[2014] SC (Bda) 63 Civ (20 August 2014)

In The Supreme Court of Bermuda

CIVIL JURISDICTION

2012: No. 134

BETWEEN:

SIMON PAYNE

Plaintiff

-v-

(1) TOBACCO BAY CONDOMINIUM LTD

(2) MINISTER OF HEALTH/MINISTRY OF HEALTH

Defendants

JUDGMENT

(in Court)

Date of trial: July 21-23, 2014

Date of Judgment: August 20, 2014

The Plaintiff appeared in person

Mr. Jai Pachai, Wakefield Quin, for the 1st Defendant

Mr. M. Anthony Cottle, Attorney-General's Chambers, for the 2nd Defendant

Introductory

1. "*Everybody has their taste in noises as well as other matters; and sounds are quite innoxious, or most distressing, by their sort rather than their quantity,*" Jane Austen wrote in '*Persuasion*'. These sage words may well explain why the Plaintiff, a lawyer suing as a litigant in person, would pursue the present nuisance action to trial in the face of expert evidence suggesting that the noise and vibrations of which he complained were simply insufficient to cause actionable damage. He called no expert evidence of his own.

2. That the Plaintiff was, in subjective terms, genuinely distressed by the noise of the desalination pump located and operated just next door was not disputed. It was also implicitly conceded that the device could not reasonably be operated at night. The Department of Environmental Health had, before the proceedings commenced and in response to the Plaintiff's noise complaints, directed the 1st Defendant only to operate its equipment during certain hours and to take certain "dampening" steps. The 1st Defendant did not dispute that it was reasonable or necessary for it to comply with these directives. The Plaintiff sought by this action to stop the 1st Defendant from using the desalination unit, at its present location near the boundary, altogether.

3. The dispute had two dimensions to it as regards the two Defendants. Firstly, whether or not as a question of objective fact the 1st Defendant's desalination plant was sufficiently noisy as to constitute a nuisance and/or to have caused physical damage to the Plaintiff's property through the vibrations the plant generated. Secondly, as regards the Minister, the controversy was whether or not the Minister's allegedly unlawful licensing of the pump made him liable for any actionable damage the 1st Defendant's pump had caused in any event.

The pleadings

4. The Statement of Claim alleges that the 1st Defendant with the permission of the 2nd Defendant (but without planning permission) operates a desalination plant which:

    (a) constitutes an actionable nuisance, "*causing a constant, unbearable, insufferable and annoying humming sound*"; and

    (b) has caused through vibrations irreparable damage to the Property for which the Defendants are jointly liable to compensate the Plaintiff for in damages assessed (by reference to the replacement value of the Property) at $645,000.

5. In a skeletal Defence, the 1st Defendant denied causing any damage. The Minister denied liability in more fulsome terms, in particular on the following grounds:

(a) the Minister was neither the owner, occupier nor controller of the premises on which the plant was operated, and so could not be liable for common law nuisance;

(b) the Minister lawfully issued the 1st Defendant's license in respect of the plant for potable water purposes under the Public Health Act and owed no duties to the Plaintiff in so doing;

(c) The Minister in any event denied that the vibrations complained of caused the damage alleged by the Plaintiff.

6. On September 12, 2012, Hellman J, on the 1st Defendant's application, granted leave for each party to call two expert witnesses and made other pre-trial directions. On January 30, 2014, I directed the Plaintiff to give reasonable access to the 1st Defendant's noise expert and required any further expert evidence to be served and filed not less than 30 days before the trial.

Legal findings

The requirements for proving a common law nuisance

7. The Plaintiff rightly submitted that a "*private nuisance is one which interferes with a person's enjoyment of land or of some right connected with land*": '*Halsbury's Laws*', 5th edition, Volume 78, paragraph 107. He also placed the following passage from paragraph 124 of the same text before the Court:

> "*In deciding whether in any particular case this right has been invaded and a nuisance thereby caused, it is necessary to determine whether the act complained of is an inconvenience materially interfering with the ordinary physical comfort of human existence, not merely according to elegant or dainty modes and habits of living, but according to plain and sober and simple notions. It is also necessary to take into account the circumstances and character of the locality in which the complainant is living and any similar annoyances which exist or previously existed there*."

8. I accept Mr. Pachai's submission that "*the ordinary use of residential premises without more is not capable of amounting to a nuisance*": per Lord Millett in Southwark *LBC-v-Mills* [2001] 1 AC 1 at 21G. I also adopt the 1st Defendant's counsel's reliance on the recent *dictum* of Lord Neuberger in *Coventry-v-Lawrence* [2014] UKSC 13 as an accurate formulation of the defence of "*coming to the nuisance*":

"*56. On this basis, where a claimant builds on, or changes the use of, her land, I would suggest that it may well be wrong to hold that a defendant's pre-existing activity gives rise to a nuisance provided that (i) it can only be said to be a nuisance because it affects the senses of those on the claimant's land, (ii) it was not a nuisance before the building or change of use of the claimant's land, (iii) it is and has been, a reasonable and otherwise lawful use of the defendant's land, (iv) it is carried out in a reasonable way, and (v) it causes no greater nuisance than when the claimant first carried out the building or changed the use. (This is not intended to imply that in any case where one or more of these requirements is not satisfied, a claim in nuisance would be bound to succeed.)*"

Rylands-v-Fletcher liability

9. I was initially inclined to reject out of hand the submission that the strict liability rule, which was established by the case of *Rylands-v-Fletcher* (1868) LR 3 HL 330, potentially applies to the desalination plant maintained by the 1st Defendant. '*Halsbury's Laws*', Vol. 78, defines that rule (at paragraph 148, 150) as follows:

> "*By this rule, a person who, for his own purposes, brings onto his land and collects and keeps there anything likely to do mischief if it escapes must keep it in at his peril and, if he fails to do so, is prima facie liable for the damage which is the natural consequence of its escape. Liability under the rule is strict, and it is no defence that the thing escaped without the defendant's wilful act, default or neglect…*
>
> *The requirement is not easily satisfied: there must be an exceptionally high risk of danger when judged by standards relevant to the particular place and time…*"

10. The text relied upon by the Plaintiff (at paragraph 150 n.18) does in fact cite *Hoare-v-McAlpine* [1923] 1 Ch 167 as authority for the proposition that vibrations can engage the rule. However, it is noted that this case was not followed in *Barrette-v-Franki Compression Pile Co. of Canada* [1955] 2 DLR 665, Ont. HC. Neither of these judicial authorities was placed before the Court. Without considering these additional authorities, I would in any event have declined to find that vibrations emanating from the 1st Defendant's plant which were proven to have caused irreparable damage to the Plaintiff's home would potentially engage the rule in *Rylands -v- Fletcher*.

11. In *Hoare-v-McAlpine* [1923] 1 Ch 167, the plaintiff's old building had to be destroyed because of structural damage caused by vibrations generated by construction work on the defendant's neighbouring property. Astbury J found that the rule in *Rylands -v-Fletcher*, as well as private nuisance, applied. The evidence is not dealt with in the law report, but the plaintiff clearly proved structural damage caused by the driving of piles into the neighbouring property.

12. In *Barrette-v-Franki Compression Pile Co. of Canada* [1955] 2 DLR 665, where Schroeder J held the defendant liable for private nuisance arising from structural damage caused by vibrations also created by pile-driving construction work, the application of the rule in *Rylands-v-Fletcher* to vibrations was doubted. Reference was made to a footnote on page 377 of '*Pollock on Torts*', 15th edition (1951) commenting on the application of the *Rylands-v-Fletcher* rule to the facts in *Hoare & Co.-v-McAlpine* as follows*:*

> "*A man cannot be said to bring or collect vibrations on his land, nor can they be said to escape; neither are they noxious or dangerous in their own nature. On principle the cause of action is nuisance or nothing, and no authority can be shown for inventing any other."*

13. I discern no material difference in terms of what the Plaintiff must prove to make out a case of private nuisance in the form of structural building damage caused by vibrations emanating from the 1st Defendant's property and, and what he must prove to establish liability under the rule in *Rylands-v-Fletcher* based on the very same damage. As Lord Goff has pointed out, "*liability for nuisance has generally been regarded as strict*": *Cambridge Water Co.-v- Eastern Counties Leather Plc* [1994] 2 AC 264 at 299.

14. Although this conclusion may be more theoretical than practical in its effects on the merits of the present case, I find that the proper legal analysis is that damage to property caused by vibrations emanating from the operation of equipment on a neighbouring property may amount to a private nuisance, but does not engage the *Rylands-v-Fletcher* rule. Liability for private nuisance is strict in any event in the sense that no need to establish any failure to exercise reasonable care or deliberate misconduct is required.

Is expert evidence required to establish private nuisance by way of noise or property damage?

15. Expert evidence is not in my judgment required as an inflexible rule to establish a claim for nuisance by noise. The Defendants did not contend as much. The weight to be attached to lay evidence and expert evidence will obviously vary with the circumstances of each case.

16. I also find that expert evidence is not necessarily required to prove structural damage, where credible evidence can be given by lay witnesses about damage the causation of which can reasonably be detected by a lay person using their ordinary senses and powers of observation. For instance, in *Barrette-v-Franki Compression Pile Co. of Canada* [1955] 2 DLR 665, the vibrations in question were shown to have literally

shaken the homes of the plaintiff and several neighbours, who observed damage being caused while the vibrations were happening. Piles of around 40 feet in length were being hammered into the ground near the plaintiff's property to a depth of around 45 feet below the surface with a steel hammer weighing 7000 pounds.

17. The latter example is very far removed from the facts of the present case.

Liability of the Minister for issuing the License

18. The Plaintiff did not pursue the plea that planning permission was required for the installation of the plant. He did not advance any coherent legal theory according to which the Minister could be held to be subject to any common law duty owed to the Plaintiff in respect of the operations of the 1st Defendant's desalination plant.

19. Mr. Cottle submitted that various licenses were issued under a statutory provision designed to protect the quality of the water processed by the desalination plant or unit for the benefit of those persons using the relevant water supply. His Skeleton Argument referred the Court to the various licenses granted from time to time, but did not cite the statutory provision under which they were made (the "Licences"). These Licenses authorised the 1st Defendant "*to operate a WELL/REVERSE OSMOSIS PLANT FOR POTABLE WATER PURPOSES*". They were also each expressed to be "*subject to THE PUBLIC HEALTH ACT, 1949*".

20. Section 29 of the Act provides as follows:

> "***Restriction on use of water from wells***
> *29. (1) No person shall use, or cause or allow to be used, any water drawn or piped from any well or boring, or from any stream, pond or lake—*
>
> *(a) for drinking; or*
>
> *(b) for any process connected with the preparation or manufacture of any food or drink:*
>
> *Provided that a Public Health Officer may grant, subject to such conditions as he may think fit to impose, an annual permit authorizing the use of such water for either such purpose.*
>
> *(2)Any person who contravenes any of the foregoing provisions of this section, or any condition imposed in a permit issued thereunder, commits an offence against this Act.*"

21. In addition, section 33 (2) of the Act empowers the Minister to make regulations in relation to private undertakings involved in supplying water:

"*(c) for regulating the manner in which reservoirs, wells, mains, cisterns, tanks, aqueducts, cuts, sluices, pipes and other things for supplying, or used for supplying, water, are constructed and maintained* "

22. No such regulations were cited in argument, nor do any appear from my own superficial electronic researches to have been made under section 33(2) of the Act. In any event, I am bound to accept the submissions advanced on behalf of the Minister and find that the only statutory power engaged by the issue of the Licenses is clearly designed to ensure the purity of water processed by the desalination plant for public health purposes.

23. For completeness I should mention that the Water Act 1975 (not referred to in the course of argument) does contain provisions which appear to empower the Minister responsible for the Environment to exercise regulatory authority over equipment such as desalination plants. The Act regulates the extraction of "*public water*" which includes "*underground water*" (section 1). Section 1 of the 1975 Act also contains the following definition:

"*'works' include reservoirs, wells, pumping installations, pipelines, filters, sedimentation tanks or other works constructed for or in connection with the abstraction, or storage of public water, or the filtration or purification of water, or the use of public water for any purpose, or the introduction of fluids directly into public water whether by means of a well or pipe or otherwise howsoever.*"

24. The following statutory provision appears to provide a basis for the Department of Environmental Health giving directions to the 1st Defendant designed to mitigate the noise and vibrations generated by the operation of the desalination equipment. It does not, however, confer any licensing power and appears rather to complement the Public Health Act abatement order powers:

"***Power to require repair etc***
28 If in the opinion of the Minister any works are so constructed, maintained or used or are being so constructed, as to constitute a danger to life, health or property, he may require any person for the time being enjoying the benefit of those works to carry out such repairs or to effect such additions or modifications to such works or to carry out such demolitions or to change the use of the works in such manner as he may consider necessary and may by notice in writing suspend any water right until he is satisfied that such requirement has been fulfilled and, thereupon, the right shall cease for the period of the suspension."

25. The Public Health Act creates statutory nuisances and empowers the Minister to serve an abatement order under section 54 and, where it is ignored, to make a complaint to the Magistrates' Court under section 55. These powers do not assist the Plaintiff's private nuisance claim against the Minister in any discernable way. I accept Mr. Cottle's submission that the applicable statutory provision under which the Licenses were granted does not require the Minister, when granting a license, to have regard to any noise or vibration issues.

26. The Minister's discretionary power to prosecute for public nuisance through the abatement order process has a closer legal connection, than the water quality licensing power, with a private law nuisance claim. However, any perceived failure to discharge that type of statutory power cannot support a private nuisance claim against the Minister in respect of acts committed by the 1st Respondent on its own private property. Nor can any failure to exercise the discretion to refer an abatement order to the Magistrates' Court support an action for breach of statutory duty or give rise to any civil liability for the Crown.

27. Mr. Cottle referred the Court to the following illuminating passage in Lord Diplock's speech in *Home Office-v-Dorset Yacht Co. Ltd.* [1970] A.C. 1004 at 1067 to 1068, in support of his submission in this regard:

> "*It is, I apprehend, for practical reasons of this kind that over the past century the public law concept of ultra vires has replaced the civil law concept of negligence as the test of the legality, and consequently of the actionability, of acts or omissions of government departments or public authorities done in the exercise of a discretion conferred upon them by Parliament as to the means by which they are to achieve a particular public purpose. According to this concept Parliament has entrusted to the department or authority charged with the administration of the statute the exclusive right to determine the particular means within the limits laid down by the statute by which its purpose can best be fulfilled. It is not the function of the court, for which it would be ill-suited, to substitute its own view of the appropriate means for that of the department or authority by granting a remedy by way of a civil action at law to a private citizen adversely affected by the way in which the discretion has been exercised. Its function is confined in the first instance to deciding whether the act or omission complained of fell within the statutory limits imposed upon the department's or authority's discretion. Only if it did not would the court have jurisdiction to determine whether or not the act or omission not being justified by the statute constituted an actionable infringement of the Plaintiff's rights in civil law.*"

28. The Plaintiff did not allege that the Minister's decision not to prosecute for public nuisance was ultra vires his powers under section 55 of the Public Health Act 1949

and had accordingly breached a duty owed to the Plaintiff as an affected member of the public.

29. However, if the matter is looked at more practically, it must be accepted in the Plaintiff's favour that the Minister can be said to have contributed to the nuisance in a very general sense by granting the License from time to time, being aware of the Plaintiff's complaints. But this fact by itself, in legal terms, is insufficient to render the Minister liable. Because even if the Minister was legally empowered to refuse to reissue the License on noise grounds, the Plaintiff would have to go further and establish that the Minister knew or ought to have known that the device could not be used at all without creating a nuisance. Mr. Cottle relied in this respect on the following statement of principles by Earl Loreburn in *Pwllbach Colliery Company Ltd.-v-Woodman* [1915] A.C. 634 at 639, which I adopt:

> "*To my mind it is clear that permission to carry on a business is quite a different thing from permission to carry it on in such a manner as to create a nuisance. If, indeed, it could be proved that the business authorised could not possibly, in any practical sense, be carried on without committing a nuisance, so that everyone must have known the purpose was to commit a nuisance, or if some particular method of carrying it on had been authorised, which being faithfully observed had nevertheless necessarily resulted in an unexpected nuisance being committed, then it would have been different.*"

30. The case of *Tetley-v-Chitty* [1986] 1 All ER 663, where a council was sued in nuisance for noise created by a go-kart racing course operated by its tenants, supports a similar principle in a parallel context. In this case, upon which the Minister also relied, the council was held liable for nuisance as landlord because the nuisance arising from the activity the landlord authorised its tenant to carry out was "*an ordinary and necessary consequence of the operatio*n" (McNeil J, at page 671).

31. In summary, I find that the Minister can only potentially be held to be liable for any nuisance caused by the 1st Defendant's desalination plant if the Plaintiff proves that either:

    (a) the operation of the plant "*could not possibly, in a practical sense, be carried on without committing a nuisance*": *Pwllbach Colliery Company Ltd.-v-Woodman* [1915] A.C. 634 at 639; and

    (b) the commission of a nuisance through the operation of the plant would have constituted a lawful ground for refusing to grant a permit under section 29(1) of the Public Health Act 1949; or, alternatively,

(c) the Minister, apart from the act of licensing the desalination unit, authorised the 1st Defendant to commit a nuisance by noise.

32. The Plaintiff's Statement of Claim did not plead a legally sustainable case against the Minister at all. I will consider below whether the Plaintiff nevertheless adduced any evidence capable of supporting any of the essential elements of the inadequately pleaded claim against the Minister.

Factual findings

The effect of the Plaintiff's own renovations

33. In 2007, the Plaintiff and his wife purchased 6 Coot Pond Road ("the Property"). The Property had an old one-story 'fisherman's cottage', which was built far closer to the eastern boundary and the adjacent property of the 1st Defendant and occupied more of the lot space than modern planning standards would permit. The Plaintiff applied for planning permission to build a new two-story house essentially on the same footprint as the original house, although the original structure was described in official planning documents as occupying 68% and the new structure 98% of the lot as a whole.

34. His application was refused by the Development Applications Board but allowed by the Minister on appeal. The Minister accepted the Inspector's Report, which opined that the restoration of a derelict building was a positive feature and that the additional story was substantially being added on above the footprint of the old house. The Inspector's Report recorded the only objector as being the Corporation of St. George. Nevertheless, the Plaintiff believed some of the 1st Defendant's shareholders had "fiercely contested" his planning application (Plaintiff's First Affidavit, paragraph 4). The basis for this belief was not explored at trial and I make no findings in this regard.

35. I accept the Plaintiff's evidence, which is supported in this respect by the Inspector's Report (which was in turn affirmed by the Minister of Planning) and was not challenged by the 1st Defendant's Mr. Johnson, that his renovations did not result in his new two-story home being closer to the eastern boundary and the desalination plant located near the western boundary of the 1st Defendant's property.

36. However, I accept the evidence of Mr. Johnson that the Plaintiff's predecessors in title made no complaints about the operation of the desalination plant. This evidence, combined with the expert evidence of Mr. Eric Zwerling to the effect that the pump would likely be heard more loudly in the new upstairs section of the property which the Plaintiff built, justifies the further finding that the Plaintiff's renovations exacerbated any pre-existing noise problem to an extent which it is impossible to quantify.

37. I am unable to make any finding on the issue of whether or not, but for the renovations, no nuisance would have occurred. The absence of any prior complaints is not dispositive in any event. The Plaintiff's case is not based on the impact of the noise on the additional new story of his home alone. The 1st Defendant's defence of 'coming to the nuisance' fails.

The Plaintiff's pre-litigation complaints

38. The Plaintiff and his family moved into the Property in 2008. Before long, the Plaintiff lodged complaints with the 1st Defendant about the noise emanating from the desalination plant. By 2009, the Ministry of Health were involved and in February of that year the 1st Defendant was requested to restrict the operation of the plant to the hours of 6.00am to 6.00pm. These hours were later changed to 8.30am to 8.30pm to accommodate the schedule of Mrs. Johnson, and Chief Environmental Health Officer David Kendell instructed that steps be taken to dampen the vibrations from the plant by August 1, 2010. Mr. Kendall advised the Plaintiff (who was now threatening to sue the Government if no action was taken) that these instructions would be given in a July 16, 2010 email.

39. The Plaintiff had earlier that year, in a letter dated March 24, 2010, complained to the Minister of the Environment about structural damage to the Property evidenced by cracks which he blamed on vibrations from the 1st Defendant's desalination plant. Although he asserted that he had that day instructed engineers to carry out a structural survey, the Plaintiff under cross-examination admitted that no such survey was ever commissioned.

40. After one of his staff had been berated by the Plaintiff's wife about the Ministry's perceived non-responsiveness, the Chief Environmental Health officer on January 28, 2011 emailed Mrs. Johnson. A warning was given that unless further steps were taken to dampen the noise and vibrations, an abatement notice would be issued under section 54 of the Public Health Act 1949. In the ensuing weeks further email complaints from the Plaintiff to the Permanent Secretary were parried.

The Abatement Order

41. On April 17, 2012, the present proceedings were commenced by a Generally Indorsed Writ of Summons. Environmental Health Officer Mrs. Crystal Baxter between June and July conducted subjective noise assessments at the Property, and based on these assessments an Abatement Order was issued against the 1st Respondent on July 5, 2012. She testified that this Order was not enforced because the view was subsequently taken that any enforcement action should be based on objective measurements of noise and vibrations. She attended the Property with experts who

conducted vibration and noise tests on behalf of the 2nd Defendant. Her evidence was not challenged.

42. Mrs. Baxter's evidence supports a finding that the Plaintiff's complaints about the noise from the unit were not merely frivolous. Because she felt, subjectively, that the noise warranted issuing an Abatement Order. Against this background, the issuance of the Abatement Order is far from conclusive evidence of a nuisance in objective terms. Because it is clear that the Department of Environmental Health decided that any further enforcement action (beyond the directions given about dampening steps and restricted operating hours) would not be justified in the absence of objective evidence that the noise was unacceptably loud.

Nuisance by noise

43. Mr. Pachai helpfully referred the Court to the following extract from the judgment of Oliver J in *Stone-v-Bolton* [1949] 1 All ER 237 at 238-239, reproduced in '*Clerk & Lindsell on Torts*', 19th edition, at paragraph 20-10, which has informed my general approach to the evidence on this issue:

> "*Whether such an act does constitute a nuisance must be determined not merely by an abstract consideration of the act itself, but by reference to all the circumstances of the particular case, including, for example, the time of the commission of the act complained of; the place of its commission; the manner of committing it, that is, whether it is done wantonly or in the reasonable exercise of rights ; and the effect of its commission, that is, whether those effects are transitory or permanent, occasional or continuous; so that the question of nuisance or no nuisance is one of fact.*"

44. The Plaintiff's own evidence about the noise from the desalination plant, supported by the subjective evidence of Mrs. Baxter, was only marginally capable of supporting a finding that the operation of the equipment constituted a nuisance. Although it was easy to accept that the humming noise generated by the operation of the unit could be heard from within the Property, it was far more difficult to find that the volume and duration of the noise was such as to be inconsistent, in all the circumstances, with the reasonable use by the 1st Defendant of its property.

45. There was a conflict between the Plaintiff's evidence and Mr Johnson's as to how often and for how long the desalination plant would be in use. It was essentially common ground that the plant was not in operation twelve months a year; it depended on the demand for water and rainwater was also used by the condominium's residents. The Plaintiff insisted that occasionally the equipment would be on for 24 hour periods. Mr. Johnson accepted that in an earlier state, the equipment once started

could not conveniently be turned off until it had completed a particular cycle. He insisted that now it was only switched on during daytime hours. He admitted that his main concern was not the Plaintiff, but generating water for the various owners and/or occupiers of the 1st Defendant's development. He also explained that the plant was important to his fellow condominium owners because it provided an affordable fresh water supplement to rain water. This is, I find, a modest development owned by people of modest means.

46. Ms. Paynter, who lived above the pump room on the 1st Defendant's property, described the noise from the unit as "*a mild humming. It is like the refrigerator, maybe.*" Mr. Zwerling did not measure the sound in her condominium and I will assume in the Plaintiff's favour that the noise level may have been lower for Ms. Painter because the sound pathways were different. Nevertheless, the Plaintiff was the only person living in the vicinity complaining of the offending noise, and he conceded that the noise was (apart from on one occasion when he first moved in) indeed a humming noise. It seems probable that what the Plaintiff personally found particularly disturbing was not just the level of the noise, but the peculiar character of the noise in question as well.

47. I find that the Plaintiff probably exaggerated how long the equipment was on for in terms of both months of the year and hours per day. I also find that Mr. Johnson probably understated, to some extent, the operating duration in both respects. On balance, however, I find that the desalination unit is probably switched on more often than not during the daytime only. I also find that occasionally, either by accident or design, the unit would probably be in operation during some of the hours of darkness, if not throughout an entire night. The device was clearly used to fill a tank of limited capacity. I found no reason to doubt Mr. Johnson's assessment, provided in re-examination, that the plant created 1500 gallons of fresh water within 24 hours. It was therefore impossible to believe that it would be switched on for an extended basis on a 24 hour basis.

48. I make no finding as to precisely how many months the various periods of operation would add up to in any one year. The operating hours issue is significant because the Department of Environmental Health directed the 1st Defendant not use the desalination unit at night, and the 1st Defendant implicitly accepted that this was a reasonable restraint on its user rights. This tacit concession supports a finding that the noise was more clearly offensive during the quieter night-time hours than it was during the busier day.

49. On the other hand, this concession is not dispositive in terms of demonstrating that the operation of the equipment overall constitutes a nuisance, because the law recognises that there must be 'give and take' between neighbours in relation to lawful activities on their respective properties which may cause each other offence: Mr. Cottle illustrated this legal point by referring to the following passage in *Cambridge*

Water Co.-v-Eastern Counties Leather plc [1994] 2 AC 264 at 299, where Lord Goff stated as follows:

> "*Of course, although liability for nuisance has been regarded as strict, at least in the case of a defendant who has been responsible for the creation of a nuisance, even so that liability has been kept under control by the principle of reasonable user-the principle of give and take as between neighbouring occupiers of land, under which 'those acts necessary for the common and ordinary use and occupation of land and houses may be done, if conveniently done, without subjecting those who do them to an action': see Bamford v Turnley (1862) 3 B.&S. 62, 83, per Bramwell B. the effect is that, if the user is reasonable, the defendant will not be liable for consequent harm to his neighbour's enjoyment of his land; but if the user is not reasonable, the defendant will be liable, even though he may have exercised reasonable care and skill to avoid it.*"

50. All that the Plaintiff established was that the sort of device which one would expect to find on the premises of a condominium development and which was not in operation on a continual basis, and usually only during daytime hours, caused a humming noise which was irritating but not a 'racket', particularly in certain parts of the Property. He also made a strong case for the proposition that the location of the unit in a building near the boundary was not a suitable location. Mr. Johnson, under cross-examination, did not dispute that another location could have been and could still be found; the main objection at this point to relocating the unit was that the necessary funds could not be found.

51. The 1st Defendant called Mr. Eric M. Zwerling, President of the Noise Consultancy LLC and Director of the Rutgers University Noise Technical Assistance Center. He was an impressive witness. He placed devices in the 1st Defendant's pump room, and at various locations on the Plaintiff's Property, and measured the sound when the desalination unit was operating as well as the ambient sound level when it was switched off.

52. Based on his evidence, I find that the noise complained of is both airborne and structural, the latter because a concrete pathway links the 1st Defendant's pump house to the Property. The highest noise level measured inside the property was in the master bedroom when the inner pump room door and the Plaintiff's master bedroom door were both open. However, if those doors were both closed, as one would reasonably expect to be the usual conditions, the sound level from the pump was 10.1 dBA above the ambient sound level. The United Kingdom statutory noise limit for

night-time is 10dB[1] above the ordinary sound level for the locale in question. I accept Mr. Zwerling's evidence that the 1st Defendant's desalination unit would not, when switched on, ordinarily emit a sound which could be heard inside the Property louder (to any material extent) than the limit imposed for night-time purposes under statutory regulations in the United Kingdom. Moreover, the sound would only reach this level in one of the various areas of the Plaintiff's house which the expert tested. He also opined that if the inner and outer doors of the 1st Defendant's pump room were sealed more completely, further noise reductions could still be achieved. Meanwhile, the Plaintiff could reduce the offending noise significantly by using an air conditioner inside the Property.

53. In my judgment it is reasonable to assume that when legislation is passed to regulate conduct which might otherwise constitute a breach of the common law, such as noise at night, the standard set will generally be at worst no lower than the pre-existing common law and at best a higher standard than the common law. Noise pollution legislation falls into that category of legislation where it is reasonable to assume that the object of the legislation was to reduce noise pollution, not increase the freedom to make noise. The preamble to the United Kingdom Noise Act 1996 reads as follows: "*An Act to make provision about noise emitted from dwellings at night; about the forfeiture and confiscation of equipment used to make noise unlawfully; and for connected purposes.*" If the noise the Plaintiff complained of would not breach UK statutory night-time noise limits to any material extent, it would ordinarily be somewhat incongruous to find that this level of noise constituted a common law nuisance, either during the day or at night.

54. On the peculiar facts of this case, however, it can hardly be open to the 1st Defendant to contend that it would be a reasonable exercise of its property rights to operate the offending equipment at night, in breach of the operating hours prescribed by the Department of Environmental Health. Its case at trial, advanced through the evidence of Mr. Johnson, was that it was adhering (or attempting to adhere) to these guidelines. Because this issue was not directly addressed, I merely note that it must be seriously arguable that the operation of the 1st Defendant's desalination unit in breach of the Department of Environmental Health's operating hours guidelines would constitute an actionable nuisance.

55. However, in the context of a case where the sole relief sought by the Plaintiff was an injunction restraining the 1st Defendant from using the device altogether, I make the following formal findings. The Plaintiff sought an injunction restraining the 1st Defendant from operating the reverse osmosis altogether because of, in part, its noise. Taking into account the steps taken by the 1st Defendant to mitigate the noise, under pressure from the Department of Environmental Health, and in light of the expert

[1] Although the Plaintiff in his closing submissions sought to distinguish the "dB" measure used in the UK legislation from the "dBA" measure used by Mr. Zwerling, the expert's evidence that these measures were comparable was not challenged in cross-examination.

evidence of Mr. Zwerling, the Plaintiff has failed to prove that all use of the desalination plant constitutes a nuisance by reason of the noise. Under Bermudian common law, the occasional use by the 1st Defendant of its desalination plant, which creates a humming sound, mostly during daytime hours and only when its residents' rainwater supplies are low, does not in all the circumstances of the present case constitute an actionable nuisance.

56. A desalination plant is in my judgment the sort of equipment one would expect to be operated in a residential neighbourhood in Bermuda. There may be a need for statutory regulation of noise levels in residential neighbourhoods, if not throughout Bermuda. There may also be a need for planning regulation of where such equipment is situated on residential property, especially where buildings are as close together as the Plaintiff and the 1st Defendant. These are, ultimately, matters entirely within the discretion of the Executive.

Damage to property by vibrations

57. According to '*Cross and Tapper on Evidence*', 12th edition, at page 534:

> "*A litigant would have to be in desperate straits before he thought about calling a witness, who was not an expert on the matter in question, to give his opinions on a subject involving special skill or knowledge.*"

58. The Plaintiff's sole witness, in support of his claim for damages for "irreparable" structural damage allegedly caused by vibrations emitted by the 1st Defendant's desalination plant, was himself. His case was hopeless because:

    (a) it was based on his own layman's conjecture as to what caused cracks in the Property;

    (b) although he testified that he could feel the vibrations in the wall of the Property, he did not claim to have seen cracks opening up while the desalination unit was switched on;

    (c) he did not clearly explain on what basis he believed the cracks which he attributed to the vibrations from next door had irreparably damaged the Property so as to entitle him to damages assessed by reference to the replacement value of his house;

    (d) the issue of whether or not the vibrations caused irreparable damage to the Property could not be proved by direct evidence of a witnesses' observations, nor by an ordinary inference from proven facts. Determination of this question

required special skill and knowledge, as this Court determined when granting leave to adduce expert evidence on September 20, 2012.

59. Although this point was not taken against him in these precise terms, I am bound to find that the Plaintiff was not a competent witness to express the opinion that the vibrations from the 1st Defendant's desalination unit caused "irreparable damage" to the Property. This was not a case where the building had collapsed to the ground as a result of a falling crane so that the doctrine of *res ipsa loquitur* applied. It is, on reflection, obvious that expert construction or engineering evidence is required to proffer opinions as to whether or not a building which, but for cracks, is apparently stable has become fundamentally structurally unsound.

60. I further find that the Plaintiff was not a competent witness to express the opinion that the cracks he saw were caused by the vibrations at all. This inference could not be made merely from the fact that cracks appeared after the building was completed and following the operation of the offending equipment by the 1st Defendant. The Plaintiff sought to buttress this hypothesis with a similar non-sequitur, based on his observations of cracks on the building which housed the desalination unit. The vibrations were not of earth-shaking, let alone building-shaking, proportions. Moreover, I consider it to be a notorious fact that cracks appear in concrete and/or stone houses for reasons wholly unconnected with mechanically-induced vibrations.

61. Once the Plaintiff elected not to adduce expert evidence in support of his claim and to rely upon his own evidence alone, there was, in effect, no case for either Defendant to answer. It is unfortunate that neither the Defendants nor the Court (of its own motion) sought a pre-trial adjudication of this limb of the Plaintiff's claim with a view to saving the costs incurred in adducing oral expert evidence to refute a virtually non-existent case. Be that as it may, a number of experts gave oral evidence at trial to refute this limb of the Plaintiff's case.

62. The 1st Defendant called Edward S. Pereira, of Pereira Engineering Ltd., a Bermuda company, a registered structural engineer who has worked in New York before returning to Bermuda. He was an impressive witness, who despite extensive cross-examination by the Plaintiff, calmly and clearly explained the basis for his opinion that the cracks pointed out to him by the Plaintiff were not caused by the vibrations. He attributed them to minor construction flaws extremely common in Bermuda. I accept his evidence.

63. The Minister called two expert witnesses to deal with the structural damage complaint. Mr. Kelly Harris, formerly Government's Principal Water Engineer, and principal of Mason & Associates Ltd. contracted Ken Tully of CDB, a geologist and vibration specialist. Mr. Harris essentially confirmed that based on Mr. Tulley's vibration study, he did not believe that the vibrations complained of could possibly

have caused the damage complained of. The Plaintiff did not directly challenge Mr. Harris' evidence, and instead cross-examined Mr. Tully extensively.

64. Mr. Tully impressed me as a witness with considerable expertise and experience. His crucial findings were that the level of the vibrations which were generated by the desalination plant was "negligible", and the ambient vibration levels in the 1st Defendant's pump room and elsewhere were occasionally higher with the unit switched off. Wind gusts of a sort regularly experienced in Bermuda would have a far greater impact on structures than the desalination unit. I accept the evidence of the Minister's experts which the Plaintiff was unable to undermine.

65. The Plaintiff in any event adduced no evidence potentially supporting the legal responsibility of the Minister for any vibration damage which the 1st Defendant might have caused.

66. The Plaintiff's claim for physical damage to the Property must be dismissed.

Conclusion

67. For the above reasons, the Plaintiff's claim against each Defendant for common law nuisance in respect of noise and damage to property is dismissed. The Plaintiff's claim has nevertheless identified the need for consideration to be given to two aspects of noise pollution regulatory reform:

    (a) Bermuda lags behind many jurisdictions including the United Kingdom in not fixing statutory noise levels, especially for residential areas;

    (b) reverse osmosis plants are only seemingly regulated at present from a water purity perspective. Consideration should be given from a noise pollution perspective to regulating where such units are located on residential properties, especially in areas where for historical or other reasons the modern standard of boundary set-backs do not exist.

68. I will hear the parties as to costs. There is no obvious reason why costs should not follow the event overall. My provisional view is that the Plaintiff as a litigant in person ought not, however, to bear the trial-related costs of the expert witnesses on the property damage limb of his claim. Those witnesses attended trial to meet a case which could have been struck out before trial, once it became apparent that the Plaintiff proposed to call no expert evidence of his own.

Dated this 15th day of August, 2014 _____

IAN R.C. KAWALEY CJ