling of the facts. This explanation was rejected by a majority of the House in Fairchild. The second ground of decision was by way of adoption of a passage in the dissenting judgment of Sir Nicolas Browne-Wilkinson V-C in the Court of Appeal [1987] QB 730, 779:*

"To apply the principle in McGhee v National Coal Board [1973] 1 WLR 1 to the present case would constitute an extension of that principle. ***In the McGhee case there was no doubt that the pursuer's dermatitis was physically caused by brick dust****: the only question was whether the continued presence of such brick dust on the pursuer's skin after the time when he should have been provided with a shower caused or materially contributed to the dermatitis which he contracted****. There was only one possible agent which could have caused the dermatitis,*** *viz, brick dust, and* ***there was no doubt that the dermatitis from which he suffered was caused by that brick dust.***

"In the present case the question is different. ***There are a number of different agents which could have caused the RLF.*** *Excess oxygen was one of them.* ***The defendants failed to take reasonable precautions to prevent one of the possible causative agents (e.g. excess oxygen) from causing RLF. But no one can tell in this case whether excess oxygen did or did not cause or contribute to the RLF suffered by the plaintiff. The***

plaintiff's RLF may have been caused by some completely different agent or agents, e g hypercarbia, intraventricular haemorrhage, apnoea or patent ductus arteriosus. *In addition to oxygen, each of those conditions has been implicated as a possible cause of RLF. This baby suffered from each of those conditions at various times in the first two months of his life.* ***There is no satisfactory evidence that excess oxygen is more likely than any of those other four candidates to have caused RLF in this baby****. To my mind,* ***the occurrence of RLF following a failure to take a necessary precaution to prevent excess oxygen causing RLF provides no evidence and raises no presumption that it was excess oxygen rather than one or more of the four other possible agents which caused or contributed to RLF in this case.***

"The position, to my mind, is wholly different from that in the McGhee case [1973] 1 WLR 1, where ***there was only one candidate (brick dust) which could have caused the dermatitis,*** *and* ***the failure to take a precaution against brick dust causing dermatitis was followed by dermatitis caused by brick dust****. In such a case****, I can see the common sense, if not the logic, of holding that, in the absence of any other evidence, the failure to take the precaution caused or contributed to the dermatitis.*** *To the extent that certain members of the House of Lords decided the question on inferences from evidence or presumptions, I do not consider that the present case falls within their reasoning.* ***A failure to take preventative measures against one out of five possible causes is no evidence as to which of those five caused the injury."***

In Fairchild [2003] 1 AC 32, Lord Bingham approved this passage as the reason why Wilsher did not fall within the exception. He said:

"It is one thing to treat an increase of risk as equivalent to the making of a material contribution where a single noxious agent is involved, but quite another where any one of a number of noxious agents may equally probably have caused the damage."

*Similarly Lord Hutton, at p 95, para 115, said that "**where there is only one causative agent" the McGhee principle could apply** and went on to approve the passage from the judgment of Sir Nicolas Browne-Wilkinson V-C in Wilsher.*

Lord Rodger likewise said, at p 110, para 149, that the "reasoning of the Vice-Chancellor, which the House [in Wilsher] adopted, provided a sound and satisfactory basis for distinguishing McGhee and for allowing the appeal":

"Mustill LJ's extension of the approach in McGhee to a situation where there were all kinds of other possible causes of the plaintiff's condition, resulted in obvious injustice to the defendants. In particular, there was nothing to show that the risk which the defendants' staff had created-that the plaintiff would develop retrolental fibroplasias because of an unduly high level of oxygen-had eventuated. That being so, there was no proper basis for applying the principle in McGhee."

It was only in my own opinion in Fairchild that the reasoning of Sir Nicolas Browne Wilkinson was not accepted. I said, at p 77, para 72:

"I do not think it is a principled distinction. What if Mr Matthews had been exposed to two different agents-asbestos dust and some other dust-both of which created a material risk of the same cancer and it was equally impossible to say which had caused the fatal cell mutation? I cannot see why this should make a difference."

This was a minority opinion and, furthermore, I think it was wrong. The question which I

raised about different kinds of dust is not so much about the principle that the causative agent should be the same but about what counts as being the same agent. Lord Rodger identified this point when he said, at pp 118–119, para 170:

"the claimant must prove that his injury was caused, if not by exactly the same agency as was involved in the defendant's wrongdoing, at least by an agency that operated in substantially the same way. ***A possible example would be where a workman suffered injury from exposure to dusts coming from two sources****, the dusts being particles of different* ***substances each of which, however, could have caused his injury in the same way."***

If the distinction between Fairchild and Wilsher does not lie in the fact that in the latter case a number of very different causative agents were in play, I think it would be hard to tell from my Fairchild opinion what I thought the distinction was. In my opinion ***it is an essential condition for the operation of the exception that the impossibility of proving that the defendant caused the damage arises out of the existence of another potential causative agent which operated in the same way****. It may have been different in some causally irrelevant respect, as in Lord Rodger's example of the different kinds of dust, but the mechanism by which it caused the damage, whatever it was, must have been the same. So, for example,* ***I do not think that the exception applies when the claimant suffers lung cancer which may have been caused by exposure to asbestos or some other carcinogenic matter but may also have been caused by smoking and it cannot be proved which is more likely to have been the causative agent.***

The latest decision on these issues as at the time of writing is to be found in the decision of the UK Court of Appeal in the case of **Ministry of Defence v AB and Ors** [2010] EWCA Civ 1317. The court there summarised arguments on causation as follows, distinguished the case of Fairchild, explained the cases of **Bonnington**, **McGhee** and **Bailey**, and applied the reasoning in **Wilsher**.

Ministry of Defence v AB and Ors [2010] EWCA Civ 1317

In the case of **Ministry of Defence v AB and Ors** it was stated as follows:

We summarise first the arguments advanced by the MOD both before the judge and before this court.

It is common ground that in tort, ***causation must usually be demonstrated by evidence from which it can be concluded or inferred that, but for the tort, the claimant would probably not have suffered the injury complained of. Its application can give rise to difficulty in claims in which there is more than one potential cause for the condition complained of and only one of those potential causes arises from the negligence of the defendant. It is common ground that all the conditions of which the claimants complain have several different possible causes besides radiation.***

The MOD submitted that no claimant would be able to show that it was radiation which had probably caused his conditions as opposed to other possible causes. The ruling of the House of Lords in Wilsher v Essex Health Authority [1988] AC 1074 governed the position. In that case, there were several potential causes for the condition from which the infant plaintiff was suffering; only one of them arose as the result of the negligence of the defendant. The plaintiff could not show which of the

several potential causes had probably caused his condition and, as a result, his claim failed.

In particular, submitted the MOD, no claimant will be able to demonstrate, by reference to scientific and epidemiological evidence, that his exposure to radiation has at least doubled the risk of developing his condition to which he was otherwise subject. If that could be done, a claimant could demonstrate that the tort is probably (more likely than not) the cause of his injury: see Novartis Grims..by Ltd v Cookson [2007] EWCA Civ 1261. But, submitted the MOD, there is no evidence that this could be shown.

Further, the claimants cannot as a matter of law rely on the method of proving causation relied on in ***Bonnington Castings v Wardlaw [1956] AC 613. There, the plaintiff developed pneumoconiosis from exposure to a noxious dust. Part of the exposure came from a source which the employer negligently failed to prevent; part of the exposure was unavoidable. The House of Lords held that the plaintiff could succeed on the basis that the negligent exposure had made a material contribution to the plaintiff's disease****.*

This method of proving causation was not available to these claimants because the radiation exposure could not be said to have contributed to the severity of their conditions, only to the risk that the conditions would occur.

*We think that a word of explanation of this submission is warranted****. The decision of the House of Lords in Bonnington amounted to a modification of the 'but for' rule of causation because the plaintiff recovered damages for the harm caused by all the dust, not just the tortious component****. At no stage in that case was it suggested that the damages should be apportioned as between the effect of the tortious and non-tortious components. If that had been suggested, and if expert evidence had been called showing*

the effect of the different components (as we think it would be nowadays), the damages would probably have been apportioned. The plaintiff would have recovered damages for only the harm caused by the tort and there would have been no need for any modification of the 'but for' rule. ***This type of modification of the 'but for' rule is still available where the negligent and non-negligent causative components have both contributed to the disease (as opposed to the risk of the disease) and it is not possible to apportion the harm caused and therefore the damages. This method of proving causation (by showing that the tort made a material contribution to the condition or disease) is only available where the severity of the disease is related to the amount of exposure; further exposure to the noxious substance in question is capable of making the condition worse****. Thus the MOD's submission is that, in the present cases, at least so far as the cancers were concerned, that could not be said. The cancers either developed or they did not. Their severity did not depend on the extent of the exposure. It could not be said that the exposure to radiation had made a material contribution to the disease, only to the risk that it might occur.*

Finally, submitted the MOD, the claimants would not be able to bring themselves within the exception to the 'but for' rule, established ***in Fairchild v Glenhaven Funeral Services Ltd [2003]1 AC 32. Under the exception, it will be sufficient for the claimant to show that the tort has materially increased the risk that he will develop the condition complained of. That exception is of very narrow application based upon the particular facts of the case which involved the disease of mesothelioma. The House of Lords had said that the exception would only be extended in exceptional circumstances****.*

*In **Fairchild,** the workmen in respect of whom the claims were brought had all developed mesothelioma as the result of asbestos exposure. **They had been negligently exposed to asbestos by more than one different employer**. **There was no doubt that it was asbestos which had caused the disease**; indeed, there is no other established cause for that condition. The claimants' difficulty was that **they could not show whose asbestos had caused their disease**. They could not rely on Bonnington because mesothelioma is an indivisible condition. **All the claimants could say was that each employer's exposure had materially increased the risk that they would develop the disease**. **The House of Lords held, largely for policy reasons, that it would be enough in cases of mesothelioma for the claimant to show that any employer's tortious exposure to asbestos had materially increased the risk.***

*The House of Lords recognised that attempts would be made to extend the scope of that exception to other conditions besides mesothelioma and, in Fairchild itself and in the later case of Barker v Corus UH Ltd [2006] 2 AC 572, some of their Lordships attempted to define its potential limits. The MOD submitted that these limits were very narrowly defined. It was stressed that the reason why the House had been prepared to allow the exception at all was **because asbestos was the only known cause of mesothelioma**. There was no other different potential cause. The exception would not apply where, as here, there was more than one different potential cause. In such cases Wilsher would apply. In addition, the claimants were hopeful that they might be able to show a more than doubling of the risk by demonstrating that the risk from radiation interacted multiplicatively with the risk from other causes, such as smoking. However, there was no medical evidence to support such a contention.*

He also considered that ***causation was essentially a matter of fact*** *…*

The claimants' case before this court is, first, that they accept that, as the evidence stands, they cannot show that tortious exposure to radiation has increased the risk of injury by anything approaching two fold. But they hope to be able show at least a doubling of the risk by demonstrating that the risk arising from radiation will interact synergistically with that arising from any other potential cause which may be present in the individual case. However, the claimants have not produced any medical evidence that would enable them to launch such an argument. We did not understand them to argue that there was any prospect of demonstrating a doubling of the risk merely on account of the size of the radiation dose.

Second, they submitted that they would or might be able to rely on the case of Bailey v Ministry of Defence and another [2008] EWCA Civ 883 and to demonstrate that the radiation had made a material contribution to their conditions.

Their third contention was that it is at least arguable that it will be sufficient for them to show that the tortious radiation exposure has materially increased the risk of injury. For that, they would need an extension of the Fairchild exception. They accept that they cannot bring themselves within the present scope of the extension but they submit that the scope of the extension is uncertain. In Novartis Grimsby, where the claimant had bladder cancer, which might have been caused by exposure to dyestuffs at work or to cigarette smoking, the Court of Appeal said that the scope of the Fairchild exception was uncertain and that it was arguable that that case might fall within it. In any event, the claimants contended that it might be possible to persuade the Supreme Court to widen the scope of

the exception. They argued that there are powerful policy reasons why it might do so. After all, in Fairchild itself, the House of Lords had been persuaded to make a radical change in the law of causation. Why could this not be done again?

We accept the submissions of the MOD. ***First, unless there were to be an extension of the Fairchild exception, the claimants will have to show 'but for' causation: see Wilsher.***

Second, we accept that, at least so far as cancers are concerned, the claimants cannot rely on proving that the radiation exposure has ***made a material contribution to the disease, as in Bailey and Bonnington Castings****.* ***This principle applies only where the disease or condition is 'divisible' so that an increased dose of the harmful agent worsens the disease. As is well known, in Bonnington, the claim succeeded because the tortious exposure to silica dust had materially aggravated (to an unknown degree) the pneumoconiosis which the claimant might well have developed in any event as the result of non-tortious exposure to the same type of dust. The tort did not increase the risk of harm; it increased the actual harm. Similarly in Bailey, the tort (a failure of medical care) increased the claimant's physical weakness. She would have been quite weak in any event as the result of a condition she had developed naturally. No one could say how great a contribution each had made to the overall weakness save that each was material. It was the overall weakness which led to the claimant's failure to protect her airway when she vomited with the result that she inhaled her vomit and suffered a cardiac arrest and brain damage. In those cases, the pneumoconiosis and the weakness were divisible conditions****.*** *Cancer is an indivisible condition; one either*

gets it or one does not. The condition is not worse because one has been exposed to a greater or smaller amount of the causative agent.

Third, on the present state of the evidence there is no prospect that the claimants will be able to satisfy the 'but for' test by showing that risk arising from radiation is at least twice that arising from other causes. It is not claimed that there is any prospect of them doing so by reliance on a sufficiently high dose of radiation. Nor is there at present any possibility that the claimants will be able to rely on the synergistic inter-reaction of two different causative agents. ***The foundation of medical evidence has not been laid****. That approach was discussed by MacKay J in* ***Shortell v Bical Construction*** *[unreported 16 May 2008] although in the event the claimant succeeded without reliance on it. The claimant had developed lung cancer as the result of a combination of smoking and asbestos exposure. There was evidence assessing the risks arising from each and evidence that the two risks interacted multiplicatively. So, on the facts, it would have been possible to demonstrate that, on the balance of probabilities, the claimant would not have developed the condition if he had not been exposed to asbestos.* ***We stress that such an approach could only be taken if there is available scientific evidence of the manner of interaction and also expert evidence assessing the risk arising from each, which depend in turn on reliable estimates of exposure****. In the present cases, there is no such evidence and no sign that it could be obtained.*

Finally, these are not cases to which the ***Fairchild*** *exception could foreseeably be made to apply. The House of Lords in that case and in Barker has made it plain that the scope of the exception will be very narrow.* ***It is clear that the exception will only apply where the two or more potential causes act either through the same agent (e.g. asbestos dust***

in Fairchild or brick dust in McGhee v National Coal Board [1973] 1 WLR 10) or possibly through different agents which act on the body in the same way. *At paragraph 24 of Barker, in a passage with which the other members of the House appear to have been in agreement, Lord Hoffmann said:*

"In my opinion, ***it is an essential condition for the operation of the exception that the impossibility of proving that the defendant caused the damage arises out of the existence of another potential causative agent which operated in the same way.*** *It may have been different in some causally irrelevant respect … but the mechanism by which it caused the damage, whatever it was, must have been the same. So for example I do not think that the exception applies when the claimant suffers lung cancer which may have been caused by exposure to asbestos or some other carcinogenic matter but may also have been caused by smoking and it cannot be proved which is more likely to have been the causative agent. Smith LJ had that observation in mind when she said, in Novartis Grimsby, that it was arguable that that case might be brought within the exception. That was because there was medical evidence that the amines which were the active carcinogenic substance in the dyestuffs to which the claimant had been exposed at work were the same amines that were present in cigarette smoke. (In the event, there was evidence to show that the risk from the dyestuffs had more than doubled the risk from smoking so the claimant succeeded without relying on the Fairchild exception.) But* ***in contrast with that case, there is no evidence in the present cases to suggest for example that the carcinogenic effect of radiation operates in the same way as the carcinogenic effect of cigarette smoke. Nor has it even been established what the other risk factors***

are. *All that can be said of many of the conditions is that they are very common, particularly in the elderly population.*

So, ***we conclude that there is no foreseeable possibility that the Supreme Court would be willing to extend the Fairchild exception so as to cover conditions such as we are here concerned with, which have multiple potential causes some of which have not even been identified.*** *We reject as highly unlikely the suggestion that the Supreme Court might be prepared, on policy grounds, to extend the exception well beyond that which was contemplated at the time of Fairchild or Barker.* ***We say that because, to effect such a change would be to upset completely the long established principle on which proof of causation is based. It is true that Fairchild itself made a small inroad into that principle. The inroad is slight and there were strong policy reasons for it. But the inroad applies only to cases where the cause of the condition is known. It does not apply where the cause is unknown. Here the causes of the claimants' conditions are not known. All that can be said in these cases is that radiation exposure is one of several possible causes.***

APPLICATION OF LAW

Causation or Contribution

In the instant situation the claimant must first therefore establish that some factor present at the defendants' workplaces caused her condition, or contributed to its onset. She must establish that such a factor is capable of causing her condition. If she can do so then on the relaxed burden of proof established in **Bonnington** (infra), she merely needs

to establish that it contributed (to an extent that is not merely de minimis) to the onset of her condition.

In this case the factors allegedly existing at the defendants' buildings were dust, paint fumes, and heat or humidity. The evidence is that the claimant's diagnoses are:

1. Allergic rhinitis.
2. Gastro oesphegal reflux.
3. Recurrent Episodic Angioedoema Anaphylaxis.

Allergic Rhinitis

With regard to the allergic rhinitis the medical evidence, which I accept, is clear. While an argument could have been raised with respect to the impact of workplace exposure to dust, such as it was, on the claimant's allergic rhinitis this condition predated the claimant's entry into the building at Long Circular Road. It was not caused therefore by that building.

Further the deterioration and exacerbation of this condition predated the claimant's entry into the building at Long Circular Road.

Still further, while a possible effect of continued exposure to dust could have been a deterioration in this condition to asthma, the evidence on balance is that the claimant did not exhibit symptoms of asthma and her lung function tests were normal. Dr. Monteil had ruled this out. To the extent that Dr. Creticos may have offered this as a diagnosis Dr.

Wheeler suggests that this was based on the fact that the claimant was being treated with asthma medications.

Anaphylaxis

With respect to her recurrent episodic angioedoema/ anaphylaxis the evidence is that the underlying condition is unknown, and therefore the cause of the condition is equally unknown. Dr. Wheeler was able to eliminate the buildings of the defendants as a cause of the condition - whatever it may turn out to be. The medical evidence in **McGhee** unlike in the instant case is that a causal connection existed between the plaintiff's exposure to dust and the condition he developed. No such medical evidence or causal link exists in the instant case. It is simply not possible therefore to say that dust caused the claimant's condition, and that workplace exposure materially increased that risk. The fact is that no one knows what causes the claimant's condition of anaphylaxis, so that workplace exposure to dust, such as it was, paint fumes, such as it was, or paint fumes, such as it was, cannot be said to have materially increased her risk of developing this condition.

Heat / humidity - evidence

The evidence is that there were episodes of electricity supply interruption, but that these were infrequent and, that the claimant was not required to endure them at the workplace

McGhee and **Bonnington** permit a relaxed burden of proof if the **cause** of the claimant's condition is known **and** the **source** of that cause is attributable to the defendants **as well as** other parties/ sources. There was evidence in McGhee that the dust caused the plaintiff's condition. The defendant was tortiously responsible for one source of that dust and not the other. It was not however necessary in that circumstance for the plaintiff to establish that it was the tortious dust and not the non tortious dust which caused his condition. It was inferred that the tortious dust made a material contribution to the plaintiff's medical condition.

In the instant case what caused the claimant's condition of recurrent episodic anaphylaxis/ angioedema is unknown. It is not possible therefore for the claimant to contend that any factor at the defendants' buildings made a material contribution to development of her condition of anaphylaxis/ angioedema, as this is not a case where the defendants are responsible for a tortious cause while other non tortious sources of that

cause exist. Certain possibilities exist, which are not related to reactions to dust, chemical fumes or heat /dust, but no conclusive diagnosis has been made.

Neither is this a case of multiple possible causes, as in Wilshire. In Wilshire there were 5 possible causes for the infant's condition of RLF. The defendant was responsible for one – the administration of excess oxygen. But that cause, and each of the others, were established causes of that condition. It was held not permissible to attribute to the defendant liability in such a case. The possibility that the defendant's possible cause

caused the plaintiff's RLF was not sufficient to attribute liability to it, where there were other possible causes for which it was not responsible. The necessity to establish a causal link between the cause for which the defendant was liable and the development of the plaintiff's condition still existed. Wilshire is still good law, as explained in AB v Ministry of Defence.

In the instant case there is no cause established for the claimant's angioedema / anaphylaxis. In a case where the defendants were responsible for only one of several possible causes, they would not, based on Wilshire, be liable. In a case like the instant one where the defendants are not responsible for any known cause, equally, they cannot be held responsible for the development of the claimant's condition.

I consider that the illness of the second employee, Ms. Josanne Singleton, does not add further weight to the argument that there was a breach of the duty of care with respect to the provision of a safe work environment. It adds nothing to the fact that the claimant has to establish causation.

CONCLUSION

a. Even if the defendants' buildings contained dust to which the claimant was exposed to a degree which was not de minimis,

(i) This was not established as a cause of the claimant's allergic rhinitis.

(ii) This was not established as a contributory factor which materially increased the risk of her development of allergic rhinitis.

(iii) This was not established as a factor which led to deterioration in her condition of allergic rhinitis.

(iv) This was not established as a cause of the claimant's recurrent episodic anaphylaxis/ angioedema.

(v) This was not established as a contributory factor which materially increased the risk her development of recurrent episodic anaphylaxis/ angioedema.

(vi) This was not established as a factor which led to deterioration in her condition of recurrent episodic anaphylaxis/ angioedoema.

b. Even if the defendants' buildings contained paint fumes to which the claimant was exposed to a degree which was not de minimis,

(vii) This was not established as a cause of the claimant's allergic rhinitis.

(viii) This was not established as a contributory factor which materially increased the risk her development of allergic rhinitis.

(ix) This was not established as a factor which led to deterioration in her condition of allergic rhinitis.

(x) This was not established as a cause of the claimant's recurrent episodic anaphylaxis/ angioedoema.

(xi) This was not established as a contributory factor which materially increased the risk of her development of recurrent episodic anaphylaxis/ angioedoema.

(xii) This was not established as a factor which led to deterioration in her condition of recurrent episodic anaphylaxis/ angioedoema.

c. Even if the defendants' buildings contained humidity or heat to which the claimant was exposed to a degree which was not de minimis,

(xiii) This was not established as a cause of the claimant's allergic rhinitis.

(xiv) This was not established as a contributory factor which materially increased the risk of her development of allergic rhinitis.

(xv) This was not established as a factor which led to deterioration in her condition of allergic rhinitis

(xvi) This was not established as a cause of the claimant's recurrent episodic anaphylaxis/ angioedoema.

(xvii) This was not established as a contributory factor which materially increased the risk of her development of recurrent episodic anaphylaxis/ angioedoema.

(xviii) This was not established as a factor which led to deterioration in her condition of recurrent episodic anaphylaxis/ angioedoema.

d. The cause of the claimant's condition of recurrent episodic anaphylaxis/ angioedoema is unknown.

e. Further even if dust, paint fumes or heat and humidity were or any of these was among the causes of that condition, it is not permissible, in the face of several possible causes, to infer that those factors attributable to the defendants alone were responsible for / caused or contributed to the claimant's condition.

I find that there is no causation, contribution or deterioration in either of the claimant's medical conditions of allergic rhinitis or recurrent episodic anaphylaxis/ angioedoema attributable to the defendants' buildings.

I find further in respect of aggravation of triggers of the claimant's medical conditions of dust, heat, humidity or paint fumes that the defendants were not in breach of any duty to her either at common law or under statute.

In the circumstances the claimant's claim is dismissed with costs on the basis prescribed by the Civil Proceedings Rules.

Dated this 22nd day of February, 2011

Peter A. Rajkumar

Judge