[2020] IEHC 704

THE HIGH COURT

[2017 No. 7648 P]

BETWEEN

PATRICK DUFFY

PLAINTIFF

AND

BRENDAN MCGEE TRADING AS MCGEE INSULATION SERVICES AND GMS INSULATIONS LIMITED

DEFENDANTS

[2017 No. 7649 P]

BETWEEN

ANITA DUFFY

PLAINTIFF

AND

BRENDAN MCGEE TRADING AS MCGEE INSULATION SERVICES AND GMS INSULATIONS LIMITED

DEFENDANTS

JUDGMENT of Mr. Justice Kevin Cross delivered on the 4th day of December, 2020

1. The plaintiffs in these two proceedings are husband and wife. Mr. Duffy was born on the 11th April, 1975 and he worked prior to the indexed instances as a delivery man sometimes holding down two jobs, and resides with his wife and family in Annagry in West Donegal.

2. Mrs Duffy was born on the 9th June, 1977. She attained Leaving Cert standard but did not sit her Leaving due to some health issues and when she returned the following year she decided not to proceed as all of her friends had moved on. She was employed in various jobs including in the post office, spent a time in New York, she was also employed full-time in a well-known Donegal solicitor as a book-keeper and after the crash of the economy in 2008 she went part-time.

3. The two plaintiffs married on the 25th June, 2005 and after some years trying for a child, a daughter, Charlie Jo, was born in August 2013.

4. The couple set about building a fine house at Annagry which was built primarily by Mr. Duffy and his family and friends. The house comprises four bedrooms, one on the ground floor and three upstairs, a living room and kitchen, sitting room and a dining room/sunroom off the kitchen.

5. Both Mr. and Mrs. Duffy took great pride in their house and moved in before all rooms were finished, gradually decorating the other rooms and later built a large garage to the side of the house.

6. After the birth of Charlie Jo Mrs. Duffy suffered from post-natal depression and gave up work. Mrs. Duffy was certified on one occasion as being permanently unfit for work but she herself says that she intended to return at least part time when Charlie Jo went to school.

7. In January 2016 the plaintiffs decided that they would further insulate the house including the sunroom with a spray foam known as Icynene and engaged the first named defendant for this purpose.

8. Icynene is a product manufactured in Canada and imported and distributed in Ireland by the second named defendant.

9. Icynene is sprayed from a spray gun in the form of foam which hardens after contact with the area of the roof or walls to be insulated. The foam is a union of two compounds which unite in the spray gun. Compound A consists of Isocyanate which is a well-known highly toxic substance and compound B, the exact makeup of which is not clear is also toxic but less so than compound A.

10. The compound was sprayed by the first named defendant's workers on the 18th February, 2016. Originally the job was expected to be a two day one but was in fact completed in just one day.

11. Mr. Duffy was out of the house working during the spraying and there is a dispute as to whether Mrs. Duffy and Charlie Jo were present in the house during the spraying but in any event Mr. Duffy returned from work sometime around 5 pm and the Duffys stayed in the house that evening having noticed a smell. They were advised to leave the windows open and did so for some time. Each of the plaintiffs noticed some symptoms next day which they made little of putting it down to usual colds or flu and Charlie Jo also suffered some symptoms eventually they took Charlie Jo to hospital and on examination were questioned as to whether she and they had been exposed to any chemicals.

12. The plaintiffs allege that as a result of their exposure to the chemicals inserted by the defendants and due to the negligence of the first named defendant in the manner of application and in their failure to properly ventilate the house and in their failure to require the plaintiffs to be out of the house for the requisite period that each of the plaintiffs have suffered what are undoubtedly significant serious and life affecting injures.

13. Charlie Jo was apparently also injured due to the same alleged exposure and has brought separate proceedings which are not before me.

14. The defendants deny liability and submits that Icynene nor neither component A or B could, as a matter of scientific certainty, have caused the problems suffered by the plaintiffs and suggest as an alternative that they may have been exposed to the fiberglass or plasterboard after their removal from the roof or in the walls of the sunroom. There was little if any agreement on any matter between the parties and the case lasted for seventeen days full hearing.

15. At the conclusion of the first named defendant's case counsel on behalf of the second named defendant applied for a direction and indicated that if I refuse that they would go into evidence and I ruled that I would refuse the application for direction at that stage and hear any evidence that they might want to tender. At the end of the second named

defendant's case the application for a dismiss was renewed and I granted same on the basis that there was no evidence against the second named defendant.

16. Accordingly, the issues in this case on liability is whether the plaintiffs' undoubted injuries were caused by reason of negligence of the first named defendant in the application of the chemical foam and/or their actions or inactions after the application.

17. It will first be necessary to determine the main facts of the case as they relate to liability, as these are just as much in issue as the scientific and technical theories as to why the plaintiffs were injured.

18. Having determined the factual issues, I will then determine whether the first named defendant was negligent or in breach of duty and if so I will address the issue of causation and as to whether any negligence found was responsible for the plaintiffs' injuries before considering should it be applicable the issue of damages.

The facts

I find the following facts-

19. I find that prior to the indexed events both of the plaintiffs did suffer from some respiratory ailments that may or may not have made them more vulnerable to exposure to irritants.

20. Mr. Patrick Duffy was an exceptionally highly regarded diligent worker who when he ceased working, after the index events, his employer was very distressed that he had to give up work. After his initial injury his employer was prepared to accommodate him doing lighter work which Mr. Duffy was unable to complete.

21. Mrs. Duffy was clearly a very bright intelligent person who in effect trained herself up to being a bookkeeper in a well-known busy solicitor's office. She did suffer from post-natal depression after the birth of Charlie Jo and this depression was probably greater than she herself believes and whereas there is a question mark as to whether she would have returned to work I accept her evidence that after Charlie Jo went to national school it was her intention to attempt at least some work.

22. I find that prior to the indexed events both of the plaintiffs enjoyed active life and hobbies and Patrick Duffy enjoyed not inconsiderable sporting achievements, earlier in his career, in Donegal football playing for his county at the under 21 level. While his football may have been coming to an end I have no doubt that life was very good for both of the plaintiffs prior to the indexed events. Both of the plaintiffs were fit and active and Mrs. Duffy's postnatal depression did not prevent her from a reasonably full and active and enjoyable life.

23. I find that both Duffys took great pride in their house that they built in Annagry and would have continued to live in it where it not for the indexed event.

24. I note that they had placed the house on the market with an auctioneer some years prior to the indexed events but I accept their evidence and find that this was because they were fearful that a "rogue builder" who had bought land in front of them was going to attempt to build houses to spoil their view of the sea without planning permission but it does not seem that they took the possible sale of their house beyond placing the property with an auctioneer who valued the property. The "rogue builder" was stopped from building in front of the plaintiffs' house and nothing further was done in relation to a sale. The plaintiffs from then on until the indexed events were happy to be in their house.

25. I also find that the garage which was subsequently built beside the property was built without planning permission and they had to get retention thereto and also that the septic tank they constructed was not in accordance with regulations and that when they sold the house they had to agree a reduction of price because of this fact.

26. I find that the plaintiffs had originally insulated the attic and roof of their house with a conventional fibreglass insulation but decided to give themselves extra comfort by installing the defendant's product having researched same on the internet.

27. I find that Mr. Duffy contacted the first named defendant the local supplier of Icynene and he reassured the plaintiffs that the product was safe. In January 2016 Mr. McGee inspected the house and went into the attic with Mr. Duffy to take measurements.

28. The work in the roof involved removal of fibreglass wool installation in the roof, the cutting open and later resealing of three holes, one in the landing area and two in the bedroom areas as well as the application of the Icynene.

29. I accept the evidence of Mrs. Duffy and Mr. Duffy and I find that, in January 2016, Mrs. Duffy asked Mr. McGee whether the product was safe and he reassured them that it was. Mrs. Duffy's main concern was that Charlie Jo was a baby and Mr. McGee said the product was fully safe, breathable and water blown doesn't off gas and that it was it the best product on the market.

30. Mr. and Mrs. Duffy are adamant that at no stage was there mention that they would have to vacate the house during the installation or do so for any time thereafter. Mr. McGee is adamant that he advised the Duffys that they would have to be out of the house for two hours after the spraying had finished.

31. Issues of liability will be considered later but I have no doubt and so find that Mr. and Mrs. Duffy were not at any stage appraised that their absence from the house was required as a matter of personal safety for themselves or Charlie Jo. I have no doubt whatsoever that had they been so appraised that Mrs. Duffy would have left the house with Charlie Jo before the spraying commenced and none of the Duffys would have returned until they were assured it was safe to do so.

32. I come to this conclusion not just because I have no doubt that the Duffys are rightly particular in relation to their own safety and even more rightly particular in relation to the

child's but it is clear that Mr. McGee's recollection of the entire event is less than accurate. Mr. McGee was apparently still under the impression in 2019, when consulting his then expert, that the job had taken two rather than one days. If Mr. McGee could not recall until presumably he later consulted his records that it was just a one-day job, I have no doubt that his recollection in relation to the minutiae of what occurred is defective and I prefer the evidence of Mr. and Mrs. Duffy on whose minds the events are clearly etched.

33. I fully accept that Mr. McGee believes at this stage that he did tell Mr. and Mrs. Duffy that they should not be in the property during the spraying and for two hours thereafter. I accept that this is Mr. McGee's usual practice. Mr. McGee at all stages remains convinced of the absolute safety of his product in any circumstances and I find if he did mention to Mr. and Mrs. Duffy the desirability of them being out of the property it was not so mentioned as a matter of safety concern and Mr. McGee made no attempt to enforce the absence of the plaintiffs from the house for the two-hour period.

34. Mr. McGee accepts that he did not cordon off the house with any signs while the process was taking place and he did not furnish Mr. or Mrs. Duffy with the data sheets or safety dockets or get them to sign any of same.

35. I find that when he was upstairs in the property during his inspection in January 2016, Mr. McGee indicated that due to the configurations of the house he would have to remove the old insulation from the eaves behind the plasterboard upstairs and his product would have to be applied there as well as the roof, and that as part of the attic space could not be accessed from the main opening he would have to cut three holes in the ceilings. Mr. McGee indicated that his workmen would repair the openings subsequent to the installation and that it would be a clean job.

36. Mr. McGee contends that it was always part of his contract with the plaintiffs that an alternative contractor should repair the openings in the ceiling and Mr. Duffy insists that this was only agreed on the evening of the day of the installation. I accept Mr. Duffy's evidence as it is supported by the evidence of the contractor Mr. D. who says that he was contacted by Mr. Duffy on the evening of the installation to ask him to repair the opening on the next day.

37. Having inspected the upstairs of the house Mr. Duffy then asked about the sun room downstairs which was always cold and difficult to heat and Mr. McGee indicated that the ceiling would have to be removed as well as the old fibreglass insulation and that specialised contractor would be required to do this. Mr. McGee asked that the other contractor should remove the plaster work in the sun room on the day of the spraying before the spraying could commence, and then reinstate it on top of his product. I find that this was the first mention of another contractor and Mr. Duffy later engaged Mr. D. for this work in the sun room.

38. A price of €4,000 including VAT was agreed and it was agreed that the work would commence on the 18th February and take two days.

39. On the morning of the 18th February the other contractor Mr. D. arrived with two workmen to work on the sun room and then Mr. McGee arrived and his two workmen arrived separately with their van and spraying equipment.

40. I find that at that stage Mr. Duffy was present with Mrs. Duffy and Mr. D. commenced work on the sun room putting a plastic sheet over the double door between the sun room and the kitchen to protect the main house from the dust caused by Mr. D's work.

41. Again I accept Mr. Duffy's evidence as his recollection is clearly far superior to that of Mr. McGee's that when Mr. McGee arrived at the house on the 18th February, Mr. McGee walked through the job upstairs with Mr. Duffy and indicated that as his workman was small in stature that the holes to enable him to get access into the roof would be small and that while Mr. D. was working on the sun room Mr. McGee's workers could be removing the existing fibreglass insulation in the roof. I accept that in fact what Mr. McGee's workmen did was not to remove the fibreglass in the roof but to relocate the fibreglass onto the floor of the attic to provide some extra insulation and there is no criticism of Mr. McGee's workers use of this fibreglass.

42. I find that Mr. Duffy then departed for his work for the day leaving Mrs. Duffy and Charlie Jo and Mr. D's workmen and Mr. McGee's workmen on the site and Mr. McGee left the house himself to do other pricing work.

43. Mr. McGee is of the opinion that Mrs. Duffy said that she was leaving for her mothers and that he took this as being confirmation that she would be out of the house during the spraying and for two hours thereafter. I find that Mr. McGee is mistaken in this conclusion as Mrs. Duffy's trip to her mother's was only ever going to be of short duration whatever Mr. McGee thought.

44. I find that when Mr. McGee left the property Mrs Duffy and Charlie Jo were still there and when the first defendant's workmen were starting work on the ceiling preparing it for the installation and they ought to have been aware that Mrs. Duffy was in the kitchen with Charlie Jo.

45. I accept the evidence of Mr. D. that during the day he saw Charlie Jo walking or running around the outside of the sun room as he worked on it. I accept the evidence that it was Mr. McGee who suggested to Mr. Duffy that Mr. D. and his workmen patched up the holes in the ceiling as Mr. D. was a professional plasterer who would do a better finish than Mr. McGee and his workers and that these holes were plastered the day after the original installation by Mr. D. There was one opening in the master bedroom ceiling, one in the dormer hallway and one in another bedroom.

46. I also accept the evidence of Mr. D. that having removed the fibreglass from the walls and placed it in the garage that he and his men left the sun room and had lunch and the first named defendant's workers then applied the foam to the sun room. After the first defendant's men finished the sun room they left to work in the ceiling. Mr. D. and his workmen then returned to the sun room to put back the plasterboard on top of the foam

insulation and were never advised that they should wait any two hour or any period or that they should have special breathing apparatus when they were in the sun room.

47. I also accept the evidence of Mrs. Duffy that the first named defendant's workmen or one of them was seen by Charlie Jo with his protective equipment and he made some joke to Charlie Jo to the effect that he looked like a spaceman. I have no doubt that this was to reassure the young child but it is indicative of the fact that the first named defendant and his employees were aware that Mrs. Duffy and Charlie Jo were present in the house at the time that the spraying was going on.

48. I find that Mrs. Duffy left the kitchen with Charlie Jo to go to her mother's house which was nearby. This was only ever for a short social visit and then she returned to the house by which time Mr. McGee's men were upstairs. Mr. McGee may have been advised that Mrs. Duffy was going to visit her mother and may have taken it that this visit was for the entirety of the day but that was a wrong impression and Mrs. Duffy never told Mr. McGee that she would be out of the house for the day as she was not aware that this was necessary for safety. Mr. McGee's workmen were or ought to have been aware that Mrs. Duffy and Charlie Jo were in the house during the main part of the spraying and took no steps to insure that Mrs. Duffy and Charlie Jo left the site or to cordon off the house to prevent anyone accessing same.

49. I accept the recollection of Mr. Duffy that when he returned home at approximately 5 o'clock Mr. McGee was back in the property and his men where finishing up. At that stage Mrs. Duffy and Charlie Jo were in the kitchen and Mrs. Duffy indicated that the workmen were cleaning up.

50. Mr. McGee denies that he met Mr. Duffy on the evening of the work. There is no doubt that Mr. McGee did return himself at around 5 pm when his workmen were clearing up but as outlined above I accept that he did meet Mr. Duffy in the house and that it was on this occasion that it was agreed that Mr. D's workmen should repair the openings the next day and on being advised by Mr. Duffy that he could smell a smell he was then reassured by Mr. McGee and told that he should leave the windows open.

51. Also I find it was at this meeting between Mr. McGee and Mr. Duffy that Mr. Duffy expressed surprise that the job was finished in one day rather than two but was advised that this was explicable by the fact that the work was carried on quicker than had been anticipated.

52. I accept that Mr. and Mrs. Duffy left the windows open that night but had to close them later due to the cold and that the window in bedroom 2 in which Mrs. Duffy was sleeping with Charlie Jo, who had generally difficulty in sleeping in an ordinary bed at the time, was incapable of being opened.

53. In relation to ventilation I find that while neither Mr. or Mrs. Duffy was aware of any ventilation or extraction machine and Mr. D. indicated that when he and his men came back to the sun room to put back the plasterboard after the insulation was completed that

there was no ventilator and at no stage did he see any ventilator in the property, I accept that Mr. McGee had one ventilator, the dimensions or capacity of which are not at all clear working in the sun room while his workmen were applying the insulation and once they had finished they removed this ventilator to the landing. I accept the evidence of Mr. KG, the plaintiff's engineer and so find that the structure of the roof, which required three separate openings because different areas were isolated from the main, also required that each of these areas be separately ventilated. I accept that the nozzle of the ventilator was placed in each of the spaces in which the foam was being applied and then the extractor was left working in the landing for an indeterminate period of not more than two hours until approximately 5 pm. The foaming work was apparently finished at approximately 3 pm.

54. The next day Mr. D. closed the opes and skimmed over them and plastered them and finished them.

55. The first named defendant was paid by Mrs. Duffy the next day who complimented him on a good job and a warranty was given.

56. On the night of the installation I find that there was a pungent smell and Mrs. Duffy and Charlie Jo went to bed in the room in which the window could not be opened. Charlie Jo had difficulty in sleeping in an ordinary bed and Mrs. Duffy used to sleep with her. I find that next day both plaintiffs felt some symptoms as in a head cold, sore throat, burning sensation, sore eyes and runny nose and chestiness. I accept that these symptoms continued and worsened over time and Charlie Jo had similar complaints. I accept that during the weekend Mr. Duffy contacted Mr. McGee complaining that the smell was still there and mentioned that the family had bad "doses" but Mr. Duffy reassured them. The family continued to have symptoms and were not improving and treated themselves with Uniflu or cold tablets. It was not until May that there is the first note of complaints by Mr. Duffy to his GP who was a friend of his. Mr. Duffy was anxious in relation to what was happening and its relation to the indexed events but was reassured by his GP that normally if it was anything to do with the indexed event that the symptoms should pass.

57. The first record of Mrs. Duffy reporting symptoms to her GP, who was different from Mr. Duffy's, was in March. As Charlie Jo's symptoms were worsening Mrs. Duffy was recommended by her GP to take Charlie Jo to Letterkenny hospital at which stage she was kept in for two nights and the specialist in Letterkenny the doctors inquired about irritants and were advised that the family's symptoms commenced immediately after the indexed events, requested details from a data sheet in relation to the product that was used and Mr. Duffy contacted Mr. McGee in some considerable distress. I accept as Mr. McGee said that Mr. Duffy's words were to the effect that his product had "poisoned" their child. Clearly Mr. Duffy was and indeed remains highly distressed. In any event as a result of the conversation Mr. McGee forwarded a data sheet to the Duffys but apparently got that data sheet from the internet. He did not get the data sheet from his own records.

58. This is important as the data sheet supplied to the Duffys indicates that nobody should be in the house for 24 hours after the spraying. It was only during the course of the trial that it became clear that the actual product inserted by Mr. McGee had a two hour (with appropriate ventilation) rather than the 24-hour period before a safe return to the house could be recommended.

59. Having heard all the evidence, I accept Mr. McGee's evidence and find that this data sheet suppled to the plaintiffs refers to an earlier product and that some time prior to the installation of the Icynene in the Duffy's property a modification had been invented by the manufacturer, known as "light density low VOC Icynene" with the same Icynite in component A but a different product in component B which resulted in the American and indeed European authorities certifying that with the appropriate ventilation the period of absence from the dwelling house could be reduced from 24 to two hours.

60. The confusion as to what product was actually utilised was such that the second named defendant's consulting engineer apparently produced reports referring to the product with the 24 hour rather than the two hour waiting period.

61. The plaintiffs do not accept that the defendants have established that it was the new "light density low VOC Icynene" that was inserted but I accept the evidence from Mr. McGee and from the second named defendant that at the time of this installation that all Icynene in Ireland was the low density one.

62. From time to time before this case came to trial the defendants continued to furnish various data sheets which still referred to their original product and these data sheets advised that the property should be vacated for 24 hours after spraying. This caused confusion and annoyance which was added to by the second named defendant's engineer whose reports identifying the 24-hour absence requirement were referred to though that expert was never called to give evidence.

63. It is clear from all of the data sheets for Icynene products that the chemicals in both the A and B side and in the final "cured" product are potentially hazardous and that in order to mitigate against risk the manufacturer and the regulatory authorities in the United States of America, Europe and in Ireland require that during spraying full PPE including a respirator are required that no one is to come within 50 feet of the spray foam without the specified PPE and respirator during the spraying that everyone other than the certified sprayers are to leave the site for the duration of the spray and for 24 hours after the spraying is completed unless it is the low VOC product (and the requisite 40 air changes per hour is achieved), when the absence must be for the duration of the spray and for two hours after the spraying. Also there must be adequate active negative pressure ventilation during the spraying and for 24 hours after the spraying is completed unless it is the low VOC product and the requisite 40 changes per hour is achieved for the duration of the spray and two hours thereafter. There are "no exceptions" to this rule.

64. Accordingly, I find with the low VOC product, which is the product in question there may be access to the site two hours after spraying if, and only if, the requisite 40 changes per hour has been achieved during the spray and for two hours thereafter.

65. I find that all the data sheets for the product graphically highlighted the nature of the potential damage to individuals' lungs and larynxes unless the required precautions were taken.

66. Clearly the change in Icynene which allowed for entry after two hours due to or alterations to the B side was a great commercial benefit to the manufacturers and distributors of Icynene.

67. I find that the plaintiffs abandoned their house soon after receiving the data sheets from the defendants and remained outside notwithstanding the air quality report undertaken in August which found that there were no chemicals present in the house at that time. They have not been able to return.

68. I further find that the first named defendant was fully trained by the manufacturers and distributors of the product in the safety requirements for the product.

Liability

69. I find that the first named defendant was clearly negligent in a number of matters.

70. I accept that Mr. McGee was an installer with great experience who clearly believed in his product and in the general safety of the product. However, I find that this general belief seems to have resulted in an extremely lax approach to the necessary safeguards. The product itself is I find essentially safe if properly applied with the proper safeguards.

71. However, I find that the first named defendant was negligent in that:

    i. He failed to advise the Duffys that they were required to be out of the house during the spraying and for at least two hours thereafter.

    ii. He failed to communicate with the plaintiffs as to the potential risks and hazards involved in the product if the safeguards were not adhered to.

    iii. He failed to cordon off and secure the property to warn persons that they should not enter during the spraying or for two hours thereafter.

    iv. He failed to, on his own admission, measure the extent and outline of the property to be sprayed in order to calculate the 40 air changes per hour required during the spraying and for two hours thereafter.

    v. He failed to supply to the plaintiffs the information which the first named defendant's safety statement required to be furnished to customers which would have alerted the plaintiff to potential dangers.

vi. He failed to comply with the requirements of his own generic risk safety statement and risk assessment.

vii. The first named defendant was further negligent in that he clearly failed to communicate the requisite safety data to his workers in that the operative stated that he always applied a two-hour absence from dwellings rule even before the new product came on the market and that he never heard of a requirement to vacate for 24 hours.

viii. Furthermore, the first named defendant clearly failed to communicate the obligation to have all sites vacated for two hours as he allowed Mr. D. and his workmen to return to the sun room to complete their work immediately the spraying had been finished with no extractor working in the sun room. Fortunately, neither Mr. D. or his workmen were injured.

ix. The first named defendant was in breach of s. 12 of the Safety and Health and Welfare at Work Act, 2005 and indeed the Safety, Health and Welfare at Work (Chemical Agent) Regulations, 2001 of which Mr. McGee was entirely ignorant.

x. Most importantly I find that the first named defendant was negligent in relation to the air extraction and ventilation of the property.

(a) Mr. McGee though aware that roof contained a number of isolated areas that would have to be separately accessed by separate entrance holes made no calculation as to the air extraction rates required to meet the requisite changes necessary to reduce the absence from the house from 24 to two hours.

(b) The first named defendant removed the air ventilator from the sun room immediately after they had finished working on the spray there and there was no extractor present therein for the requisite two-hour period let alone an air extractor that would provide the necessary ventilation and further allowed Mr. D. and his workmen into the sun room when same should have been clear for at least two hours while it was being properly ventilated.

(c) The safety data for the revised product make it clear that it is not safe to allow anyone into the building after two hours unless the appropriate air ventilation rates have been achieved. The first named defendant made no calculation to ensure that this was done. The first named defendant had no separate ventilators or air extractors working for the separate areas in the roof space, which is a necessary requirement given the engineering evidence, merely allowing the extractor to be in each roof area while the spraying was being undertaken and after the spraying transferring the extractor to the landing area where it worked for approximately two hours.

(d) The defendants have not established accordingly that the property was ventilated adequately in accordance with their requirements before they allowed the Duffy family back into the property. I find that the property was not adequately ventilated to 40 air extractions per hour as required, as at the

very least the separate areas in the roof were not properly ventilated in accordance with the requirements as stipulated by the plaintiff's engineer.

(e) In circumstances where they knew or ought to have known that the bedroom in which Mrs. Duffy and Charlie Jo was to sleep could not have its window opened they allowed that room and the other areas to remain with open holes until the next day with the Duffys in the property.

(f) The defendants were in breach of S.I. 619/2001 Safety Health and Welfare at Work (Chemical Agents) Regulations 2001, at Regulation 4 and Regulation 5.

xi. They allowed Mrs. Duffy and Charlie Jo to be and remain in the property while they were spraying in contravention of all safety requirements.

xii. They allowed Mrs. Duffy to sleep in the bedroom without any natural ventilation with Charlie Jo.

I do not find that these breaches are in any way irrelevant to the events or can be excused by Mr. McGee's claim that he wasn't good on paperwork as there is clear obligations on Mr. McGee to properly advise the Duffys as to the risks in relation to product and also as to what they must do in order to ensure their own safety.

72. The first named defendant has alleged contributory negligence as against the plaintiffs for their failure to vacate the house while the spraying was in place but as I have found that they were not advised adequately or at all by the first named defendant that they should be out of the house and were allowed to remain in the house this allegation of contributory negligence cannot stand.

Causation

73. The plaintiffs' case is straightforward. The morning after the foam was sprayed in their house all three family members had respiratory symptoms which did not resolve and have continued.

74. Each of the plaintiffs have been diagnosed by Professor B as having sustained severe pan-airway inflammation and Reactive Airway Dysfunction Syndrome (RADS). Each plaintiff presents with the most severe version of RADS of very inflamed larynxes. The injury was caused by something with huge irritant toxic properties consistent with the known adverse effects of the chemical compounds forming the constituent elements of the spray foam as listed by the manufacturer in the data sheets. Professor B had never seen injuries of the nature caused by fibreglass or dust which are of a chemical type of injury and not a reactive injury. Professor B performed two bronchoscopies on each of the plaintiffs something that he had never done on any of his patients before to confirm that the film which shows the damaged larynx has continued and worsened over time.

75. In consequence of this the plaintiffs and each of them have become highly sensitised to any number of day to day odours which are irritants and have resulted in inability in particular of Mr. Duffy to work. They left their house and put it up for sale, moved into a relative's property but as this was unsuitable they are now living in a mobile home, have suffered sleep deprivation and areas of irritation on their skin, significant depression on

the part of Mr. Duffy and Mrs. Duffy all of which Professor B links to the exposure to either A or B parts in the foam or both of them, most likely Isocyanate (the A part) and further that the injuries are not likely to be referable to any other proposed possible irritant.

76. The defendants rely principally upon the evidence of Dr. T. a toxicologist who came to the defendant's case reasonably late in the day and whose testimony influenced to some extent the evidence of the defendant's medical expert Professor H.

77. Dr. T. gave trenchant evidence which concentrated upon the possible exposure to Isocyanate (Part A) rather than possible exposure to the chemicals in Part B which were dealt with only relatively shortly.

78. Dr. T. said that the chemical factors assure that no escaped Isocyanate can remain in the air after spraying as they are heavier than air and settle to the floor when sprayed. He claimed that Isocyanates so reactive that any particles will react with and are bound to air moisture, dust particles, other chemicals in the air or with materials on the floor and that the vapour pressure for Isocyanates (i.e. the evaporation rates) are so low that they cannot evaporate into the air after they have settled. Dr. T. said that the risk of exposure due to Isocyanate after spraying is very limited for a short period of time may be only a matter of "seconds" and that it will not hang around in the air. This risk he said is usually confined to the sprayers and that as neither of the plaintiffs were present in the spraying area at the time or before more than 30 minutes had elapsed after spraying had ceased that therefore the health effects alleged by the plaintiff "could not have been caused by Isocyanates because they were not exposed to this chemical in the spray area in the home during or within less than 30 minutes after the spraying had ceased".

79. Dr. T. relied upon two studies carried out on a property by Woods *et al* the first of which indicated no presence of Isocyanates in the air 30 minutes after spraying and the other within an hour after spraying. Whereas both these studies were in properties with ventilation and air extraction in accordance with the manufacturer's requirements, Dr. T. was not of the view that the ventilation was a real issue.

80. Dr. T. also relied upon a study which he was informed was undertaken by the first named and second named defendant on two properties.

81. Whereas the defendant is not required to prove anything Dr. T. was insistent that the likely cause of the plaintiffs' injuries was exposure to the fibreglass/plasterboard which had been taken down in the sun room and the plasterboard put back up by Mr. D. and the fibreglass removed to the garage.

82. Dr. T. regarded the fact that he felt the plaintiffs did not advise immediately of this other potential source of irritation as being an attempt by the plaintiffs at "deception".

83. The plaintiff has been highly critical of Dr. T's evidence and his status as an independent expert and the first named defendant has been critical of Professor B's independence or more particularly upon his reliance on the plaintiff's descriptions.

84. I regret that I have come to the conclusion that Dr T was not acting as an independent witness in accordance with the obligation of experts in these courts. I have come to the conclusion that not alone was he advocate but that he was a very partisan advocate who sought to denigrate the character of the plaintiffs.

85. The two studies of Woods *et al* upon which he relied, relate to circumstances in which the appropriate ventilation has been given to the product. The need for air extraction at the prescribed rate during installation and for two hours thereafter is a specific non-negotiable requirement of the manufacturers supported in America by the EPA which states:

> *"vapours in aerosols can migrate through the building if the area is not isolated and properly ventilated.*
>
> *After application vapours may linger in a building until properly ventilated and thoroughly cleaned."*

The EPA further states:

> *"Cutting or trimming the foam before it is truthfully cured may cause exposure to unreacted SPF chemicals"*

86. The curing process is when Parts A and B merge and the soft foam hardens and the gases become inert.

87. The manufacturer's data sheets all indicate by means of graphic drawings potential damage to internal organs including the larynx and throat due to exposure and the manufacturers in their technical bulletins state *inter alia "if the entire building is not vacated consider the potential for SPF chemicals to migrate to other floors containment and ventilation methods may help to prevent migration. Discuss with property management or other contractors which floors will be occupied."* The manufacturer's data sheets originally prescribed a blanket 24-hour vacating of the property after spraying and then with the low product modified this to two hours but indicated that this is subject to the proper and correct ventilation being undertaken.

88. Apparently the second named defendant in conjunction with the first named defendant after this litigation undertook some study on Mr. McGee's property which they first insulated and which they say indicated that with or without ventilation there was no presence of Isocyanate in the air.

89. I do not accept this exercise can in any way be described as scientific. I do not accept the validity of lay witnesses giving reports from one study. No evidence from an expert was given to suggest how the study was conducted or how scientific it was. In any event

accepting the fact that in Mr. McGee's property there were no adverse chemicals present on one specific occasion does not invalidate the manufacturer's stipulations, the regulatory authority's requirements in the United States of America, in Europe and in Ireland all of whom highlight the possible dangers and consequences if the required safety measures are not properly undertaken.

90. The EPA in its paper on the "potential chemical exposure from spray polyurethane foam" states:

> *"Research data indicate that inhalation and exposures during SPF insulation will typically exceed Occupational Safety Health Administration (OSHA) occupational exposure limits (OELS) and require skin, eye and respiratory protection.*
>
> *Vapors and aerosols can migrate through the building if the area is not isolated and properly ventilated.*
>
> *After application, vapors may linger in a building until properly ventilated and thoroughly cleaned.*
>
> …
>
> *Cutting or trimming the foam as it hardens (tack-free phase) may generate dust that may contain unreacted isocyanates and other chemicals.*
>
> *After application, dust may linger in a building until properly ventilated and thoroughly cleaned."*

91. I accept these observations and the manufacturers requirement as being indicative of the fact that Dr. T's opinion that there is a no risk and can be no risk from these chemicals a matter of a few minutes after application is incorrect. I prefer the specifications and requirements and opinions of the manufacturers and of the EPA to the opinions of Dr. T.

92. In relation to the two studies by Woods *et al* both of these were conducted after the ventilation and air extraction required by the manufacturers were put in place which is of course precisely what did not occur in the case of the plaintiffs. Whereas it is correct that Professor B is of the view that the exposure that caused the problem was to component A (Isocyanate) rather than component B, it was always the plaintiff's case that the injuries were caused by exposure to both components and the united foam. And it does not matter much to the plaintiffs' case as to which of the compounds are caused the plaintiffs' injuries or whether they were caused by a combination of compound A and B.

93. Whereas component B carries the precisely the same warnings in relation to its toxicity as component A the evidence seems to suggest that it is in fact less potentially harmful but its potential effects, as identified by the manufacturers in the data sheets, are to the same area of the body as component A. Dr. T. however said when asked by the court in relation to component B that the chemicals in side B are all in very reduced concentrations "*so the individual chemicals involved in side B although a number of them*

are irritants the concentration for exposure is significantly reduced" and that the intense injuries sustained by the plaintiffs could not in his opinion have come from side B.

94. It is of relevance contrary to Dr. T's view that side B cannot be responsible for what occurred that it was apparently a modification of side B chemicals, rather than any modification to side A, that resulted in the reduction from 24 to two hours' absence from the property in the more recent product. Accordingly, side B must be viewed as a significant potential hazard.

95. Throughout his evidence I came to the conclusion that Dr. T. was proceeding as an advocate on the basis of a paper he had delivered to the industry on how "To avoid a law suit".

96. I am fully supportive of the idea that a judge should decide as little as is necessary and conscious as I am that I have already decided that Dr. T's evidence cannot be accepted as being in any way the unbiased evidence of an expert, I feel obliged to go further and I have come to the opinion that m The fact that Dr. T. in his evidence ignored or downplayed the central importance of adequate ventilation in the Woods *et al* studies and also in the manufacturer's data sheets renders his impartiality as being highly suspect and ultimately is sufficient to ignore his findings. An expert may descend into the realm of the advocate due to excess of enthusiasm for the cause that he expounds. I have experienced this on only a very few occasions in my time as a judge. I am afraid that I must record that Dr. T's partisanship went much further.

97. For example, at Table 7 of his report Dr. T. lists as facts that the Duffys were ordered to stay out of the house until 6 pm and accepted as a fact what undoubtedly Mr. McGee told him that Mr. Duffy said that he did not finish work until about 6 and that Mrs. Duffy was going to spend the day with her mother and specifically said that she left the house at 9.30 am.

98. Further at Table 8 of his report Dr. T. heads the Table with the words "*Plaintiff misrepresentations of the SPF installation process*." Dr. T. lists in one column the plaintiff's complaints as quoted by Dr. M. the defendant's psychiatrist on the second column he heads it "*Independent expert observations*" which is a list of matters taken from Mr. McGee's statements and clearly are not independent and on the third column he lists the "*standard/actual process*".

99. Accordingly, Dr. T. has listed as being "independent" what the defendant's case is and has taken the plaintiff's case not as his evidence but rather what Dr. M. recounted the plaintiff saying to him.

100. At Table 9 Dr. T. lists what he describes as "*Duffy contradictions for SPF installation timeline – 18th Feb. 2016"* and lists in one column Mrs. Duffy's timeline and in another Mr. Duffy's timeline. Dr. T. takes all of these statements from the defendant's respiratory report from Professor H. suggesting that there is a significant contradiction between for example Mrs. Duffy saying at 8 pm four workmen arrived and Mr. Duffy saying a crew of

two operators arrived to install the installation. In fact, I find that there is no substantive contradiction between how they reported the instant to Professor H. Professor H. was not recording complaints as a private investigator but to ascertain the cause and extent of what the plaintiffs have suffered.

101. Then at Table 10 of his report Dr. T. heads it "*Professor B's false exposure assumptions*". He lists Professor's B's statement on the one hand? and in the other the "alternative perspective" at best Table 10 is argumentative.

102. Further as previously stated Dr. T. referred to the fact that he believed Mr. and Mrs. Duffy had not referred to the installation work by Mr. D. as being "deception".

103. The fact that Dr. T. is prepared to attempt to blacken the plaintiffs' testimony (unfairly) of itself entirely undermines his credibility as an independent witness. It must be forcibly pointed out that it is no role for an expert to attempt to act as a barrister in the case suggesting inaccuracies or to describe matters as deceptions.

104. I find there was no deception on the part of the plaintiffs in relation to the work carried out by Mr. D. The first named defendant and his workers were fully aware of this work and in fact on the initial occasion in January when Mr. McGee was looking over the property he told Mr. Duffy that he would have to have another contractor to remove the plasterboard and fibreglass from the sun room. Mr. McGee was at all stages aware of this fact.

105. At no stage did the plaintiffs in these proceedings disguise from anybody that Mr. D. and his workmen had done what they did as it was well known. Dr. T's complaint seems to be that once he became aware of the use of Icyanate Professor B. did not refer to the fibreglass plasterboard as possible sources of the plaintiff's injuries. It is entirely true that Professor B. did not refer to these matters in his reports because as he stated in his evidence the fibreglass was in effect a non-runner.

106. The fibreglass was removed from the sun room by Mr. D. and put into the garage. There was a reasonably effective plastic barrier between the sun room and the rest of the house and the type of injuries and irritation caused by fibreglass is of a mechanical nature mainly caused by physical contact and I accept the evidence of Professor B. and indeed agreed by Professor H. on behalf of the defendant that the type of injuries suffered by the plaintiffs were chemically caused.

107. In his evidence Professor B. discounted the alternative theory colourfully saying that in a two horse race the fibreglass theory was "not at the races". I accept that description as being correct.

108. I do not accept that the fibreglass or the panels could have been the cause of the irritation to the plaintiffs as the medical evidence from both Professor B. and Professor H. on behalf of the defendants indicates that the type of damage or irritation likely to be caused by fibreglass is of a mechanical nature (e.g. if you rub up against it) and that the

injuries sustained by the plaintiff was of a significant chemical exposure. I also find that the sun room was reasonably cut off from the rest of the house and it is highly unlikely in the extreme that any fibreglass escaped from the sun room to the rest of the house and I do not find this to be credible.

109. It is not of course the obligation of the defendant to establish any alternative cause for the plaintiffs' injuries. However, I have come to the conclusion beyond any doubt whatsoever that each of the plaintiffs sustained their life altering serious injuries as a result of exposure to chemicals, either or both component A or B and as a matter of probability from exposure to chemicals in component A.

110. I have come to this conclusion because of the failure of the first named defendant to properly ventilate the property in accordance with the requirements of safety.

111. The second named plaintiff was present in the property during the spraying to the knowledge of the first named defendant.

112. The chemicals that cause the damage were as a matter of probability not the chemicals that were sprayed in the sun room as there was a door and a plastic sheeting likely to prevent contamination from that source but rather the probable cause was the foam that had been injected into the roof.

113. I do not find that the first named defendant, his servants or agents was in any way negligent in the manner in which they sprayed the foam but rather in their failure to properly ventilate and as a result Mrs. Duffy was exposed throughout the day and Mr. Duffy was exposed when he returned to the property at 5 pm and throughout the night. The fact of the smell (even though its precise nature could not be identified) is likely to be indicative of the fact that chemicals had indeed escaped and were in the property due to the lack of proper ventilation. Mrs. Duffy together with Charlie Jo then slept throughout the night in the room underneath an opening and in respect of which the window could not be opened and there was no natural ventilation or indeed the possibility of natural ventilation.

114. Accordingly, I find that the plaintiffs' injuries were caused beyond a reasonable doubt by the exposure to the product as sprayed by the defendants. And on the balance of probabilities I find that due to the nature and extent of the plaintiff's injuries it was due to exposure to Isocyanate.

115. The defendants submit that the evidence of Professor B. in relation to causation was tainted by "*misleading information he was told by the plaintiffs*" and that he was given the impression that the plaintiffs had been exposed to Isocyanates "*on an industrial scale"* and they referred to his report in relation to Mr. Duffy to the effect that he has a "*history of significant exposures as outlined not only for the few hours in the day of the installation of these materials on the 18/02/16 but also during the following approximately eight weeks when he continued to live in the house and during which*

period he tells me that the engineers he has commissioned suggest that further exposure was likely".

116. Such criticism is in my view misplaced as Professor B. in these extracts was dealing with the seriousness of the plaintiffs' injuries in this extract. His opinion in relation to causation was that this chemical can cause this type of injuries and that person's reaction varies as to their vulnerability but that the injuries sustained by the plaintiffs and each of them was highly significant and were likely to have been caused by exposure to the chemicals in the spray.

117. The defendants also rely upon the fact that Professor B. stated in his report that each plaintiff attended their GP shortly after the incident which is not the case. Professor B's evidence however was that as the symptoms had come on in the day after the exposure or the night of it and that these symptoms had continued that this is the reason he came to his conclusion and as Professor B. stated "*once I knew he was exposed for more than minutes it was sufficient to explain his clinical presentation…*".

118. I do not accept therefore that Professor B's theories were based upon any substantial incorrect assumptions and indeed when under cross examination and alternative timelines were put to him Professor B. maintained his opinion.

119. I do not understand the submission on behalf of the defendants that because each of the plaintiffs did not have the exact same exposure to Isocyanate mean that Isocyanate could not have been the cause. That submission is not supported by the facts of this case. Both plaintiffs were exposed to the product and both have remarkably similar objectively found symptoms which as I have stated has been caused by this exposure which is the result of the negligence of the first named defendant.

Exaggerated/misleading claim, Section 26 of the Civil Liability and Courts Act, 2004

120. It was clear from the defence of this case and not just the evidence of Dr. T. but throughout that the plaintiffs were being accused of making an exaggerated or misleading claim and the defendants in their submissions, rely upon the provisions of s. 26 of the Civil Liability and Courts Act, 2004 to dismiss the proceedings. Section 26 provides:

> *"(1) If, after the commencement of this section, a plaintiff in a personal injuries action gives or adduces, or dishonestly causes to be given or adduced, evidence that—*
>
> *(a) is false or misleading, in any material respect, and*
>
> *(b) he or she knows to be false or misleading,*
>
> *the court shall dismiss the plaintiff's action unless, for reasons that the court shall state in its decision, the dismissal of the action would result in injustice being done.*
>
> …
>
> *(3) For the purposes of this section, an act is done dishonestly by a person if he or she does the act with the intention of misleading the court…."*

121. The defendant submits that the plaintiffs have "completely exaggerated the consequence of their injuries". They complain about the level of special damages sought including the level of the loss of earnings, personal hygiene products and home care for Mr. Duffy. The defendants complain as well about the loss of earnings claim for Mrs. Duffy (which the defendants take exception to as she was not working at the time and they submit unlikely to work again) as well as damages for hygiene products and domestic assistance and other matters and it is submitted by the defendants that this level of damages are completely unwarranted and demonstrate the lack of *bona fides* in relation to the claim.

122. The defendant further submits that the plaintiffs' credibility is undermined by alleged inconsistencies in their evidence both in court and to various experts which has had the effect of "plaintiffs adducing misleading evidence on their behalf".

123. The defendant's submissions list at length the alleged inconsistencies and submit that the survey that they have taken and given evidence of by a private investigator demonstrate that the plaintiffs are fully capable of going about their daily lives and further suggest that Mr. Duffy's presentation while attending court without coughing contrasted with his evidence and his submissions to the experts. The defendant submits that the plaintiff suggested that they had gone to the GPs earlier than they actually had and that Mr. Duffy's complaint of suicidal tendencies contrasted with an absence of him seeking help in this regard. The defendants submit that the plaintiff failed to disclose the air quality report that they had undertaken on their property or include it in discovery. They submit that the plaintiffs had told their experts that there was no extraction machine or ventilator in the property on the day of the installation that the particulars suggested that Mrs. Duffy was still in employment at the time of the accident and had advised one of the experts that she had given up work because of the indexed event and that Mr. Duffy had told Professor B. that he had an engineering report which claimed that there were Isocyanates in the house for a period of eight weeks after spraying and no such report existed. That he gave evidence that he had borrowed money from Mr. K. to finance his car but that Mr. K. denied this. That while Mr. Duffy claimed he could not stand fumes he was able to "operate his gas bbq" that the claim that the plaintiffs made that they would be unable to occupy their house as it was not suitable for occupation due to contamination was inconsistent with the air quality report. The defendants submit that the plaintiffs obtained a valuation report from their auctioneer Mr. J.G. saying that the house had a nil value if supported by a report confirming contamination. Further the defendants contend that the plaintiffs had a claim for rebuilding a new home being the amount of €250,000 and that they claim for their clothes that were in the house although there was "nothing wrong with them". The defendants claim that these items are exaggerated. That Mrs. Duffy claimed that the mobile home cost more than it did though it accepted that the difference is not very significant ("nearly €20,000" when it only cost €19,300). This the defendant contends demonstrated the plaintiff's desire "to exaggerate at every possible turn". Further the defendant contends that the fact that a separate set of proceedings was issued seeking damages for the diminution in the value of the property although this was also maintained in these proceedings represents a clear process in "attempting to recover on the double" that they made a claim for diminution in

the value of their home on the basis of a market value of €380,000 when the actual guide price was only €265,000 when the property was being sold and that the sale was actually for €235,000 on the open market and finally that the plaintiffs called evidence in relation to personal cleaning products supported by Ms. S.

124. Having considered all of these submissions numbered by the defendants (a) to (u) I find that there is absolutely no basis for invoking the provisions of s. 26 of the Civil Liability and Courts Act, 2004 and indeed that none of the plaintiff's claims can be said to be exaggerated if properly understood.

125. Whether any item of special damages are reasonable is a matter to be considered by the court under the heading of damages. The plaintiff in an action is always going to furnish particulars of what is the height of possible claims. The fact that a court may or may not allow all or any of the matters is not suggestive that these claims are exaggerated. A plaintiff's legal advisors would surely be guilty of negligence if they were to put forward a lower basis of a claim than might be found by a court. Whether the sum claimed by Mr. Duffy for loss of earnings and hygiene products and homecare is or is not reasonable does not mean that even if it is not found to be reasonable that he has been guilty of wilfully attempting to mislead the court. Whereas Mrs. Duffy is claiming a specific sum for loss of earnings with actuarial evidence her claim for loss is also made out on the basis of loss of opportunity.

126. I do not accept that these claims indicate any lack of *bona fides* in respect of the claim in general and certainly no such matters as would invoke the provisions of s. 26.

127. To deal with the defendant's submissions at para. 74 (a) to (u) I say that the surveillance pictures and the evidence given by the private detective on behalf of the defendants of one day's surveillance show the plaintiffs moving around outside their mobile home, Mr. Duffy changing a light bulb outside the cottage and the Duffys travelling to a local shop to buy some provisions and then Charlie Jo moving happily around the outside of the house and indeed possibly dancing. Nothing in this surveillance is indicative of a lifestyle that the plaintiffs had not volunteered. It should be pointed out that the surveillance in respect of which evidence was given was clearly by no means the first time the private investigator had followed the plaintiffs as they had purchased a drone to photograph the private investigator due to his previous visits and the fact that they felt intimidated by him.

128. I agree that Mr. Duffy while in court and not giving evidence was not subjected to prolonged coughing fits though he did cough on a number of occasions but I do not think that there is anything in his presentation which I observed that in any way counters the evidence that he gave and whereas his coughing was described as "habitual" to some extent by some of the experts none of them suggested that the plaintiff was in any way exaggerating or manufacturing his cough and someone who is subject to prolonged coughing due to the nature of his larynx is likely to develop into a habitual cough without any attempt to deceive. Whether the coughing was habitual or caused by the state of his larynx or due to a Pavlovian reaction or a psychological reaction is immaterial in relation

to the question of damages and also in relation to the question of the application under Section 26.

129. It is correct that the plaintiffs both advised that they had gone to their GPs relatively soon after the indexed event and the GP's notes indicated that it was not until May in the case of Mr. Duffy and March in the case of Mrs. Duffy that they attended their GPs and made reference to the indexed event. Given the fact that neither GP gave evidence I must accept that these were indeed the first times that reference was made I do not find that at this remove the fact that they went to their GPs later than they advised other experts is indicative of any attempt to deceive. Both plaintiffs fully agreed in evidence with the records. The plaintiffs went to their GPs when their own attempts to self-medicate did not work.

130. Whereas the evidence of a GP is frequently of great importance in a case and whereas I find that the plaintiffs are fixed with the history as described in the GP's notes, I do not believe that the failure to call the plaintiff's GP is in any way sinister as the main evidence in the case in relation to both of the plaintiffs' injuries was that given by Professor B. who treated the plaintiff and who is the leading expert in Ireland in the field and the plaintiffs were medically referred to Professor B. because of his expertise.

131. Mr. Duffy's suicidal ideation is supported by his psychiatrist. The fact that he did not seek help and only recently obtained prescriptions for antidepressants may well be evidence as to the nature or extent of the suicidal ideation when it comes to damages or indeed to Mr. Duffy's embarrassment at revealing it but is not evidence of an attempt to mislead.

132. The plaintiffs did obtain an air quality report on the property in August 2016 which revealed that at that stage there were no chemicals present in the air and this air quality report ought to have been included in the discovery. The plaintiffs however fully accepted that the air quality report indicated that the house was clear but said that they could not live in the property either from psychological or, as Professor B. suggested Pavlovian reasons. Indeed, the air quality report was necessary in order to put the property on the market and avoid it having a nil value.

133. The plaintiffs did tell their experts that there was no ventilation machine on the property on the day of the installation because they did not see any air extractors. Neither of course did Mr. D. see any air extractor. I have accepted the evidence of Mr. McGee that he used one ventilator. The defendant's reference under this heading must also fail. If a party has an honest belief in a certain series of facts, it cannot be an attempt to deceive within the terms of s. 26.

134. In relation to Mrs. Duffy's evidence and particulars in relation to her inability to work she at all stages volunteered that at the time of the instant she was off work due to her post-natal depression and accepted that she had been certified as being unable to work into the future and I do not hold that her representation that she had to give up work because of the injuries was an attempt to deceive or to adduce misleading evidence. The plaintiff fully believes that had it not been for the indexed events that she would have attempted

to go back to work and accordingly she believes that her present absence from work is due to the indexed event. It must be recalled at all stages the plaintiffs were of the view, supported by the defendant's documentation, that they had been injured by a product in respect of which they ought to have been out of the house for 24 hours after spraying which incorrect information clearly upset and probably enraged both plaintiffs and they cannot be expected to have approached all matters in a detached and calm manner. Having made that point however I have no hesitation saying that there was no attempt to mislead in accordance with the provisions of s. 26 by Mrs. Duffy in this regard.

135. In relation to Mr. Duffy's belief that there would be engineering evidence to support the fact that there were Isocyanates in the house for a period of eight weeks that was clearly Mr. Duffy's belief at the time and it did not as I have previously decided have impact on Professor B's final conclusion which was based upon the fact that once there was some exposure that the injuries were consistent with this.

136. Mr. Duffy's belief that he borrowed money from Mr. K., his previous employer, to finance his car was denied by Mr. K. however this is not an attempt by Mr. Duffy to adduce misleading evidence. I accept that this was his belief at the time he gave evidence. Mr. Duffy was of course grateful to Mr. K. for the fact that after the indexed event Mr. K. took Mr. Duffy back in employment and attempted to offer him lighter work to encourage him to return to the workplace but this was unsuccessful.

137. The suggestion that because Mr. Duffy was able to operate his gas bbq that his claims that he cannot stand fumes or is sensitive to smells is a misleading claim would be laughable were it not advanced apparently seriously in the submissions in this case. Mr. Duffy said that he can indeed light his bbq but that he has to stand away from it upwind to avoid adverse reaction.

138. On the 16th November, 2017 the plaintiffs' then solicitor wrote stating that the plaintiffs had been advised by their GP that the house would "never be suitable for occupation by them due to the contamination of their house". This letter was explained by the fact that the plaintiffs' then solicitor was under pressure from the plaintiffs due to the lack of progress in the case and the plaintiffs had threatened to take their file elsewhere (as ultimately they did) and the letter was written at a time when the plaintiffs for good or other reason had decided that they had to leave their house permanently because of what had occurred. This does not amount to anything that would be captured by the provisions of s. 26.

139. The valuation report obtained from J.G. indicating that the house had a nil value if supported by a report confirming contamination was undoubtedly correct. It was in order to ascertain the actual condition of the house that the air quality valuation report was obtained and Mr. J.G. put the house on the market with an asking price of €265,000.

140. Likewise, the fact that the plaintiffs brought a claim for rebuilding a new home or for replacing their old clothes which they abandoned or the claim for diminution in value of their home or cost of personal cleaning products or extra care all are matters which will

be dealt with under the items of special damage to be discussed below and are subject to the same provisos in relation to such claims as I indicated above.

141. I must also separately indicate that the submission at para. 74 (r) of the defendant's submissions that the claim "Mrs. Duffy claimed that her mobile home cost more than it did. Although the amount at play is not significant it further demonstrates the plaintiff's desire to exaggerate at every possible turn" is entirely without merit. Mrs. Duffy referred to the cost of her mobile home as "nearly €20,000" when in fact it cost €19,300. Mrs. Duffy's evidence was entirely accurate and to include this as part of a claim under s. 26 is to devalue the entirety of the submissions on this point.

142. The plaintiffs did indeed for some reason issue separate proceedings claiming damages in relation to the diminution of value of their property although that these claims were also maintained in these cases. That separate claim has been struck out with an order for costs against the plaintiff and the explanation for it which was not entirely satisfactory was that it was thought that as each of the plaintiffs had separate claims and as the house was jointly owned that there should be one claim in respect of the house. Clearly the plaintiffs' legal advisors saw the folly in having that separate claim and consequences have resulted therefrom. Issuing such a claim may well have been ill advised however it is not an attempt to mislead or deceive or make any exaggerated claim. There was clearly absolutely no set of circumstances in which the plaintiffs could recover "on the double". This is also the case in relation to any items of special damages which are duplicated in the two sets of proceedings before me.

143. I have listed each of the allegations in relation to s. 26 and dealt with them as they have been set out in formal written submissions to the court and lest a generic rejection of same would be criticised. If and insofar as I have not specifically listed all of the particular items, the defendants are complaining about as being "exaggerated" it is because they can all be dealt with under the heading of special damages and none of them are exaggerations and certainly none of them come within the terms of s. 26.

144. False or misleading or exaggerated claims must be discouraged and s. 26 is one of the principle ways to do so. However, s. 26 ought not to be invoked without a firm basis for doing so. To invoke s. 26 is in effect to make an allegation of fraud against a plaintiff. It should not be used merely to cause distress and there are potential consequences to a defendant for improperly invoking this section. The defendant's claim to dismiss the proceedings under s. 26 must fail.

Damages

145. Counsel on behalf of the plaintiff indicated that notwithstanding the attitude of the defendant throughout the trial and in particular notwithstanding the pleas under s. 26 of The Civil Liability and Courts Act, 2004 they do not seek aggravated or exemplary damages and accordingly the only damages are compensatory. I shall deal with each of the plaintiffs in turn.

(a) Patrick Duffy

General Damages

146. Patrick Duffy is a young man who has suffered an extremely serious injury. As is submitted by the plaintiffs the Book of Quantum is of no assistance. I accept fully the evidence of Professor B. that the plaintiff's injury is amongst the top 1% of airway damage that he has seen and that he has never performed two bronchoscopies on these patients. There has been no improvement between the bronchoscopies and I accept Professor B's evidence that the prognosis is for no further improvement.

147. I have seen the photographs of the bronchoscopies produced by Professor B. which contrasts Mr. Duffy's larynx with that of a normal larynx and the contrast is obvious and stark.

148. Mr. Duffy's larynx has become highly sensitised to a large number of odours and irritants with resulting implications for his work, social, family and personal life. He is subject to coughing on a regular basis and sleep deprivation. I accept the evidence of the ophthalmologist in relation to Mr. Duffy's eyes and the evidence of Mr. McH the plastic surgeon in relation to the skin tissue of which I have had the opportunity to view the redness. Mr. Duffy also became significantly depressed and remains so and as is stated by the defendant's psychiatrist Professor M. his psychiatric illness is tied with his physical prognosis. I fully accept that Mr. Duffy's depression was such that he researched methods of suicide. He did not put these into practice and did not make reference to his treating doctors at the time.

149. As a result of the plaintiff's injuries Mr. Duffy was forced to give up work something that he thoroughly enjoyed and clearly on the basis of his employers evidence he was very good at and highly valued.

150. I note that Mr. Duffy's late father wrote a letter for Mr. Duffy to read at his younger brother's wedding and he had great difficulty in complying with this. I accept that Mr. Duffy who was a fit young man actively engaged in sports is now limited to moderate walking as an exercise.

151. I accept accordingly that Mr. Duffy is going to go through the rest of his life with a highly sensitised larynx subject to fits of coughing and will have to guard against any exposure to any normal odours which will be a constant reminder of what occurred. Mr. Dufy will not be able to work again for the rest of his life. I note that Mr. Duffy also feels a responsibility for what has occurred as he engaged the defendant.

152. Mr. Duffy personally is an entirely truthful witness who did not exaggerate his complaints. The fact that some of his present level of coughing may be habitual does not affect the nature of his damages as none of the experts made the case that the plaintiff was deliberately exaggerating.

153. The only relevant comment from the defendant's expert, Professor H. is that he would have expected that the Duffys' injuries would have improved. They clearly have not

improved so that comment is evidence of the serious nature of the injuries. I accept Professor B's evidence that no improvement is going to occur.

154. It may be that Mr. Duffy because of some early experiences was more susceptible to the exposure than a normal person but in this regard he must be treated as someone having a "egg shelled skull".

155. As a result of the indexed injury notwithstanding the fact that the air quality control report undertaken for the plaintiff's house in August 2016 indicated that they were at that stage no chemicals present in the house, Mr. Duffy had already vacated the house with his family to live in a house owned by his brother in law. This in turn proved unsuitable left and he is now living in a mobile home with the intention of building a specially constructed house for his family.

156. The decision to vacate his house and live since then in a mobile home while not caused by any physical presence of chemicals in his own house was not unreasonable and was undertaken because Mr. Duffy and his family were afraid to return. While this item will be dealt with under Mrs. Duffy's claim for special damages it also forms part of Mr. Duffy's general damages claim. Whether Mr. Duffy's reluctance to live in that house which he loved was due to a Pavlovian reaction as suggested by Professor B. or due to psychological reasons is not relevant as I find that his decision is not one that was taken lightly and in the circumstances was reasonable.

157. Accordingly, the plaintiff, a young man, presents himself as being someone with a very serious indeed catastrophic life changing injury near to but not at the upper limits of compensation. It is a permanent injury and being fair and reasonable to all sides I award the sum of €200,000 damages for pain and suffering to date and €200,000 damages for the future.

Special damages

158. The approach in relation to special damages as highlighted by this court in *Russell* and approved by the Court of Appeal is whether the plaintiff's claims for any amounts are reasonable. The defendant submits that all of the claims are unreasonable.

159. I will allow the sum of €45 for the PIAB application. A sum for €2,415 is claimed for loss of clothing. This is because Mr. Duffy abandoned his clothes in the house for fear of contamination. I have no doubt that Mr. Duffy would not have abandoned his clothing just on a whim and did so because in effect he could not bear to utilise any clothing that was in his house the entirety of which he believed to be contaminated and accordingly the sum of €2,415 is reasonable.

160. A sum of €69,964 is claimed for loss of earnings to date up to July 2018 and a sum of €497,952 for loss of earnings into the future. These sums are based on actuarial calculations.

161. Given the evidence of the plaintiff's employer and of his work record I accept the submission on behalf of the plaintiff that any reduction for *Reddy v. Bates* would not be

very significant and I will award the sum of €500,000 for loss of earnings to date and into the future.

162. Mr. Duffy's claim in the sum of €60,522 in respect of personal hygiene expenses as he requires to utilise special sanitary products, soaps, etc. which are more expensive than the usual type of product. The evidence in relation to this matter calculated by the actuary was not entirely satisfactory but it is inevitable that the plaintiff will incur extra expenses and to allow for some excess in the claim I will award the sum of €40,000, less than €1,000 a year, to include the claim for personal hygiene expenses and household cleaning expenses to date and into the future.

163. In relation to the claim for cost of care it is accepted that while this is claimed for both plaintiffs that it should be divided between the two. In relation to the cost of care and domestic assistance to date and into the future I accept that some extra expenses are going to be incurred as Mr. Duffy will not be able to do the heavy work inside and outside the house and while neither the plaintiff is going to able to work into the future and thus will be available for Charlie Jo, it is also not unreasonable that they will require some respite and whereas the sum of €236,751 is claimed in this heading for Mr. Duffy I find that a sum of €100,000 is fair and reasonable.

164. The plaintiff is going to incur extra expenses for prescriptions and pharmacy as a result of the indexed event and has claimed €102,146 under this heading. The evidence in this regard was not entirely satisfactory but it is reasonable that the plaintiff will for the rest of his life be at an extra expense in this regard and I will award the sum of €50,000 under this heading.

165. The claim for a dual motor riser recliner I do not believe to be reasonable given the evidence from the defendant's expert which I accept in this regard but the plaintiff is also entitled to a claim for counselling into the future given his psychiatric condition and a sum of €2,660 is claimed and I find that the same is reasonable.

Summary for Mr. Duffy

General damages to date €200,000.

General damages for the future €200,000.

PIAB application fee €45.

Loss of clothing €2,415.

Loss of earnings to date and into the future €500,000.

Personal hygiene expenses and household cleaning expenses €40,000.

Extra domestic assistance €100,000.

Prescriptions €50,000.

Counselling €2,660.

A total of these sums come to €1,095,120 which I hold to be fair and reasonable in respect of Mr. Patrick Duffy.

Anita Duffy

166. Physical injuries sustained by Anita Duffy are mirror images of that suffered by her husband. There is no need to repeat same. The consequences are also similar. I also had the opportunity of viewing her skin complaints as identified by Dr. McH. Mrs. Duffy is also an entirely truthful witness who did not exaggerate and my observations in relation to her husband's physical injuries and their consequences apply to her as well.

167. In relation to her psychological injuries Mrs. Duffy presented as significantly more distressed than Mr. Duffy but it is clear that Mrs. Duffy had psychological problems prior to the indexed event. It is possible that her failure to complete her Leaving Cert was caused by some psychological difficulties but in any event after the birth of Charlie Jo Mrs. Duffy did suffer post-natal depression.

168. As I have previously stated in this judgment I believe that notwithstanding the post-natal depression which was still a factor at the time of the indexed event Mrs. Duffy was enjoying a good life and in relation to her present problems the psychiatrist Dr. NMCG reported that she cries frequently and profusely, she believes her life has been ruined, her feet swell and she feels hopeless, she has nightmares about her home, gained weight since her respiratory symptoms occurred and doubled in size from eight to sixteen, feels her face is bloated and she weighs more than twelve stone now instead of nine stone. She did have hypothyroidism since her late twenties but believed that this has gone out of control. She had hoped to have more children but has been unable to consider this because of her respiratory problems and I accept Dr. NMCG's evidence that Mrs. Duffy developed a major depressive disorder of a severe type which is being treated with anti-depressive medication which has not had any therapeutic response and that her prognosis is very poor given her severe respiratory problems. Mrs. Duffy's fear of contamination was such that she was unable to be present while her father was dying in his house due to a fear of chemical or other irritants and this of course caused her great upset and is indicative of the extent as well of her physical injury.

169. Accordingly, I have come to the conclusion that while indeed Mrs. Duffy did suffer from pre instant psychiatric problems that as her present presentation and ongoing symptoms are now more severe than Mr. Duffys, accordingly I think it is impossible to differentiate between Mr. and Mrs. Duffy's physical or psychiatric injuries and being fair to both parties I will award the sum of €200,000 damages to date for personal injuries and €200,000 into the future.

Special damages for Mrs. Duffy

170. Sum of €45 for PIAB application and €4,090 for loss of clothing is reasonable and will be awarded.

171. The plaintiff claims a total of €557,000 for loss of earnings to date and into the future. But counsel accepts that these figures are advanced assuming the plaintiff would return to work and are the actuarial figures based upon that.

172. Whereas the plaintiff was prior to the indexed events certified as being permanently unfit by her GP I accept that it is likely that the plaintiff would have attempted some work when Charlie Jo was at school but I will treat the claim for loss of earnings as based on loss of job opportunity and award the sum of €100,000 under this heading.

173. The sum of €144,900 claim for personal hygiene products and €7,245 for household cleaning expenses and under these two headings I will award the sum of €100,000. I have awarded Patrick Duffy the sum of €100,000 in respect of domestic assistance which related to the cost of assistance for heavy chores and inside the house. In the case of Mrs. Duffy, I think a similar sum of €100,000 is reasonable for the extra assistance inside the house and in minding Charlie Jo.

174. I do not find that the claim for the double reclining chair to be reasonable given the evidence of the defendants' assessor who accepts in this regard. A sum of €3,000 was claimed for the profiling bed which is reasonable. A sum of €12,000 for the steam shower. €300 for the shower seat all of which are reasonable.

The plaintiffs' house

175. Mrs. Duffy is making the claim in respect of the home.

176. As I have already stated I believe that it was not unreasonable for the plaintiffs to move home notwithstanding the air quality test. I find that the plaintiffs would not have left their much loved home and moved to Mrs. Duffy's brother's house and then to the mobile home where they at present reside without very good reason as they sought and I believe in the circumstances that their move was reasonable. The property was sold for €235,000 having gone sale agreed for €250,000 with €15,000 being later taken off in respect of the work that would have to be done because of the septic tank issue etc. The plaintiff claim that the true value of the property was €385,000. In this Mrs. Duffy is supported by the evidence of Mr. C. the auctioneer and valuer who sold the house. When the property had been previously on the market in 2012 with the fear of the "rogue builder" it was priced at €285,000. On this occasion the asking price was €265,000.

177. The defendant's expert valuer Ms. L. stated that the price of the house obtained was its open market price because it was on the market for some time and a number of persons were interested in it and it ultimately sold at that price.

178. I find that Mrs. L's evidence is circular in its reasoning. The property did indeed ultimately make €235,000. €235,000 was the value of the house on the market in its condition as it was together with its history. The question remains why it was this value. I accept the evidence of Mr. C. the local auctioneer and valuer who sold the property that the house was given the asking price of €265,000 because of its "reputational damage".

Mr. C. stated and I accept that any purchaser who was interested in the property even if the purchaser was from outside the area would become aware of its history.

179. Mr. C. made a comparison with another property which sold for €374,500 but did not have a sea view. I accept the evidence of Ms. L. that that property is somewhat grander than the plaintiffs' house and I also note and accept that when the plaintiffs' house had been briefly on the market in 2012 for €285,000 that there had been an uplift in the market since then.

180. I find that a reasonable valuation of the property at the time was €315,000 but not quite at the level of the given comparator, and taking off the sum of €15,000 in respect of the septic tank issue the open market value of the property was without reputational damage was €300,000 and accordingly there is a loss to Mrs. Duffy of €65,000.

181. In addition, in a rare if not unique example of agreement the defendants accept that the new house which the plaintiffs propose to build would cost an extra €40,000 as a result of having to build same without any volatile organic compounds and any materials that will potentially cause problems and Mrs. Duffy is also entitled to this I note that the Duffys purchased a mobile home but they will presumably continue to have the benefit of that mobile home and will not allow any extra sum in respect thereof.

Summary of Mrs. Duffy

General damages to date €200,000.

General damages into the future €200,000.

PIAB application fee €45.

Loss of clothing €4,090.

Loss of job opportunity €100,000.

Hygiene products and cleaning expenses €100,000.

Domestic assistance into the future €100,000.

Natural profiling bed €3,000.

Steam shower €12,000.

Flip down shower seats €300.

Diminution in value of sale of house €65,000.

Extra expenses in building new house €40,000.

The total of these sums amount to €824,435 which I find to be fair and reasonable.

182. The first named plaintiff is entitled to a decree for €1,095,120 and the second named plaintiff to a decree for €824,435. I believe these sums to fair and reasonable in the circumstances taking into account all matters.

APPROVED

NO REDACTIONS NECESSARY

Mr. Justice Kevin Cross