

UNITED STATES DISTRICT COURT
SOUTHERN DISTRICT OF OHIO
EASTERN DIVISION

KURT PAULUS, *et al.*,

Plaintiffs,

v.

Case No. 2:12-cv-856
JUDGE SARGUS
Magistrate Judge Deavers

CITICORP NORTH AMERICA, INC., *et al.*,

Defendants.

OPINION AND ORDER

This case is before the Court on cross motions for summary judgment (Docs. 46, 47) and Defendants' *Daubert* motion to exclude the opinions, affidavits, and testimony of Plaintiff's expert (Doc. 45). For the reasons that follow, Defendants' motion to exclude (Doc. 45) is **DENIED in part and GRANTED in part**, Plaintiffs' motion for summary judgment is **DENIED**, and Defendants' motion for summary judgment is **GRANTED in part and DENIED in part**.

I. FACTS

The Plaintiffs, Kurt and Janene Paulus, own a house on a large parcel of land in Liberty Township, Ohio. (Doc. 32, 2d. Amend. Compl. at ¶ 3). Though their parcel and those around it are zoned residential, they abut a commercial/industrial district. (Doc. 46, Ex. E, Konieczynski Aff. at ¶ 5); *see also* Liberty Twp., Official Zoning Dist. Map (Feb. 5, 2014), <http://www.libertytwp.org/Downloads/Zoning%20District%20Map%20Feb%205%202014.pdf>. In 2006-2007, within the commercial/industrial district, Defendants, Citicorp North America,

Inc., and related companies (collectively, “Citi” or “Defendants”), built a data center. (Doc. 43, Ex. 1, Butler Depo. at 21:20-23:9).

This data center is a large facility that houses computer banks and other technology necessary to operate Citi’s businesses worldwide. (Doc. 37, Answer at ¶ 1; Doc. 46, D. Mot. for SMJ at 1-2¹). Though there are other data centers, this center is vital to keeping Citi’s business operating smoothly. (Doc. 43, Ex.1, Butler Depo. at 105:21-106:1). Consequently, Citi has taken measures in constructing the data center to ensure that it never goes offline or experiences other power-related problems.

The data center is connected to the power grid through its own power-substation. (Doc. 43, Ex. 1, Butler Depo. at 40:14-41:5). It also has battery backups – good for approximately 10 minutes of operation at full power. *Id.* at 119:16-119:22. In addition to these sources of power, the facility contains a total of eight diesel generators (four engines per bank, north and south) capable of powering the entire 7-megawatt² building off-grid. *Id.* at 95:2-95:7, 165:19-165:21, 193:1-193:3. In fact, each of the eight generators has a maximum load of two megawatts and the set has a total capability, therefore, of 16 megawatts. *Id.* at 193:1-193:3. The generators, when operating, are quite loud and this lawsuit revolves around whether the noise they produce, which emanates from Citi’s property and is audible on neighboring properties, constitutes a nuisance. (Doc. 32, 2d Amend. Compl. *in passim*).

In aid of determining whether the noise produced by the data center constitutes a nuisance, each side has hired an expert on sound. Plaintiff’s expert is Richard James. James is a mechanical engineer with a degree from the General Motors Institute (now Kettering University)

¹ Defendants’ motion and memorandum are, as is appropriate, submitted as a single document. However, the page numbering starts at 1 on the first page of the memorandum but that is the second page of the entire document. This Opinion shall cite to the page numbers as they appear on the memorandum.

² A megawatt is 1,000,000 watts.

in the field of Noise Control Engineering. (Doc. 46, Ex. N, James Resume at 1³). From 1970 until founding his current company, E-Coustic Solutions, in 2006, James was a consultant and scientist primarily for the automotive industry. *Id.* He worked with companies such as GM, Ford, Goodyear, and Chrysler, helping them evaluate actual and potential noise emissions and develop noise mitigation strategies. *Id.* at 1-3. In addition, since 1985, James has been an adjunct instructor at Michigan State University and, since 2012, has been an adjunct professor at Central Michigan University. *Id.* at 2-3. James has authored numerous papers on sound produced by various commercial activities and its effects in humans. In recent years, these have focused on wind turbine technology. He has also published on personal listening devices, risks of sound exposure, power press noise control, and computer-assisted acoustical engineering techniques. *Id.* at 1-3. James has never published a paper on generator noise control specifically. He explained in deposition that in his former employment with GM, he could not comment about the problems related to his employer's line of work. (Doc. 43, Ex. 5, James Depo. at 80:1-80:8). James considers himself an expert on noise mitigation, even with respect to generators specifically, and has, in his career, designed noise attenuation systems for generators. *Id.* at 80:1-81:25.

Defendants' expert is Kenric Van Wyk and, as his qualifications have not been challenged, the Court will forego all but a brief recitation of his curriculum vitae in this Opinion. Van Wyk, like James, possesses a mechanical engineering degree. (Doc. 46, Ex. J, Van Wyk Rpt. at 18). He holds a Masters in the subject from Purdue University and a Bachelors from Calvin College. *Id.* He has a number of certifications and memberships relating to engineering and noise control. *Id.*

³ James curriculum vitae is (and most lettered exhibits in this case are) preceded by an exhibit label page. Thus, this Court's citations shall refer to the page numbers printed upon the exhibit pages.

Both experts studied the noise at issue in this case.

James tested the sound on August 1, 2013, at two locations on the Pauluses' property; in the master bedroom by the head of the bed next to the window and on the Southeast corner of the outdoor patio. (Doc. 44, Ex. 1, James Rpt. at 2-4). On August 1, according to James, the Paulus residence was neither upwind nor downwind of the data center. *Id.* at 5. If the wind were to come from the Southeast and the Pauluses were, therefore, downwind of the data center, the noise would likely be higher by 6 dBA or more. *Id.* If the wind were to come from the Northwest and the Pauluses were, therefore, upwind of the data center, the noise would likely be lower (though by how much, James does not report). *Id.*

On the patio, the background sound level (or ambient sound level) was approximately 36 dBA. *Id.* at 6. Citi, at James' direction, ran different generators in a number of different configurations between the north and south banks including all eight at once. The result of this was a low reading of 44 dBA and high of 50 dBA on the outdoor patio. *Id.* In the master bedroom with the windows open, the ambient noise levels were below 30 dBA. *Id.* With the generators running in a variety of configurations, the sound levels ranged from 42 dBA to 45 dBA. *Id.* In the master bedroom with the windows closed, the ambient sound levels were 20 to 23 dBA. *Id.* at 6-7. With the generators running, the sound levels ranged from 23 dBA to 35 dBA. *Id.* As insects began to chirp in the time between the patio and bedroom tests, the bedroom tests have had insect sounds artificially removed. *Id.* Thus, were insect noise included, both ambient and generator measurements would be higher.

James noted that the sound from the generators was low frequency (deep sounding). *Id.* at 7-8. The insect noise and ambient sounds are not low frequency, making them ineffective in masking the generator noise. *Id.* at 8-9. Moreover, low frequency sound penetrates solids (like

windows and walls) better than does high-frequency sound. *Id.* at 9. Thus, closing the windows, while it does reduce the overall noise somewhat, reduces the ambient noises more than the deep generator noise and thus can have the effect of making the generator noise more noticeable against the ambient background sounds. *Id.* In addition, though Van Wyk, rather than James, explained the matter, when low sounds are made, they are actually much more powerful sound waves than our human auditory senses might indicate:

When dealing with sound, there is the physical quantity which is expressed as sound level and the perceived level which is expressed as loudness. Sound level is measured in units called decibels (abbreviated dB). Decibels are power ratios and are logarithmic quantities. Audible sound occurs over a wide frequency range, from approximately 20 Hertz (Hz) to 20,000 Hz. Human hearing does not respond equally to sounds at different frequencies (or pitch). Lower frequency sounds that are equally as “loud” have a much higher decibel level than high frequency sounds. To accommodate this variation in frequency sensitivity of human hearing, a frequency weighting can be applied to sound level measurements. When the weighting is applied, the resulting sound level measurements are said to be “A-weighted” and the decibel level is abbreviated dBA.

(Doc. 46, Ex. J, Van Wyk Rpt. at 3). Thus, low sounds (like the generators) can be quite powerful – rattling windows and causing thrumming vibrations while contributing relatively little to the dBA measure.

Van Wyk produced two reports, a primary and a rebuttal. (Doc. 45, Exs. J & K). Between these two reports, Van Wyk measured generator and ambient noise on April 15, August 1,⁴ and September 16, 2013. *Id. in passim.* On the April 15 and August 1 occasions, Van Wyk measured noise under a variety of generator operation conditions at two locations – at the Southeast property line of the Pauluses’ parcel, and at the tree line on the Northwest corner of the data center property. (Doc. 46, Ex. J, Van Wyk Rpt. at 9). For the September 16 tests, Van Wyk

⁴ All Van Wyk’s tables are labeled September 1. However the report frequently states and he, in testifying at deposition, frequently stated, that the date of the measurements was August 1, 2013. Hence this Court shall proceed from the assumption that August 1, 2013, is, in fact, the correct date.

measured noise (again under a variety of operating conditions) at approximately the same locations as James – on the Pauluses’ patio and in their bedroom. He also, once again took measurements at the Southeast property line of the Pauluses’ parcel. (Doc. 46, Ex. K, Van Wyk Rebut. Rpt. at 3).

On April 15, 2013, the wind was from the South-Southeast; meaning that the Pauluses’ home (which is Northwest of the data center) was downwind from the data center. (Doc. 46, Ex. J, Van Wyk Rpt. at 2; *see also* Doc. 50, Ex. 14, sub-Ex. A, Property Map (marking data center and Paulus residence)). On August 1, 2013, according to Van Wyk’s report, the wind was from the West-Southeast. *Id.* at 3. In Van Wyk’s deposition, Counsel for Plaintiffs suggested that the wind was, instead, from the West-Northwest that day; meaning the Paulus residence would have been upwind of the data center. (Doc. 43, Ex. 10, Van Wyk Depo. at 107:14-108:19). If true, this would conflict with James’ report which states that the wind was a crosswind on August 1, 2013. (Doc. 44, Ex. 1, James Rpt. at 5).

In his April 15 test, Van Wyk measured an ambient of 41 dBA at the tree line just north of the data center. (Doc. 46, Ex. J, Van Wyk Rpt. at 9-10). In that same location he measured a maximum average of 69 dBA with all eight generators running. *Id.* at 10. At the edge of the Pauluses’ property line, Van Wyk measured a 39 dBA ambient. *Id.* In that location he measured a maximum average of 61 dBA with the generators. *Id.* On August 1, 2013, in the same locations as were measured on April 15, Van Wyk measured ambients of 47 dBA and 52 dBA respectively. *Id.* at 13. He achieved a maximum average of 63 dBA and 57 dBA at each respective location with the generators functioning. *Id.* Again, the highest readings were achieved by operating all eight generators at once. *Id.* Van Wyk also broke the sounds down by

octave band. *Id.* at 11-12, 14-15. In all locations, the low end of the frequency spectrum, 63-500Hz, was strongly weighted with some dB readings reaching into the mid-high 70s. *Id.*

In his September 16 test, Van Wyk took measurements at different locations. He measured sound inside the Pauluses' bedroom with windows opened and closed, on the Pauluses' porch, and, once again, at the Pauluses' property line. (Doc. 46, Ex. K, Van Wyk Rebut. Rpt. at 2-3). In the bedroom with the windows closed, he measured an ambient of 21 dBA and a maximum average of 28 dBA with the generators running. *Id.* at 14. With the windows open, the ambient was 31 dBA and the maximum average, with generator noise, was 42 dBA. *Id.* On the patio, the ambient was 46 and 47 dBA and the maximum average, with generators functioning, was 52 dBA. *Id.* at 16. At the property line, the ambient was between 45 and 47 dBA and the maximum average was 57 to 58 dBA with generator noise. *Id.* at 18. As before, all maximum averages were achieved with all eight generators running and the octave band breakdown shows that low frequency sounds were more powerful than higher frequency noises. *Id.* at 14-19.

The generators for the Data Center, according to the Pauluses and their neighbors, run at seemingly random times during the day or night. (*See, e.g.*, Doc. 43, Ex. 8, K. Paulus Depo. at 184:1-184:8, 269:14-271:1; Doc. 59, Ex. 3, J. Vutech Depo. at 43:1-43:6; Doc. 43, Ex. 11, M. Vutech Depo. at 21:6-21:24; Doc. 43, Ex. 1, Butler Depo. at 125:23-126:16). According to Citi, generators are run for maintenance purposes, when installing new infrastructure, and during any power interruption. (Doc. 43, Ex. 1, Butler Depo. at 36:5-40:6). Power interruptions have been infrequent (only one or two in the history of the data center). *Id.* at 36:9-37:7. However, planned testing is conducted on a regular schedule and accounts for approximately 250 hours of generator run-time yearly. (Doc. 46, Ex. J, Van Wyk Rpt. at 8). While some testing can be conducted

during business hours (and Citi argues that it has attempted to do that) some of it must be performed at night to avoid the risk of interrupting data center operations. (Doc. 43, Ex. 1, Butler Depo. at 100:23-106:5). Moreover, whenever infrastructure is being installed (and that has been frequently since the data center opened in 2007) the generators will run beginning pre-dawn and continue running until the night following the completion of the install. *Id.* at 106:13-107:7.

Each of the nearby homeowners was deposed. (Doc. 43, Exs. 4, 8-9, 11 (depositions of D. Hoopes, K. Paulus, J. Paulus, and M. Vutech); Doc. 59, Exs. 1-3 (depositions of W. Hoopes, M. Sapp, and J. Vutech); *see also* Doc. 50, Ex. 14, sub-Ex. A, Property Map (marking data center and nearby residences)). Though not all suffered the same severity of annoyance from the generator noise, all testified that they could hear it on their property and found it, to one degree or another, annoying. (Doc. 43, Ex. 4, D. Hoopes Depo. at 22:9-25:15 (only hears and is annoyed by noise when walking on Winter Road, cannot hear it inside her house with windows closed); Doc. 43, Ex. 8, K. Paulus Depo. at 183:7-184:11, 269:14-293:14 (lengthy discussion of how it is annoying both inside and outside the house, disturbing sleep and causing headaches); Doc. 43, Ex. 9, J. Paulus Depo. at 24:20-27:24, 31:7-42:18 (lengthy discussion of how it is annoying both inside and outside the house, disturbing sleep, interrupting outdoor activities like gardening and indoor activities like television-watching); Doc. 43, Ex. 11, M. Vutech Depo. at 20:1-25:18, 38:18-42:19 (noise is annoying to her both inside and outside her house, disrupts her sleep, prevents her from using her screened-in porch, and drowns-out otherwise enjoyable nature sounds); Doc. 59, Ex. 1, W. Hoopes Depo. at 17:13-20:11, 25:20-26:25, 27:19-28:11 (the noise interrupts his morning walks with his dog and he hears the noise and is moderately annoyed by it on his deck); Doc. 59, Ex. 2, M. Sapp Depo. at 24:5-26:8, 29:16-30:25, 38:14-42:6, 48:2-48:18, 52:7-56:15 (hears the noise at his home and throughout the neighborhood and it disturbs the

peace and solitude of the otherwise woodland area; is also annoying because it is an unceasing drone but he cannot hear it well in his house); Doc. 59, Ex. 3, J. Vutech Depo. at 40:22-43:22, 46:8-47:3 (hears the noise an average of once per month and it bothers him when he hears it)).

II. DISCUSSION

Plaintiffs and Defendants both move for summary judgment. (Docs. 46, 47). In addition, Defendants move to exclude the opinions of Plaintiffs' expert, Richard James. (Doc. 45, D. *Daubert* Mot.). As the *Daubert* inquiry affects the content of the record available for summary judgment purposes, the Court first addresses this matter. *See* Fed. R. Civ. P. 56(c)(2) (evidence is objectionable on summary judgment if not capable of being presented as admissible evidence).

A. *Daubert* Motion

Federal Rule of Evidence 702 provides:

A witness who is qualified as an expert by knowledge, skill, experience, training, or education may testify in the form of an opinion or otherwise if:

- (a) the expert's scientific, technical, or other specialized knowledge will help the trier of fact to understand the evidence or to determine a fact in issue;
- (b) the testimony is based on sufficient facts or data;
- (c) the testimony is the product of reliable principles and methods; and
- (d) the expert has reliably applied the principles and methods to the facts of the case.

Fed. R. Evid. 702.

In this Circuit, enforcement of this rule proceeds in three steps. First, the witness must be qualified according to his or her "knowledge, skill, experience, training, or education." *In re Scrap*, 527 F.3d 517, 529 (6th Cir. 2008) (quoting Fed. R. Evid. 702). Second, the expert's testimony must be relevant, in that it will help "the trier of fact to understand the evidence or to determine a fact in issue." *Id.* On this point, the Court's inquiry focuses on whether the expert's reasoning or methodology can be properly applied to the facts at issue. *See Daubert v. Merrell*

Dow Pharms., 509 U.S. 579, 591-93 (1993). Third, the testimony must be reliable, *see In re Scrap Metal*, 527 F.3d at 529, which the proponent has the burden of proving by a preponderance of the evidence. *Wellman v. Norfolk & W. Ry.*, 98 F. Supp. 2d 919, 923 (S.D. Ohio 2000).

It should be noted, however, that this Court's "gatekeeper role . . . is not intended to supplant the adversary system or the role of the jury." *Kendall Holdings, Ltd. v. Eden Cryogenics LLC*, No.: 2:08-cv-390, 2013 U.S. Dist. LEXIS 136898, *4 (S.D. Ohio Sept. 24 2013) (quoting *Wellman*, 98 F. Supp. 2d at 924) (citing *Daubert*, 509 U.S. at 596). Instead, it is "to keep unreliable and irrelevant information from the jury because of its inability to assist in factual determinations, its potential to create confusion, and its lack of probative value." *Id.* Accordingly, "vigorous cross-examination, presentation of contrary evidence, and careful instruction on the burden of proof are the traditional and appropriate means of attacking shaky but admissible evidence." *Id.*

1. James' Qualifications

Defendants challenge James' qualifications to testify as an expert:

James is not qualified by either his education or experience to testify as an expert in this lawsuit. James is a consultant with limited expertise; indeed, his experience almost entirely relates to wind turbines. James is a paid expert consultant; his opinions in this lawsuit do not flow from his independent scientific research but were instead created specifically for Plaintiffs' use in this matter.

(Doc. 45, D. Mot. in Lim. at 2). James has been an adjunct professor at Michigan State and had been working on noise analysis and mitigation solutions for nearly 20 years with, among others, GM, Goodyear, and Chrysler. (*Compare* Doc. 45, Ex. J, Van Wyk Rpt. at 18 *with* Doc. 45, Ex. N, James Resume at 1-3). There is little doubt that James' extensive background qualifies him as an expert generally. *See supra* pp. 2-3. However, "[t]he issue with regard to expert testimony is not the qualifications of a witness in the abstract, but whether those qualifications provide a

foundation for a witness to answer a specific question.” *Berry v. City of Detroit*, 25 F.3d 1342, 1351 (6th Cir. 1994).

Defendants argue:

[S]ince 2008, any articles written by James focus on wind turbines or personal listening devices. He has written no papers related to generator noise. Yet, in his opinion, James makes conclusions about the type of noise emitted from the generators, whether Citi should have conducted a noise impact assessment, and means Citi purportedly could take to reduce the noise from the generators. Given James’s experience does not demonstrate any breadth of experience with different types of sound and is instead limited to wind turbines, he is not qualified to opine on matters related to generator noise and mitigation.

(Doc. 45, D. Mot. in Lim. at 6-7) (citations omitted). Defendants also argue that, “Since 2007, cases where James has been retained, he has worked exclusively to stop development, primarily on behalf of property owners who were seeking to prevent the installation of wind turbines near their property.” *Id.* at 7. In so arguing, the Defendants ignore James’ approximately 35 years of experience working on behalf of industry (noise-producers). (Doc. 45, Ex. N, James Resume at 1-3). It is true that for the last 8 years James has worked principally on behalf of noise receivers, rather than noise producers. However, that fact does not deprive him of the several decades of experience that he accumulated working on behalf of and furthering the interests of companies which produce noise. Moreover, James explained during deposition why he wrote no articles about generators yet knows about them – GM forbade their consultants to make any public comment about the problems they analyzed under contract and thus, he could not write articles on the topic, despite the fact that he has, himself, done work on generator noise. (Doc. 43, Ex. 5, James Depo. at 80:1-81:25; *see also* Doc. 49, Ex. 1, James Decl. at ¶¶ 6-7).

James is qualified to testify on the topic of sound and, more particularly, generator noise.

2. James' Opinions on the Appropriate dBA Limits for Citi's Noise Emissions

a. WHO, EPA, and ANSI Levels

James seeks to offer a number of opinions about the appropriate level of noise acceptable during the day and night on the Pauluses' property. (Doc. 44, Ex. 1, James Rpt. at 11-13). He does so based on a 2009 World Health Organization (WHO) report, a 1974 EPA report, and standards set by the American National Standards Institute (ANSI) setting forth dBA levels recommended for human health and wellbeing. *Id.*

In evaluating the propriety of these opinions it is important to keep the question in this case in mind: Is Citi's noise a nuisance? As this Court said in an earlier opinion in this case, "the invasion that leads to a nuisance claim must be 'unreasonable,' defined as one that 'persons of ordinary tastes and sensibilities would regard as an inconvenience or interference materially affecting their physical comfort to a degree which would constitute a nuisance.'" *Paulus v. Citicorp N. Am., Inc.*, No.: 2:12-cv-856, 2013 U.S. Dist. LEXIS 141353, *9 (Ohio S.D. Sept. 30, 2013) (quoting *O'Neil v. Atwell*, 598 N.E.2d 110, 113 (Ohio Ct. App. 1991)) (citing *Gevelaar v. Millennium Inorganic Chems.*, 2013-Ohio-435, at ¶¶ 25-26 (Ct. App.)). Thus, the question is not what the WHO, EPA, or ANSI, think are optimal for human health – but what the ordinary person would consider a nuisance.

Nonetheless, James may discuss these reports and findings to educate the jury on the levels of sound that have been found deleterious to human health and sleep patterns as that testimony may be helpful to the ordinary person inquiry. *See, e.g., Daubert*, 509 U.S. at 589 (emphasis omitted) (internal quotation marks omitted) ("If scientific, technical, or other specialized knowledge will assist the trier of fact to understand the evidence or to determine a fact in issue an expert may testify thereto."). However, Liberty Township has not adopted the

WHO, EPA, or ANSI's recommendations and James is therefore forbidden to opine, state, or imply that Citi is obligated to meet the dBA levels laid out therein.

b. Characterization of the Community

Defendants also challenge James' recommendations about the level of sound that would be appropriate on the Pauluses' property based on his purported failure to note that Citi's property, which abuts the Pauluses' land, is zoned commercial. (Doc. 45, D. Mot. in Lim. at 14-15). James did not ignore the zoning. He was cognizant of it but James observed that "[t]he very first canon of ethics of noise control . . . is protect the public's health." (Doc. 43, Ex. 5, James Depo. at 83:3-83:5). He utilized a residential level, rather than a commercial level, of sound. *Id.*; *see also id.* at 146:11-146:17.

As discussed above, Liberty Township has not adopted noise standards. Defendants are free to criticize James' opinions as to the reasonable levels of sound that ought to be allowed on the Pauluses' property based on the fact, *inter alia*, that it abuts commercial property. They may also, as they see fit, otherwise challenge James' views through the rigors of cross-examination and presentation of alternative theories and evidence. However, that mode of criticism and challenge is the appropriate counter to James' opinions – not exclusion.

3. Propriety of Removing Insect Sounds from Background/Ambient

When James measured the ambient background sound in the Pauluses' bedroom, because of the time of day and season of the year, insects were chirping. (Doc. 43, Ex. 5, James Depo. at 99:14-101:21). Because these sounds are not present most times of the day and most seasons of the year, James scrubbed the insect sounds from the recordings of both the background noise and the noise of the generators in order that the dBA measures would more accurately reflect conditions on the property as they exist a majority of the time. *Id.* at 88:2-88:16; (Doc. 44, Ex. 1, James Rpt. at 6-7). Defendants challenge James' decision to remove insect noise from his

measurement of the background ambient sound. They allege that this creates a “false quiet.” (Doc. 56, D. Reply in Supp. of Mot. in Lim. at 2-3; Doc. 45, D. Mot. in Lim. at 10). Defendants do not challenge James’ decision to scrub insect noise from the measurements taken while the generators were running. *Id.*

Specifically, Defendants argue that ANSI procedures for the description and measurement of environmental sound advocate for the removal of insect noise to avoid overstating the sound level of the sound source of interest – in this case, the generators. (Doc. 45, D. Mot. in Lim. at 10). Essentially, Defendants argue that when ANSI instructs one to scrub insect noise from the source of interest, it means to only scrub the noise from the source of interest. *Id.* James, however, relies upon an article by, among other authors, one progenitor of the ANSI standards upon which Defendants depend for their argument. (Doc. 50, Ex. 1, James Decl. at ¶¶ 15-16). This article provides:

A-weighted environmental noise measurements frequently seek to measure a specific . . . mechanical device. In other instances, one may be seeking to characterize the yearly ambient at a given site. In both of these cases, insect noise can significantly distort the results and lead to erroneous conclusions. Insect noise regularly produces levels of 55 dB or more in high frequency bands that can completely distort a nighttime measurement of a [noise source] that is required to be, for example, below 50 dB. Spectral analysis in octave bands would clearly show the low frequency [source] noise as distinct from the high frequency insect noise, but the simple A-weighted meter is blind to this. Similarly, if one wants to characterize the ambient in a given area for the purposes of citing a new noise source such as a wind turbine farm, then it is important that the ambient not be inflated by insect noise which is present perhaps two-to four months out of twelve, and which may be limited to certain hours of the night.

Insect noise can, as Defendants acknowledge, result in overstating the noise source and removing insect noise can result in a more accurate picture of how loud the source is. (Doc. 45, D. Mot. in Lim. at 10). However, at least for comparison purposes, the same is true of the ambient background – removing insect noise (which is temporary and seasonal) accurately shows, relative to the insect-free source, how quiet the background really is.

If Defendants wish to cross examine James and criticize the accuracy of his results based on his decision to exclude insect noise from the ambient background, they will be free to do so. Likewise, James shall be free to defend his method and results. But James' opinions are not subject to exclusion on the basis of such criticism.

4. Low Frequency and Tonality Opinions

Defendants challenge James' opinions that the generator noise is low frequency and tonal. Defendants argue that such opinions are without sufficient scientific basis, are speculative, and, accordingly, fail Rule 702(b-c) and *Daubert*. (Doc. 45, D. Mot. in Lim. at 12-13). In support of this proposition, Defendants quote a portion of James' deposition wherein he admits that there is no test that has yet been developed to quantify prominence in a tone as complex as multiple generators produce. *Id.* However, such an admission has no bearing on whether James may testify that the sounds are low frequency and tonal.

Low frequency sounds are sounds with long-period waveforms and, as a result, sound deep. Testing whether the generators produce low frequency sound is therefore a relatively simple matter. Not only will the deep-sounding auditory experience confirm the frequency, but an octave or hertz breakdown of the recorded sound will show the frequency of the source and hence, whether it is low or high frequency. James discusses this in his report. (Doc. 44, Ex. 1, James Rpt. at 7-9; *see also*, Doc. 49, Ex. 1, James Decl. at ¶¶ 17-18). Moreover, Defendants' own expert's results show just such a breakdown and confirm James' statement that the generators are low frequency. (Doc. 45, Ex. J, Van Wyk Rpt. at 12-13, 15-16). James opinion that the generators produce low frequency sound and observations based upon that fact will not be excluded.

It is true, as Defendants point out, that James has admitted that the quantitative method for determining the level of prominence in a discrete tone cannot be applied to complex tones

and that no quantitative method (at least none that is reasonably priced) for such analysis yet exists. (Doc. 45, D. Mot. in Lim. at 12-13). However, in his deposition, James explained that, notwithstanding the lack of available quantitative analysis tools, a spectrogram of the sound reveals spikes (indicative of throbbing, pulsating, or prominence) and that, to an experienced ear using good headphones, these are detectable as subtle throbbing or pulsating. (Doc. 43, Ex. 5, James Depo. at 106:2-109:19). The upshot of this, James explained, is that a novice listener, without the spectrogram to prompt the belief that the sound throbs or pulses, might not detect the pulsating or throbbing on a conscious level, but they would likely find the sound more annoying than a sound that did not have such throbbing character. *Id.* Defendants' observation, that no quantitative method has been employed to quantify the exact extent of the prominence or pulses, does nothing to harm James' testimony on these points. James properly recorded the sound pursuant to ANSI standards. He made a spectrogram of the same. Then, using his training and experience, he made the observation that the sound in question throbs or pulses and thus, in his experience, would be found more annoying by the typical listener than a sound which does not pulse or throb. Defendants are free to attack this observation through presentation of their own evidence and cross examination. But James' method (despite not being quantitative) was sound and the opinion will not be excluded.

5. James' Opinions on Louver Silencers

Defendants claim that James, not having "performed any independent determination" of possible noise mitigation methods for this particular data center, speculates when he opines that inlet louver silencers on the generator buildings would provide sufficient noise mitigation. (Doc. 45, D. Mot. in Lim. at 15; Doc. 56, D. Reply in Supp. of Mot. in Lim. at 5-6). However, that James examined the site is evident from the record. (*See, e.g.*, Doc. 44, Ex. 1, James Rpt. at 5 (stating that James toured the data center); *see also, e.g., id.* at 14-15 (detailing some seven

different mitigation options that Citi might undertake to reduce its noise emissions and/or the impact thereof on its neighbors)). It is true that James said, during his deposition that he had not “performed any independent determination” as to whether inlet louver silencers could be installed at the data center at issue here or what dBA reduction such an installation would effect. (Doc. 43, Ex. 5, James Depo. at 184:25-187:1). However, he also explained that Citi has such silencers installed at other of its facilities, that the firm Ketchum & Walton did study the data center and conclude that inlet louver silencers could be installed to effect a 28 dBA reduction in noise emissions, and that, based on his experience, he is familiar with such devices and knows them to be an effective way to insulate generator sets. *Id.*

Federal Rule of Evidence 703 permits an expert to rely not just on personal observations but also “facts or data in the case that the expert has been made aware of” James was therefore entitled to rely on the fact (of which he had been made aware) that Citi had installed such silencers to good effect in similar projects and that an independent firm (Ketchum & Walton) had opined that such silencers could be installed at the data center in this case to good effect. He was also, of course, able to rely on his own experience. His opinion was not speculation, but the testimony of an expert relying on information which he had not personally observed, but which, in accordance with Rule 703, he had nonetheless been “made aware of.” Fed. R. Evid. 703. Should Citi wish to dispute the opinion of James and the firm Citi hired (Ketchum & Walton) that inlet louver silencers would be helpful to reduce their sound emissions, they are free to do so through cross-examination and other evidence. However, James’ opinions on the merits of such silencers will not be excluded.

B. Summary Judgment

Both sides have moved for summary judgment in this case. (Docs. 46, 47). Because there is a conflict of material fact about the nature of the sound, the Pauluses’ motion is denied. *See*

infra pp. 22-26. For the same reason Citi's motion will be denied in part. Because, however, the Pauluses cannot show that a public right is injured by Citi, Citi will be entitled to summary judgment on the Pauluses' public nuisance claims. *See infra* pp. 33-35.

1. Standard

"The standard of review for cross-motions of summary judgment does not differ from the standard applied when a motion is filed by only one party to the litigation." *Ferro Corp. v. Cookson Group, PLC*, 585 F.3d 946, 949 (6th Cir. 2009) (citing *Taft Broad. Co. v. U.S.*, 929 F.2d 240, 248 (6th Cir. 1991)).

Summary judgment is appropriate "if the movant shows that there is no genuine dispute as to any material fact and the movant is entitled to judgment as a matter of law." Fed. R. Civ. P. 56(a). The Court may therefore grant a motion for summary judgment if the nonmoving party who has the burden of proof at trial fails to make a showing sufficient to establish the existence of an element that is essential to that party's case. *Celotex Corp. v. Catrett*, 477 U.S. 317, 322 (1986).

The "party seeking summary judgment always bears the initial responsibility of informing the district court of the basis for its motion, and identifying those portions" of the record which demonstrate "the absence of a genuine issue of material fact." *Id.* at 323. The burden then shifts to the nonmoving party who "must set forth specific facts showing that there is a genuine issue for trial." *Anderson v. Liberty Lobby, Inc.*, 477 U.S. 242, 250 (1986) (quoting Fed. R. Civ. P. 56). "The evidence of the nonmovant is to be believed, and all justifiable inferences are to be drawn in his favor." *Id.* at 255 (citing *Adickes v. S. H. Kress & Co.*, 398 U.S. 144, 158-59 (1970)). A genuine dispute of material fact exists if the evidence is such that a reasonable jury could return a verdict for the nonmoving party. *Liberty Lobby*, 477 U.S. at 248; *see also Matsushita Elec. Indus. Co., Ltd. v. Zenith Radio Corp.*, 475 U.S. 574, 586 (1986) (the

requirement that a dispute be “genuine” means that there must be more than “some metaphysical doubt as to the material facts”). Consequently, the central issue is “whether the evidence presents a sufficient disagreement to require submission to a jury or whether it is so one-sided that one party must prevail as a matter of law.” *Liberty Lobby*, 477 U.S. at 251-52.

2. Varieties of Claims

Nuisances, as relevant to the circumstances in this case, come in two varieties – private and public. These two varieties each divide into two subcategories – absolute and qualified. In addition to asserting claims for public and private nuisance in both absolute and qualified flavors, the Pauluses bring a claim in simple negligence. (Doc. 32, Amend. Compl. at ¶¶ 15-27). Each is addressed in turn.

a. Private Nuisance

Private nuisance actions protect against “nontrespassory invasion of another’s interest in the private use and enjoyment of land.” *Brown v. Scioto Cnty. Bd. of Comm’rs*, 622 N.E.2d 1153, 1158 (Ohio Ct. App. 1993). Invasions of this sort can include sound. *See, e.g., Hamilton v. Hibbs LLC*, 2012-Ohio-4074, at ¶ 15 (Ct. App.).

The Ohio Supreme Court has defined absolute nuisance as follows:

Absolute nuisance, for which strict liability or liability without fault is imposed by law, may be defined as a distinct civil wrong arising or resulting from the invasion of a legally protected interest, and consisting of an unreasonable interference with the use and enjoyment of the property of another; the doing of anything or the permitting of anything under one’s control or direction to be done without just cause or excuse, the necessary consequence of which interferes with or annoys another in the enjoyment of his legal rights; the unlawfully doing of anything or the permitting of anything under one’s control or direction to be done, which results in injury to another; or the collecting and keeping on one’s premises anything inherently dangerous or likely to do mischief, if it escapes, which, escaping, injures another in the enjoyment of his legal rights.

Taylor v. Cincinnati, 55 N.E.2d 724, syllabus ¶ 2 (Ohio 1944). The Ohio Supreme Court also has held:

An absolute nuisance, or nuisance per se, consists of either a culpable and intentional act resulting in harm, or an act involving culpable and unlawful conduct causing unintentional harm, or a nonculpable act resulting in accidental harm, for which, because of the hazards involved, absolute liability attaches notwithstanding the absence of fault.

Metzger v. Penn., Ohio, & Detroit R.R., 66 N.E.2d 203, syllabus ¶ 1 (Ohio 1946).

As to qualified nuisance, the Ohio Supreme Court has defined it as “the negligent maintenance of a condition, which, of itself, creates an unreasonable risk of harm, ultimately resulting in injury.” *Allen Freight Lines, Inc., v. Consol. Rail Corp.*, 595 N.E.2d 855, 856 (Ohio 1992); *see also Metzger*, 66 N.E.2d 203, syllabus ¶ 2 (“A qualified nuisance, or nuisance dependent on negligence, consists of an act lawfully but so negligently or carelessly done as to create a potential and unreasonable risk of harm, which in due course results in injury to another.”); *Taylor*, 55 N.E.2d 724, syllabus ¶ 3 (same).

The Ohio Fourth District Court of Appeals, relying on the Second Restatement of Torts, has held:

[A] private nuisance [i]s a nontrespassory invasion of another’s interest in the private use and enjoyment of land. [I]n order to be actionable, the invasion must be either (a) intentional and unreasonable, or (b) unintentional and caused by negligent, reckless or abnormally dangerous conduct (negligent and reckless conduct carry with them a degree of unreasonableness; abnormally dangerous activity is not treated in the same sense, but the balancing effort necessary to determine liability has the same effect).

While the law in Ohio is far from clear in this area . . . [t]he essence of . . . [absolute] nuisance is that no matter how careful one is, such activities are inherently injurious and cannot be conducted without damaging someone else’s property or rights. [Absolute nuisances] are based upon either intentional conduct or abnormally dangerous conditions, and as such the rule of absolute liability applies. . . .

Conversely, qualified nuisance is premised upon negligence. It consists of a lawful act that is so negligently or carelessly done as to have created an unreasonable risk of harm which in due course results in injury to another.

Brown, 622 N.E.2d at 1158-59 (citations omitted).

i. Is the Noise an Unreasonable Inconvenience or Interference?

Under any nuisance definition relevant in this case,⁵ however, the invasion that leads to a nuisance claim must be “unreasonable,” defined as one that “persons of ordinary tastes and sensibilities would regard as an inconvenience or interference materially affecting their physical comfort to a degree which would constitute a nuisance.” *O’Neil*, 598 N.E.2d at 113; *see also Gevelaar*, 2013-Ohio-435, at ¶¶ 25-26 (noting that this definition of an unreasonable interference applies to both absolute and qualified nuisance claims).

On one hand the Pauluses and all their immediate neighbors have testified that the sound from Citi’s generators is annoying to some degree. (Doc. 43, Ex. 4, D. Hoopes Depo. at 22:9-25:15; Doc. 43, Ex. 8, K. Paulus Depo. at 183:7-184:11, 269:14-293:14; Doc. 43, Ex. 9, J. Paulus Depo. at 24:20-27:24, 31:7-42:18; Doc. 43, Ex. 11, M. Vutech Depo. at 20:1-25:18, 38:18-42:19; Doc. 59, Ex. 1, W. Hoopes Depo. at 17:13-20:11, 25:20-26:25, 27:19-28:11; Doc. 59, Ex. 2, M. Sapp Depo. at 24:5-26:8, 29:16-30:25, 38:14-42:6, 48:2-48:18, 52:7-56:15; Doc. 59, Ex. 3, J. Vutech Depo. at 40:22-43:22, 46:8-47:3). The Pauluses and Vutechs (who are closest to the data center) moreover, have testified that the noise interrupts their sleep and prevents them from enjoying outdoor activities on their property. (*See* Doc. 43, Ex. 8, K. Paulus Depo. at 183:7-184:11, 269:14-293:14 (lengthy discussion of how it is annoying both inside and outside the house, disturbing sleep and causing headaches); Doc. 43, Ex. 9, J. Paulus Depo. at 24:20-27:24, 31:7-42:18 (lengthy discussion of how it is annoying both inside and outside the house, disturbing sleep, interrupting outdoor activities like gardening and indoor activities like television-watching); Doc. 43, Ex. 11, M. Vutech Depo. at 20:1-25:18, 38:18-42:19 (noise is annoying to her both inside and outside her house, disrupts her sleep, prevents her from using her

⁵ There appears to be no dispute that Citi was not conducting abnormally dangerous activities on its property. Thus, rules and definitions applicable to such circumstances have no bearing here.

screened-in porch, and drowns-out otherwise enjoyable nature sounds)). On the other hand, the data collected by both experts, James and Van Wyk, suggests that the generators are simply not very loud. The loudest reading on the Pauluses' patio collected by either expert with the generators running was 52 dBA – no more than a typical office environment. (Doc. 46, Ex. K, Van Wyk Rebut. Rpt. at 16 (52 dBA on patio); Doc. 46, Ex. J, Van Wyk Rpt. at 4 (chart of typical sound levels)). The loudest reading in the Pauluses' bedroom (with the windows closed) collected by either expert with the generators running was 35 dBA – around the same as inside the average residence. (Doc. 44, Ex. 1, James Rpt. at 6-7 (35 dBA in bedroom with windows closed); Doc. 46, Ex. J, Van Wyk Rpt. at 4 (chart of typical sound levels)). Yet, both experts confirmed that the sound was low frequency and thus more penetrating and powerful than the dBA measures might suggest. (Doc. 44, Ex. 1, James Rpt. at 7-9; Doc. 46, Ex. J, Van Wyk Rpt. at 3).

In addition, analysis of the reasonableness of an intrusion should take account of the utility of the allegedly nuisance activity, the surrounding circumstances (such as zoning), and whether reasonable mitigation is possible. *Soukup v. Republic Steel Corp.*, 66 N.E.2d 334, 341-342 (Ohio Ct. App. 1946); Restatement (Second) of Torts §§ 826-828, 830-831. In this case, Citi's property (where the noise is emitted) is zoned commercial but the Pauluses' property (where the noise is heard) is zoned residential. (Doc. 46, Ex. E, Konieczynski Aff. at ¶ 5); *see also* Liberty Twp. Official Zoning Dist. Map (Feb. 5, 2014), <http://www.libertytpw.org/Downloads/Zoning%20District%20Map%20Feb%205%202014.pdf>. There appears to be no doubt that the data center, in accurately and securely processing the many electronic transactions upon which modern society depends, has great utility. (Doc. 50, P. Memo. in Opp. to SMJ at 1 (admitting utility of data center)). However, there is also evidence that Citi

could, albeit at significant expense, install silencers on its generators and thereby mitigate or perhaps eliminate the presence of the noise on the Pauluses' property without impacting data center operations at all. (Doc. 43, Ex. 5, James Depo. at 184:25-187:1; Doc. 43, Ex. 1, Butler Depo. at 174:16-180:20 (both discussing the Ketchum & Walton proposal)).

In short, the evidence is in conflict on the question of whether the noise is unreasonable or, to put it another way, whether “persons of ordinary tastes and sensibilities would regard [the noise] as an inconvenience or interference materially affecting their physical comfort to a degree which would constitute a nuisance.” *O’Neil*, 598 N.E.2d at 113. Thus, there is a genuine dispute about the factual character and nature of the sound. As the noise is the heart of the case, the conflict is material and summary judgment cannot, therefore, issue to the Pauluses on their private nuisance claims.⁶ In addition, the other factual circumstances of the case, for instance, zoning, mitigation, and utility, are mixed and thus do not render immaterial the factual questions regarding the noise.

ii. Damages

Citi claims that the Pauluses cannot prove damages. (Doc. 46, D. Mot. for SMJ at 14-16). However, both Kurt and Janene Paulus testified that the noise from Citi disrupts their sleep and interrupts otherwise pleasant activities on their property. (See Doc. 43, Ex. 8, K. Paulus Depo. at 183:7-184:11, 269:14-293:14 (lengthy discussion of how it is annoying both inside and outside the house, disturbing sleep and causing headaches); Doc. 43, Ex. 9, J. Paulus Depo. at 24:20-27:24, 31:7-42:18 (lengthy discussion of how it is annoying both inside and outside the house, disturbing sleep, interrupting outdoor activities like gardening and indoor activities like

⁶ For the same reason – that the facts through which the Court comes to appreciate the nature of the noise are in conflict – there are genuine disputes of fact as to whether the injury of being subjected to the noise is “real, material, and substantial.” (Doc. 46, D. Mot. for SMJ at 7 (citing *Banford v. Aldrich Chem. Co.*, 932 N.E.2d (Ohio 2010))).

television-watching)). This testimony describes injuries and could be credited by a fact-finder. Moreover, despite Citi's arguments to the contrary, the injuries described, at least collectively, are not *de minimis*. (Doc. 46, D. Mot. for SMJ at 15). Even accepting Citi's premise that the generators run only 252.5 hours per year (a number which does not include emergency use or infrastructure installation) that could still be a significant imposition. (Doc. 46, Ex. J, Van Wyk Rpt. at 8; Doc. 43, Ex. 1, Butler Depo. at 106:13-107:7). 252.5 hours per year, after all, is a total consistent with the generators being run all day or night once every two weeks. If a jury credits the Pauluses' testimony, even assuming the 252.5-hours-per-year figure is correct, the Pauluses would still have proven an injury.

The Pauluses claim that the value of their real estate has been diminished. "Ohio law has long recognized that an owner of either real or personal property is, by virtue of such ownership, competent to testify as to the market value of the property." *Smith v. Padgett*, 513 N.E.2d 737, 740 (Ohio 1987); *Rehkoph v. REMS, Inc.*, 40 F. App'x 126, 130 n.2 (6th Cir. 2002) (adopting the principle). In this case, the Pauluses have both testified that they believe the market value of their property has declined due to the noise (though how much, exactly, neither says). (Doc. 43, Ex. 9, J. Paulus Depo. at 70:14-72:15; Doc. 43, Ex. 8, K. Paulus Depo. at 298:18-299:18). The Pauluses, as property owners, are competent to offer testimony on the value of that property and, especially when drawing all inferences in favor of the Pauluses, the Court is not free to ignore their competent testimony. The Pauluses have presented evidence of injuries sustained as a result of Citi's noise emissions.

ii. Absolute Nuisance

Ohio law allows plaintiffs to base an absolute nuisance claim on "intentional conduct." *Ohio ex rel. R.T.G., Inc. v. Ohio*, 98 Ohio St. 3d 1, 2002-Ohio-6716, 780 N.E.2d 998, at ¶ 59. In the context of nuisance, the Second Restatement of Torts states:

An invasion of another's interest in the use and enjoyment of land or an interference with the public right, is intentional if the actor

- (a) acts for the purpose of causing it, or
- (b) knows that it is resulting or is substantially certain to result from his conduct.

Restatement (Second) of Torts § 825 (1979). In the broader context of intentional torts in general, the Ohio Supreme Court has similarly remarked, "If the actor knows that the consequences are certain, or substantially certain, to result from his act, and still goes ahead, he is treated by the law as if he had in fact desired to produce the result." *Kunkler v. Goodyear Tire & Rubber Co.*, 522 N.E.2d 477, 481 (Ohio 1988).

In this case, many years ago now, the Pauluses contacted Citi to let them know that the data center noise was bothering them and disturbing their sleep. (*See, e.g.*, Doc. 48, Ex. Y, e-mails (complaining about noise from data center); Doc. 48, Ex. V, sub-Ex. 1, e-mails (same); Doc. 43, Ex. 6, Konieczynski Depo. at 78:14-80:6 (admitting that, by October 2008, Citi knew their generators were the source of the noise that was disturbing their neighbors)). Despite this knowledge, it is undisputed that Citi did not install (and still has not installed) noise mitigating devices or materials and continued (and still continues) to operate its generators. Moreover, when apprised of the noise problem, Citi, at least for the first several years of complaints, made a conscious decision to ignore the Pauluses. For instance, Citi distributed an e-mail to their data center workers stating:

All, Please be advised, we have a neighbor who's voicing their concerns regarding our generator noise. If you receive a call regarding the generator noise, do not discuss this matter and do not patch them to anyone. Please be polite and courteous and drop the call. Please let us know if you have any questions.

(Doc. 43, Ex. 1, Butler Depo. at 241:2-242:2). On this record, a reasonable jury could conclude that Citi's noise production is intentional. If the jury then also found that "persons of ordinary tastes and sensibilities would regard [the noise] as an inconvenience or interference materially

affecting their physical comfort to a degree which would constitute a nuisance,” then the jury could render a verdict in the Plaintiffs’ favor. *O’Neil*, 598 N.E.2d at 113. Accordingly, summary judgment is denied to Citi on this claim.⁷ *See Liberty Lobby*, 477 U.S. at 248.

iii. Qualified Nuisance

As discussed above when setting forth the two varieties of private nuisance, qualified nuisance is “the negligent maintenance of a condition, which, of itself, creates an unreasonable risk of harm, ultimately resulting in injury.” *Allen Freight*, 595 N.E.2d at 856.

The Court has already found that there is a factual dispute, on the summary judgment record, as to the true nature of Citi’s noise as perceptible in the relevant spaces on the Pauluses’ property. *See supra* pp. 23-26. Thus, the Pauluses are not entitled to summary judgment on this

⁷ Citi seeks to resist this conclusion on the ground that it was given permission by the local government to build and operate the data center and therefore cannot legally be a nuisance. (Doc. 46, D. Mot. for SMJ at 16-17; Doc. 48, D. Memo. in Opp. to SMJ at 3). There is no dispute about the fact that Liberty Township gave City permission to build and operate the data center. (Doc. 48, D. Memo in Opp. to SMJ at 3). However, Liberty Township has no noise regulations or ordinances nor is it empowered to regulate noise (other than in relation to certain licensed establishments not relevant here). *See Ohio Rev. Code* § 504.04(B)(2) (2008); *Ohio Rev. Code* § 505.172(B) (2011). Thus, it could not have, and did not, regulate the noise Citi produced – either to restrict the noise produced by Citi or to permit Citi to make disturbing levels of noise. Moreover, permission to build the data center is not equivalent to permission to become a nuisance. The United States Supreme Court, writing well over a hundred years ago about a railroad which had established an engine house near a church, addressed the very argument Citi now seeks to make:

It is no answer to the action of the plaintiff that the railroad company was authorized by act of Congress to bring its track within the limits of the city of Washington, and to construct such works as were necessary and expedient for the completion and maintenance of its road, and that the engine house and repair shop in question were thus necessary and expedient; that they are skilfully[sic] constructed; that the chimneys of the engine house are higher than required by the building regulations of the city, and that as little smoke and noise are caused as the nature of the business in them will permit.

....

Whatever the extent of the authority conferred, it was accompanied with this implied qualification, that the works should not be so placed as by their use to unreasonable[sic] interfere with and disturb the peaceful and comfortable enjoyment of others in their property. Grants of privileges or powers to corporate bodies, like those in question, confer no license to use them in disregard of the private rights of others, and with immunity for their invasion. The great principle of the common law, which is equally the teaching of Christian morality, so to use one’s property as not to injure others, forbids any other application or use of the rights and powers conferred.

Baltimore & Potomac R.R. v. Fifth Baptist Church, 108 U.S. 317, 329-331 (1883). Liberty Township gave Citi permission to build and operate a data center – not permission to operate it in such a way as to become a nuisance.

claim. The Court has also already determined that the Pauluses have presented evidence of injury (or damages) sufficient to survive summary judgment. *See, supra* pp. 26-29. What remains then, is whether the Pauluses have presented evidence from which a reasonable jury could conclude that Citi negligently maintained a condition that resulted in the noise and the harm that the noise (at least according to the Pauluses' evidence) has occasioned.

Citi's Rule 30(b)(6) deponent testified as follows about choosing a location for the data center and Citi's thought for its future neighbors:

Q: Why did Citicorp choose the location of this Data Center to place this Data Center? Were there specific characteristics of the site or the area that attracted Citicorp towards putting the Data Center in that location?

Butler: It was a decent area; had good power and had good telecommunications; the labor force here is very good. There's a lot of other -- you know, we have a total due diligence, which is very confidential to us.

Q: Were you involved in that due diligence?

Butler: I was.

Q: Did that due diligence include any evaluation of the potential effects of the Data Center on the persons living near the Data Center?

Butler: We actually didn't realize the houses were even there.

(Doc. 43, Ex. 1, Butler Depo. at 196:2-196:17. A jury could find, construing the evidence in a light most favorable to the Pauluses, that Citi was negligent in constructing the generators near residences.

All persons, natural and fictitious, and whether or not there is a specific resolution, ordinance, regulation, or statute, saying so, have a duty not to injure the rights of others. *Louden v. Cincinnati*, 106 N.E. 970, 972 (Ohio 1914). Reasonable minds could conclude that Citi was negligent in selecting a site for a commercial building without even considering or knowing that it directly borders residential-zoned property on which there are single-family residential

dwellings.⁸ The jury must consider the character of the noise in this case and whether it would offend the ordinary person. A jury must also consider whether Citi negligently created and maintained the circumstances that made that so.

Citi is not entitled to summary judgment on the Pauluses' claim for qualified private nuisance.

b. Public Nuisance

Ohio law defines a public nuisance as “an unreasonable interference with a right common to the general public.” *Cincinnati v. Beretta U.S.A. Corp.*, 95 Ohio St. 3d 416, 2002-Ohio-2480, 768 N.E.2d 1136, at ¶ 8 (quoting 4 Restatement (Second) of Torts § 821B(1) (1965)). An “unreasonable interference” with a public right includes, among others, “those acts that significantly interfere with public health, safety, peace, comfort, or convenience.” *Id.* Restatement of Torts on which the Ohio Supreme Court has, in relied provides helpful guidance in its comments:

Conduct does not become a public nuisance merely because it interferes with the use and enjoyment of land by a large number of persons. There must be some interference with a public right. A public right is one common to all members of the general public. It is collective in nature and not like the individual right that everyone has not to be assaulted or defamed or defrauded or negligently injured. Thus the pollution of a stream that merely deprives fifty or a hundred lower riparian owners of the use of the water for purposes connected with their land does not for that reason alone become a public nuisance. If, however, the pollution prevents the use of a public bathing beach or kills the fish in a navigable stream and so deprives all members of the community of the right to fish, it becomes a public nuisance.

....

It is not, however, necessary that the entire community be affected by a public nuisance, so long as the nuisance will interfere with those who come in contact

⁸ Citi suggests that it is somehow unfair to assume that Butler's lack of knowledge of the residential neighbors extended to the remainder of Citi. However, Butler said, “We actually didn't realize the houses were even there.” (Doc. 43, Ex. 1, Butler Depo. at 196:16-196:17) (emphasis added). Moreover, Butler was Citi's duly appointed Rule 30(b)(6) representative and his testimony therefore has the same effect as if it were Citi incarnate that testified.

with it in the exercise of a public right or it otherwise affects the interests of the community at large. The obstruction of a public highway is a public nuisance, although no one is travelling upon the highway or wishes to travel on it at the time. In many cases the interests of the entire community may be affected by a danger to even one individual. Thus the threat of communication of smallpox to a single person may be enough to constitute a public nuisance because of the possibility of an epidemic; and a fire hazard to one adjoining landowner may be a public nuisance because of the danger of a conflagration. In any case in which a private nuisance affects a large number of persons in their use and enjoyment of land it will normally be accompanied by some interference with the rights of the public as well. Thus the spread of smoke, dust or fumes over a considerable area filled with private residences may interfere also with the use of the public streets or affect the health of so many persons as to involve the interests of the public at large.

Restatement (Second) of Torts § 821B cmt. g (1979).

This Court, in its Opinion and Order of September 30, 2013, held that an allegation that “much of the neighborhood” was disturbed by the generator noise was a sufficient allegation to allow the case to proceed on a public nuisance claim. *Paulus*, 2013 U.S. Dist. LEXIS 141353, *17-18. However, much of the neighborhood being disturbed was a sufficient allegation because “[i]n any case in which a private nuisance affects a large number of persons in their use and enjoyment of land it will normally be accompanied by some interference with the rights of the public as well.” Restatement (Second) of Torts § 821B cmt. g. That is, considering the relatively lenient standard by which complaints are evaluated when challenged by Rule 12(b)(6) motions, the Court was prepared to infer, from the factual allegation of neighborhood-wide impact, that a public right might plausibly be impacted. However, now the case stands in summary judgment posture and the standard and record are different.

Members of four households, the Hoopes, the Vutechs, the Sapps, and the Pauluses, testified and only two of those, the Vutechs and the Pauluses, reported more than minimal annoyance. (Doc. 43, Ex. 4, D. Hoopes Depo. at 22:9-25:15; Doc. 43, Ex. 8, K. Paulus Depo. at 183:7-184:11, 269:14-293:14; Doc. 43, Ex. 9, J. Paulus Depo. at 24:20-27:24, 31:7-42:18; Doc.

43, Ex. 11, M. Vutech Depo. at 20:1-25:18, 38:18-42:19; Doc. 59, Ex. 1, W. Hoopes Depo. at 17:13-20:11, 25:20-26:25, 27:19-28:11; Doc. 59, Ex. 2, M. Sapp Depo. at 24:5-26:8, 29:16-30:25, 38:14-42:6, 48:2-48:18, 52:7-56:15; Doc. 59, Ex. 3, J. Vutech Depo. at 40:22-43:22, 46:8-47:3 (all indicating some annoyance but only K. Paulus, J. Paulus, and M. Vutech reporting interrupted sleep and other activities)).

Plaintiffs have not produced any evidence of a violation of a public right in the proper sense of the term. Summary judgment is granted to Citi on the Pauluses' claims based in public nuisance.

c. Negligence

Ohio courts have held that actions for qualified nuisance and negligence merge. *See, e.g., Allen Freight*, 595 N.E.2d at 856; *Hardin v. Naughton*, 2013-Ohio-1549, at ¶ 20 (Ct. App.). The claims merge “[b]ecause the nuisance claim relies upon a finding of negligence” *Hardin*, 2013-Ohio-1549, at ¶ 20. In other words, “a cause of action in qualified nuisance is essentially an action in negligence.” *Id.* at ¶ 22.

There is but one allegation of negligence in this case – that Citi negligently created and maintained a noisy condition resulting in injury to the Pauluses. The parties are free to label that “negligence” or “qualified private nuisance.” The Court recognizes one cause of action and that single cause of action, by whatever name, may go forward.

III. CONCLUSION

Defendants' motion to exclude (Doc. 45) is **DENIED in part and GRANTED in part**, Plaintiffs' motion for summary judgment (Doc. 47) is **DENIED**, and Defendant's motion for summary judgment (Doc. 46) is **GRANTED in part and DENIED in part**.

