

# APPLICABILITY OF PROPOSED NOISE ORDINANCE

9/8/14

Highlighted Options Are Recommended by Staff

|  | PROHIBITIONS  | EXCEPTIONS<br>(Not Subject to Noise Ordinance)                            | MAX DECIBELS<br>(Pursuant to Proposed Maximum Sound Level Chart)                                 | OPTIONS   | COMMENTS   |
|--|---|---|--|---|--|
| <b>1. Uniform Hours for all Specific Prohibitions and Exceptions</b> | All prohibitions apply between 9 p.m. and 9 a.m.                            | All exceptions apply between 9 a.m. and 9 p.m.                            | When not specifically prohibited or an exception, then subject to the proposed maximum decibels. | The Board would have the flexibility to adjust the prohibited hours to any time between 9 p.m. and 6 a.m. and the exceptions anytime between 6 a.m. and 11 p.m. These hours could further be varied on weekends and Fed. holidays.  | For ease of implementation and enforcement the same hours would apply for all noise sources. Staff does not recommend across-the-board uniform hours because as set forth more fully below, there are specific reasons that certain prohibitions and exceptions require different hours.   |
| <b>2. Outdoor Loudspeakers</b>                                       | 11 p.m. to 7 a.m. Mon. – Fri.<br>*11 p.m. to 9 a.m. Sat, Sun, Fed. Holidays |   | *7 a.m. to 11 p.m. Mon. – Fri.<br>9 a.m. to 11 p.m. Sat, Sun, Fed. Holidays                      | <ol style="list-style-type: none"> <li>1. No change to prohibitions or maximum decibels.</li> <li>2. Loudspeakers that are required under ADA or OSHA or provide a public service announcement, such as train arriving, shall be an exception.</li> <li>3. Prohibition to begin as early as 9 p.m.</li> <li>4. Prohibition to begin as early as 9 p.m. Sun. – Thurs. and Fed. Holidays</li> <li>5. Limit the use of loudspeakers to no more than 3 hours at any one time.</li> </ol>          | The use of certain loudspeakers is required by state or federal regulation. The 11 p.m. cutoff is consistent with the outdoor lighting standards for outdoor sports facilities and courts.   |
| <b>3. Outdoor Construction</b>                                       | 9 p.m. to 7 a.m. Mon. – Fri.<br>9 p.m. to 9 a.m. Sat*, Sun, Fed. Holidays   | 7 a.m. to 9 p.m. Mon. – Fri.<br>9 a.m. to 9 p.m. Sat*, Sun, Fed. Holidays |  | <ol style="list-style-type: none"> <li>1. No change to prohibitions or exceptions, except as noted in Option 2 below.</li> <li>2. Add a maximum decibel level of 90 dBA for daytime construction noise in residential areas.</li> <li>3. Add a maximum decibel level of 90 dBA for all daytime construction noise.</li> <li>4. Sat. exception to begin as early as 7 a.m.</li> <li>5. Sat. exception to begin as early as 7 a.m. from June 1<sup>st</sup> to Aug. 31<sup>st</sup>.</li> </ol> | <p>In May 2014, Arlington County adopted a 90 dBA daytime residential construction noise limitation. EQAC also recommended that there be a maximum construction noise level. VDOT has a maximum construction noise level of 87 dBA.</p> <p>Since the summer months are typically when most construction activity occurs, allow earlier Saturday construction hours during the summer months.</p> |

\* Items marked with an asterisk are new with the proposed amendment.

|   | PROHIBITIONS  | EXCEPTIONS<br>(Not Subject to Noise Ordinance)  | MAX DECIBELS<br>(Pursuant to Proposed Maximum Sound Level Chart)   | OPTIONS  | COMMENTS  |
|---|---|---|--|--|---|
| <b>4. Outdoor Motor Vehicle or Mechanical Device Repair</b> | 9 p.m. to 7 a.m.  |   | *7 a.m. to 9 p.m.  | 1. No change to prohibitions or maximum decibels.  |   |
| <b>5. Operation of Powered Model Vehicles</b>               | 9 p.m. to 7 a.m.  |   | *7 a.m. to 9 p.m.  | 1. No change to prohibitions or maximum decibels.  |   |
| <b>6. Trash and Recycling Collection</b>                    | In residential districts and/or within 100 yards of a residential dwelling prohibited from 9 p.m. to 6 a.m. | 1. At any location from 6 a.m. to 9 p.m. and,<br>2. When located 100 yards or more from a residential dwelling and not in a residential district, from 9 p.m. to 6 a.m. |  | 1. No change to prohibitions or exceptions.<br>2. Prohibit trash and recycling collection in all locations from 9 p.m. to 6 a.m.<br>3. Prohibit trash and recycling collection in all locations from 7 p.m. to 7 a.m.<br>4. Prohibit trash and recycling collection on weekends and holidays from 7 p.m. to 8 a.m. | Optimally trash collection should not occur during rush hours. In order to avoid the heat of the day, trash haulers prefer to have early morning hours in the summer. |
| <b>7. *Land Fill Operation</b>                              | Within 100 yards of a residential dwelling prohibited from 9 p.m. to 6 a.m.                                 | 1. At any location from 6 a.m. to 9 p.m. and,<br>2. When located 100 yards or more from a dwelling, from 9 p.m. to 6 a.m.   |  | 1. No change to prohibitions or exceptions.<br>2. Prohibit land fill operation in all locations from 9 p.m. to 6 a.m.<br>3. Prohibit land fill operation in all locations from 7 p.m. to 7 a.m.<br>4. Different weekend and holiday prohibition hours of 7 p.m. to 8 a.m.  |   |
| <b>8. Outdoor Truck Loading/Unloading</b>                   | When located within 100 yards of a residential dwelling prohibited from 9 p.m. to 6 a.m.                    |   | *1. At any location between 6 a.m. and 9 p.m. and<br>2. When located 100 yards or more from a residential dwelling between 9 p.m. and 6 a.m. | 1. No change to prohibitions or maximum decibels.<br>2. Prohibit loading activities in all locations from 9 p.m. to 6 a.m.<br>3. Prohibit loading activities in all locations from 7 p.m. to 7 a.m.<br>4. Different weekend and holiday prohibition hours of 7 p.m. to 8 a.m.                                      |   |

\* Items marked with an asterisk are new with the proposed amendment.

|   | <b>PROHIBITIONS</b>   | <b>EXCEPTIONS<br/>(Not Subject to Noise Ordinance)</b>   | <b>MAX DECIBELS<br/>(Pursuant to Proposed Maximum Sound Level Chart)</b> | <b>OPTIONS</b>  | <b>COMMENTS</b>   |
|---|---|--|--|---|---|
| <b>9. *Lawn Equipment Operation</b>                               | Unless otherwise excepted, prohibited<br>1. When located within 100 yards from a residential dwelling, between 9 p.m. and 7 a.m.; and<br>2. When located 100 yards or more from a residential dwelling, between 9 p.m. and 6 a.m. | 1. When located within 100 yards from a residential dwelling, between 7 a.m. and 9 p.m. and,<br>2. When located 100 yards or more from a residential dwelling, between 6 a.m. and 9 p.m.                                     |  | 1. No change to prohibitions or exceptions.<br>2. Allow golf courses to begin operating lawn equipment as early as 5 a.m. when located 100 or more yards from a residential dwelling.<br>3. Prohibit operation of lawn equipment as early as 8 a.m. on Sat. and Sun. and Fed. holidays.   |   |
| <b>10. *Operation of Mechanical Devices for cleaning outdoors</b> | When located within 100 yards of a residential dwelling from 9 p.m. to 7 a.m., unless otherwise excepted.   | 1. At any location from 7 a.m. to 9 p.m. and,<br>2. When located 100 yards or more from a residential dwelling from 9 p.m. to 7 a.m.   |  | 1. No change to prohibitions or exceptions.<br>2. County facilities and/or WMATA shall be an exception from these provisions at all times and in all locations.<br>3. Prohibit outdoor operation of mechanical devices between 9 p.m. and 7 a.m.; and the use of such devices between 7 a.m. and 9 p.m. shall be an exception.  | Bus and trains begin operating well before 7 a.m. and there are limited times when the parking lot is empty and cleaning can occur.   |
| <b>11. *Person, Motor Vehicle or Instrument</b>                   | Unless otherwise excepted, prohibited when plainly audible and discernible inside a residential dwelling with doors and window closed between 11 p.m. and 7 a.m.  | Activities protected by the First Amendment of the Constitution of the United States and Sections 12 (freedom of speech) and 16 (free exercise and non-establishment of religion) of Article 1 of the Virginia Constitution. | 7 a.m. to 11 p.m.  | 1. No change to prohibitions or exceptions except as noted in Option 3 below.<br>2. Mixed use and commercial districts shall be an exception between 7 a.m. and 1 a.m. the following day on Fri. and Sat.<br>3. In commercial and mixed use areas, prohibit when plainly audible inside a residential dwelling between 1 a.m. and 7 a.m. on Fri. and Sat.<br>4. Replace the plainly audible prohibition with a maximum interior decibel level of 45 dBA.<br>5. Maximum decibel levels at all times. | The plainly audible and discernible standard inside a dwelling is a difficult standard to meet and a decibel level may be a fairer standard. However, the use of noise meters by the police has staffing and cost implications. |

\* Items marked with an asterisk are new with the proposed amendment.

|                                  | PROHIBITIONS   | EXCEPTIONS<br>(Not Subject to Noise Ordinance)  | MAX DECIBELS<br>(Pursuant to Proposed Maximum Sound Level Chart) | OPTIONS  | COMMENTS   |
|----------------------------------|--|---|--|--|--|
| <b>12. *Animals</b>              | Unless otherwise regulated, noise from animals that is plainly audible and discernible for more than 10 consecutive or nonconsecutive minutes in any 30 minute period (1) across property lines, (2) across residential unit partitions, or (3) a distance of 50 feet or more from the noise source. | 1. When the animal is responding to pain or injury or is protecting itself, its kennel, its offspring, a person, or<br>2. When the animal is a police dog that is engaged in the performance of its duties at the time of making the noise.   |  | <ol style="list-style-type: none"> <li>1. No change to exceptions.</li> <li>2. Delete the exceptions</li> <li>3. Animal noise is prohibited when the sound is plainly audible and discernible at least once per minute for 10 consecutive minutes within any dwelling unit of another person, at any street edge, or across a real property boundary.</li> <li>4. Animal noise is prohibited when the sound is plainly audible and discernible for more than one consecutive or nonconsecutive minute in any 10 minute period across property lines or residential unit partitions.</li> </ol> | A shorter time period would be easier to enforce. Option 3 is similar to the standard that was adopted by Arlington County in May, 2014.   |
| <b>13. Emergency Work</b>        |  | Any time  |  | <ol style="list-style-type: none"> <li>1. No change to exceptions.</li> </ol>  |  |
| <b>14. *Alarms</b>               |  | <ol style="list-style-type: none"> <li>1. Emission of sound for purpose of alerting people to the existence of an emergency, provided that such alarm signals cease when any such threat is no longer imminent.</li> <li>2. The testing of alarms for fire, emergency, theft or imminent danger between 7 a.m. to 9 p.m.</li> </ol> | Emergency alarm testing between 9 p.m. and 7 a.m.                | <ol style="list-style-type: none"> <li>1. No change to exceptions or maximum decibels except as noted in Option 2 below.</li> <li>2. The exception for testing of alarms shall be limited to no more than 2 continuous or cumulative hours in any one day.</li> </ol>  |  |
| <b>15. *Preempted Activities</b> |  | Activities for the regulation of sound that have been preempted by Federal or State law.  |  | <ol style="list-style-type: none"> <li>1. No change to exceptions.</li> </ol>  |  |
| <b>16. *Snow and Ice Removal</b> |  | Any time  |  | <ol style="list-style-type: none"> <li>1. No change to exceptions.</li> <li>2. Prohibit snow and ice removal between 11 p.m. and 5 a.m.</li> <li>3. Except for snow and ice removal by public safety entities, prohibit snow and ice removal between 11 p.m. and 5 a.m. in residential areas.</li> </ol>   | This applies only to individual property as snow removal on the streets would be an exception. Inherent nature of snow and ice in this area is akin to an emergency and the removal of snow and ice should be encouraged as quickly as possible. |

\* Items marked with an asterisk are new with the proposed amendment.

|                                  | PROHIBITIONS | EXCEPTIONS<br>(Not Subject to Noise Ordinance)   | MAX DECIBELS<br>(Pursuant to Proposed Maximum Sound Level Chart)  | OPTIONS   | COMMENTS  |
|----------------------------------|--------------|--|---|---|---|
| 17. *Motor Vehicles              |              | Motor vehicles traveling on the road right-of-way.   |   | <ol style="list-style-type: none"> <li>1. No change to the motor vehicle exception.</li> <li>2. Trains traveling on tracks located in rail road rights-of-way or easements shall be an exception.</li> <li>3. The operation of airplanes and helicopters shall be an exception.</li> <li>4. Prohibit motorcycles and automobiles that have been modified from operating in residential areas at night.</li> </ol> | Cars traveling on roadways, trains traveling on tracks and airplanes and helicopters flying overhead are subject to state and federal noise regulations. Trains shall include those trains serving an interstate area as well as those servicing the region, such as WMATA and VRE. |
| 18. *Heat Pumps/Air Conditioners |              | Single family dwellings when operating in accordance with the manufacturer's specifications.   | <ol style="list-style-type: none"> <li>1. Single family dwellings not operating in accordance with the manufacturer's specifications.</li> <li>2. All non-single family dwellings</li> </ol>  | <ol style="list-style-type: none"> <li>1. No change to exceptions or maximum decibel levels.</li> <li>2. All heat pumps and air/conditioners would be subject to maximum decibel levels – including those developed with single family dwellings.</li> </ol>  | Not all heat pumps/air conditioners have noise manufacturer's specifications. Overtime, this equipment tends to become louder as mechanical problems tend to develop.   |
| *19. Back-Up Generators          |              | <ol style="list-style-type: none"> <li>1. Use of back-up generators during power outages resulting from storms and other emergencies.</li> <li>2. Routine testing and maintenance of back-up generators between 9 a.m. and 7 p.m.</li> </ol> | <ol style="list-style-type: none"> <li>1. Use of generators during power outages not caused by a storm or other emergency; and</li> <li>2. Routine testing and maintenance of back-up generators between 7 p.m. and 9 a.m.</li> </ol> | <ol style="list-style-type: none"> <li>1. No change to exceptions or maximum decibels except as noted in Option 2 below.</li> <li>2. The exception for routine testing shall be limited to no more than 2 continuous or cumulative hours in any day.</li> </ol>   |   |
| 20.*Impulse Sound                |              | Impulse sound that lasts no more than 3 consecutive or nonconsecutive seconds in any 30 minute time period.  | Impulse sound that lasts for more than 3 consecutive or nonconsecutive seconds in any 30 minute period.   | <ol style="list-style-type: none"> <li>1. Revise the timing in the exceptions and maximum decibels to no more than 2 seconds in any 10 minute time period.</li> </ol>   | Shorter time period is easier to enforce/measure and is a standard used in other jurisdictions..  |
| 21. *Transportation Facility     |              | 7 a.m. to 9 p.m.   | 9 p.m. to 7 a.m.  | <ol style="list-style-type: none"> <li>1. No change to exceptions or maximum decibel levels.</li> <li>2. Subject transportation facilities to the maximum decibel levels at all time.</li> <li>3. Transportation facilities shall be an exception at all times.</li> </ol>  | WMATA and VRE would be considered transportation facilities.  |

\* Items marked with an asterisk are new with the proposed amendment.

|   | PROHIBITIONS   | EXCEPTIONS<br>(Not Subject to Noise Ordinance)  | MAX DECIBELS<br>(Pursuant to Proposed Maximum Sound Level Chart)  | OPTIONS  | COMMENTS  |
|---|--|---|---|--|---|
| 22. *Bells, Carillons and other Calls to Worship  |  | 7 a.m. to 11 p.m., provided that any such sounds do not occur for a duration of 5 minutes or more per hour. | 1. 11 p.m. to 7 a.m. and<br>2. Between 7 a.m. to 11 p.m. when the sounds last for more than 5 minutes in an hour. | 1. No change to exceptions or maximum decibel levels.<br>2. Allow bells and carillons as an exception between 7 a.m. and 11 p.m., provided that such sound does not occur for more than 15 minutes in any one hour and no more than 4 times in any one day.  | Bells and carillons should not be grouped with calls to worship as bells and carillons maybe used to accompany a season with seasonal music, not just a call to worship.                                      |
| 23. *Band performances or practices, athletic contests or practices and other such activities on school or recreational grounds | Use of Loud speakers between 11 p.m. and 7 a.m. Mon. – Fri. and between 11 p.m. and 9 a.m. Sat., Sun. and Fed. holidays. | 7 a.m. to 11 p.m. Mon. – Fri.<br>9 a.m. to 11 p.m. Sat, Sun, Fed. Holidays                                  | 11 p.m. to 7 a.m. Mon. – Fri.<br>11 p.m. to 9 a.m. Sat, Sun, Fed. Holidays  | 1. No change to the prohibitions, exceptions or maximum decibels, except as noted in Options 6 and 7 below.<br>2. Subject this noise source to the maximum decibel levels at all times.<br>3. These facilities shall be an exception at all times.<br>4. Public facilities and/or public parks shall be an exception at all times.<br>5. Prohibit use of dog parks between dusk and 7 a.m. Mon.– Fri. and between dusk and 9 a.m. on Sat., Sun. and Fed. Holidays; and subject dog parks to the max. decibel levels the rest of the time.<br>6. Prohibit use of dog parks between dusk and 7 a.m. Mon.– Fri. and between dusk and 9 a.m. on Sat., Sun. and Fed. Holidays and except dog parks between 7 a.m. and dusk Mon.-Fri. and between 9 a.m. and dusk on Sat., Sun. and Fed. Holidays.<br>7. Notwithstanding the animal provisions outlined in #12 above, animals in dog parks shall be subject to these provisions. | The outdoor lighting standards for sports courts/fields require the field lighting to be turned off at 11 p.m. unless otherwise approved in conjunction with a rezoning, special permit or special exception. |
| 24. All Other Sound Sources Not Listed Above  |  |   | All other sound sources not listed above.   | 1. See the following proposed maximum sound levels table and notes.  |   |

\* Items marked with an asterisk are new with the proposed amendment.

### PROPOSED MAXIMUM SOUND LEVELS

(The current maximum sound levels do not distinguish between the time of day, continuous and impulse sounds, and the different types of uses in Residential Districts.)

| Use and Zoning District Classification                         | Time of Day       | Continuous Sound (dBA) | Impulse Sound (dBA) |
|--|-------------------|------------------------|---------------------|
| Residential Areas (as defined herein) in Residential Districts | 7 a.m. to 11 p.m. | 60                     | 100                 |
| Residential Areas (as defined herein) in Residential Districts | 11 p.m. to 7 a.m. | 55                     | 90                  |
| Non-Residential Areas in Residential Districts                 | All               | 60                     | 100                 |
| Mixed Use Area (as defined herein)                             | All               | 60                     | 100                 |
| Commercial Districts   | All               | 60                     | 100                 |
| Industrial Districts   | 7 a.m. to 11 p.m. | 72                     | 120                 |
| Industrial Districts   | 11 p.m. to 7 a.m. | 65                     | 100                 |

| Proposed Maximum Sound Levels Options and Comments   |   |
|--|---|
| Options  | Comments  |
| 1. Modify the above proposed Maximum Sound Levels Table and impulse sound definition as outlined in Options 3, 5, 6 and 7 below.   |   |
| 2. Add a daytime definition of 7 a.m. to 9 p.m. on weekdays and between 9 a.m. and 9 p.m. on Sat., Sun. and Fed. holidays. Add a nighttime definition of between 9 p.m. and 7 a.m. on weekdays and between 9 p.m. and 9 a.m. on Sat., Sun and Fed. Holidays. Designate either daytime or nighttime in the time of day column.  | This is a similar approach to what Arlington County, City of Falls Church, City of Alexandria and Montgomery County have taken.   |
| 3. Decrease the nighttime maximum impulse sound level in residential areas in residential districts to 80 dBA.   | New Jersey, Oregon and Connecticut have statewide noise regulations with a maximum daytime residential impulse sound level of 100 dBA and a maximum residential impulse sound level of 80 dBA.  |
| 4. Decrease the residential maximum impulse sound levels in residential areas to 80 dBA at all times.  |   |
| 5. Increase the maximum continuous sound level in mixed use areas and commercial district from 7 a.m. to 11 p.m. from 60 to 65.  | The 60 dBA maximum sound level is too limiting for daytime noise in more urban and commercial areas.  |
| 6. Revise the maximum impulse sound levels to be measured at the peak levels (dB) and not as a weighted average (dBA).   | The dBA measurement is a weighted average and dB is based on the peak volume. This would require the use of and purchase of impulse sound meters and is widely used in measuring impulse sound. |
| 7. Change the proposed impulse sound definition as follows: Impulse sound shall mean acoustical energy characterized by a rapid rise to a maximum sound pressure followed by a somewhat slower decrease in sound pressure, both occurring within one second. Impulse sound may include, but is not limited to, sound from the firing of weapons, pile drivers or blasting. | This definition is similar to definitions from Arlington County, City of Alexandria, City of Falls Church and Montgomery County.  |

\* Items marked with an asterisk are new with the proposed amendment.