

## Some Locations, Sources, and/or Reports that have (or are recommending) 30-40 DBa Noise Limits for Wind Turbines

1. 30 DBa limit for indoor noise level: [South Australia EPA guidelines](#) (2009)
2. 30 DBa is the no effect limit for outdoor nighttime noise: [World Health Org](#) (2009)
3. 30 DBa limit for Middleton, RI (see page 29 of [this report](#): 2012)
4. 30 DBa at 550 Meters: [Dr. Hazel Lynn](#) discusses infrasound (2014)
5. 30-35 DBa: 10% are very annoyed [Noise & Health Journal](#) study (2011)
6. 30-35 DBa are night-daytime turbine noise limits in [Lyme, NY](#) (2012)
7. 32 DBa is the night time limit in wind law of [Frankfort, Maine](#) (2011)
8. 32 DBa is a marker for serious health effects for some [Thorne Study](#) (2012)
9. 32.5 DBa is the beginning point of human annoyance: [study](#) (2007)
10. 33 DBa limit (24/7) in wind law of [Orange, New Hampshire](#) (2016)
11. 33.5 DBa limit recommended by Dr. Schomer in [Wisconsin study](#) (2012)
12. 35 DBa is annoyance threshold [Pedersen study](#) (2004)
13. 35 DBa is where there are measurable sleep differences Dr. Phipps [report](#) (2007)
14. 35 DBa is Australian sound limit [study](#) [p-3] (2008)
15. 35 DBa limit for Oregon, Germany and Australia: [study](#) (2008)
16. 35 DBa night limits have caused complaints: [Acoustical Society of America](#) (2010)
17. 35 DBa is "level of predictable adverse community response" [study](#) (2010)
18. 35 DBa limit (24/7) to home exterior in wind law of [Glenmore, WI](#) (2010)
19. 35 DBa limit (24/7) in wind law (note superior comments) of [Holland, WI](#) (2010)
20. 35 DBa limit: [Danish Society for Environmental Medicine](#) (2011)
21. 35 DBa limit proposed in [New South Wales, Australia](#) (2011)
22. 35 DBa is the night time limit in wind law of [Morrison, WI](#) (2011)
23. 35 DBa for quiet regions of New Zealand: European Human Rights [study](#) (2012)
24. 35 DBa limit (24/7) in wind law of [Sumner, Maine](#) (2013)
25. 35 DBa daytime limit in wind law of [Woodstock, Maine](#) (2013)
26. 35 DBa is "Regulators minimum noise limit" [study](#) (2013)
27. 35 DBa is tolerable limit [Schmidt study](#) (2014)
28. 35 DBa limit (24/7) in wind law of [Carteret County, NC](#) (2014)
29. 35 DBa limit (24/7) in wind law (§ 9.6.1) of [Town of Newport, NC](#) (2014)
30. 35 DBa limit (24/7) by [Rutland \(VT\) Regional Plan](#) (2015)
31. 35 DBa daytime limit and 30 DBa nighttime limit by [Sand Beach, MI](#) (2017)
32. 35 DBa limit (24/7) in wind law of [Craven County, NC](#) (2018)
33. 37 DBa recommendation of [Dr. Amanda Harry](#) (British physician) (2007)
34. 35-40 DBa: daytime limit in ETSU (UK) [Study](#) (1996)
35. 35-40 DBa: 20% are very annoyed [Noise & Health Journal](#) study (2011)

*Note: An increase of only 10 DB **doubles** the perceived noise level. See this [explanation](#).*

## Some Locations using and Some Reports about 5 DBa above Ambient for Wind Turbines

36. 5 DBa limit ETSU (UK) [study](#) (1996)
37. 5 DBa limit above ambient in wind law of [Trempealeau County, Wisc.](#) (2007)
38. 5 DBa limit above ambient in wind law for [Montville, Maine](#) (2009)
39. 5 DBa limit above ambient in wind law for - [Buckfield, Maine](#) (2010)
40. 5 DBa limit above ambient for [Owen Sound, Ontario](#) (2011)
41. 5 DBa limit was found to be "insufficient protection" [study](#) (2013)

*[Note: this alternative was not chosen due to the complexity of establishing ambient baselines, etc.]*

### — Some worthwhile scientific studies on wind turbine noise —

[Effects of the wind profile at night on wind turbine sound](#): van den Berg (2003)

[An investigation into Wind Turbines and Noise](#): The Noise Association (2006)

[Human response to wind turbine noise](#): Pedersen (2007)

[Disconnect between Turbine Noise Guidelines and Health Recommendations](#): Harrison (2008)

[Siting Turbines to Prevent Health Risks from Sound](#): James (2008)

[Wind Turbine Noise - Sleep and Health](#): Hanning (2010)

[Wind Turbine Noise - What Audiologists Should Know](#): Punch, et al (2010)

[An Infrasound and Low Frequency Noise Study](#): McPherson (2011)

[Wind Farm Generated Noise and Adverse Health Effects](#): Thorne (2012)

[Wind Turbine Noise Study](#): Acoustic Ecology Institute (2012)

[Windfarms Noise](#): Shepherd, Hanning, Thorne (2012)

[Adverse Health Effects of Industrial Wind Turbines](#): Jeffery, et al (2013)

[Wind Turbine Noise Complaint Predictions Made Easy](#): Rand & Ambrose (2014)

[Health Effects Related to Wind Turbine Noise Exposure: A Systematic Review](#): Schmidt (2014)

[Wind Turbines can be Hazardous to Human Health](#): Salt (2014)

[Wind Turbine Amplitude Modulation and Planning Control Study](#): Hanning (2015)

[Low Frequency Noise and Industrial Wind Turbines](#): Stelling (2015)

[Infrasound from Turbines Has Adverse Health Impacts](#): Nikula (2015)

[Impact of Wind Turbine Sound on Health, Sleep Disturbance, etc](#): Abbasi, et al (2015)

[Wind Turbine Noise and Human Health— Four Decades](#): Punch & James (2016)

[Altered Cortical & Subcortical Connectivity: Wind Turbines](#): Bauer, et al (2017)

This [site](#) has an excellent discussion in infrasound, plus many references.

For additional helpful information on sound studies, go to [WiseEnergy.org](#).

For additions and/or corrections please contact [John Droz](#).

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