

#### **24.4 SETBACKS FOR LWES**

Each LWES shall be setback 150% of the total extended height of the LWES from any participating parcel or project parcel property boundary lines.

Each LWES shall be setback 200% of the total extended height of the LWES from any public road right-of-way and any overhead utility line.

Each LWES shall be located 1600 feet from any single family or seasonal dwelling located on a participating parcel.

Each LWES shall be located 3300 feet from any single family or seasonal dwelling located on a non-participating parcel.

#### **24.5 SOUND EMISSION TESTING FOR ALL WIND TURBINES**

In order to establish long-term background noise, the pre-construction La90 and Lc90 ambient sound levels are to be measured at the property lines of non-participating parcels at night time between the hours of 9:00 pm and 5:00 am.

Post-construction operating sound levels are to be measured within nine (9) months of a fully operational LWES installation at the property lines of non-participating parcels at night time between the hours of 9:00 pm and 5:00 am. The maximum noise emission at any non-participating parcels containing a single family or seasonal dwelling shall not be in excess of the following limits:

- Maximum Emission Level – 40dB(A)

- Maximum Emission Level – 55dB(c)

- Maximum emission above preconstruction ambient level – La90+5dB

- Maximum emission above preconstruction ambient level – Lc90+5dB

- Emission Spectra Imbalance –  $Lc90+5dB - (La90-5dB) \leq 20dB$

\*Each limit listed above is independent and exceeding any of the limits will be determined to be evidence of non-compliance. The Zoning Administrator shall immediately inform the operator of non-compliance with the Emission Limits and/or any other requirements set in this ordinance. The LWES shall be removed from operation until such time as compliance with noise levels is achieved.

#### **24.6 EFFECTIVE DATE AND ADOPTION**

This ordinance shall become effective thirty (30) days after its publication as required by law.

This ordinance was adopted by the Township Board of Trustees of the Township of Clark, Mackinac County, Michigan at a meeting held on August 18, 2011.

Effective Date: