

DRAFT

Scope of Possible Noise Regulation and Policy

MassDEP Wind Turbine Technical Advisory Group,
March 18, 2016



Under Consideration:

- Possible amendments to the existing regulation:
 - Adopt the 10 dBA limit as regulation (current policy)
 - Clarify what is and is not subject to the regulation (e.g., Children in playground, barking dogs, emergency and safety equipment)
 - Define what metrics to use to determine compliance (all applicable sources of sound)
 - Add new permitting requirements for wind turbine projects



Potential Wind Turbine Requirements

- In Regulation:
 - Standards to meet
 - Procedures for permitting
 - Requirements and formula for determining compliance
- In Guidance:
 - Details on sound sampling (Meter settings, locations to sample, *etc.*)
- In Permit:
 - Conditions for operation including post construction sampling and requirement to mitigate

Potential Components of Regulation:

- Standard (10 dBA) over background
- Definition of background (i.e., L_{90})*
- Compliance Metric [i.e. ($L_{eq} + 2\text{dbA Adj Factor}$)- L_{90}]*
- Permit or certification process
- Requirement to assess sound impacts as part of a permit / certification application

* *The Department will consider the results of the RSG Research in developing the options and will seek comment on several alternatives to the proposed compliance metric and background value.*



Potential Components of Regulation (Continued)

- Consultation with MassDEP on pre and post construction sound sampling
- Post- construction testing results provided to the public in a timely manner



Potential Components in Guidance:

- Standardized content of sampling protocol (all sound sources)
- Preconstruction impact assessment (what model to use, what adjustment factor to use for WT, what assumptions to use, etc.)
- Post construction sampling specifics including meter settings , locations, weather conditions (all sound sources)
- Guidance on mitigation options (all sound sources)

Potential Components of a Permit (Wind Turbines):

- ≥ 1 MW requires a permit from MassDEP
- Approval conditions to include:
 - Post construction sampling
 - Additional testing should complaints arise
 - Implementation of mitigation measures if necessary
 - Deadline for submitting post construction sampling results and public access
- 100 kW- <1 MW - File a certification
 - Applicant to accept the same conditions as above



Process will also seek comment on:

- Alternative Compliance Metrics for Wind Turbines including:
 - L90 of Laf max with turbine on, minus L90 of LaF max turbine off
 - Turbine only sound, minus background (RSG)
 - Use of preconstruction background for post construction analysis
 - Use of a mix of sampling and modeling to demonstrate compliance post construction
 - Other measurement methods brought forth in WNTAG Process
- Alternative Compliance Metrics for Other Sound Sources



Potential Next Steps:

- Meet with stakeholder groups (wind turbine and non-wind turbine)
- Complete Regulation Technical Support Document
- Complete Guidance Documents
- Post / Hold Public Hearings
- Review comments submitted at hearing
- Develop response to comments and revise draft regulation as needed
- Finalize/ Adopt Regulation
- Timing – begin late 2016

Comments on presentation:

- Submit to MassDEP by April 8th
- Submit to:
 - Laurel Carlson at Laurel.Carlson@state.ma.us

Thank you!