

ZONING REGULATIONS
297 Attachment 18

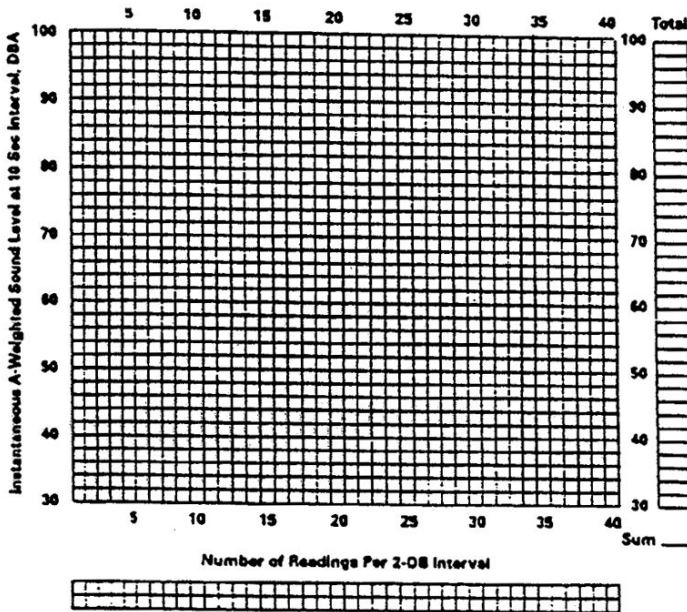
Appendix H
Guide for Noise Levels

Community Noise Measurement Data Sheet

Site No. _____ Packet No. _____ Cluster _____ Area _____

Location _____
Operators _____
Date _____ Day: M Tu W Th F Sat Sun
Time _____ am/pm to _____ am/pm
Wind Speed _____ km/h (_____ mph)
Air Temperature _____ °C (_____ °F)

Master Check ()
Battery: OK _____ Replaced _____
Settings: A _____ Slow _____
Calibrations: Set to _____ End _____



Miscellaneous (after data coll.)
Background Noise Sources: _____
Unusual Situations or Interferences: _____
Comments: _____

Description	Evaluation
_____ V. Quiet	_____ V. Accept.
_____ Quiet	_____ Acceptable
_____ M. Quiet	_____ M. Acceptable
_____ Noisy	_____ Unacceptable
_____ V. Noisy	_____ V. Unaccept.

Code for identifiable simple noise sources

Transportation	Machinery
E -- Emer. Veh.	C -- Construction
G -- Gen. Avia.	Y -- Yard Maint.
J -- Jet	F -- Factory
H -- Helicopter	Q -- Household
R -- Railroad	Other
T -- Truck	D -- Door
A -- Auto	P -- People Noise
B -- Bus	X -- Unidentifiable
M -- Motorcycle	
S -- Service Veh.	
V -- Off-Rd. Veh.	

Further Comments: _____

CHARLES COUNTY CODE

Computational Work Sheet
to Hand-Calculate L_{eq}
from Sound Level Meter
Measurements Recorded
on Data Log

A	B	C	D	Data Requirements:																																																																																																																																																																																																																																																			
Noise Level Band, dB	Count	Relative Noise Energy	Relative Total Noise Energy																																																																																																																																																																																																																																																				
100	x	=		<ul style="list-style-type: none"> Each noise reading must be taken at a standard time interval between measurements. Each noise level recorded is the instantaneous level. 																																																																																																																																																																																																																																																			
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SUM B = _____		SUM D = _____		<p>Step Procedure</p> <ol style="list-style-type: none"> Enter number of counts per noise level in Column B. Multiply the counts in Column B by the number in Column C and enter the result in Column D. Add all values in Column B to determine Sum B, add all values in Column D to determine Sum D, and divide Sum D by Sum B. Locate the value in Column C that is approximately equal Sum D/Sum B. The corresponding value in Column A is equal to L_{eq}. Interpolate to the nearest 0.5 dB. <p>Example</p> <p>Given the following count data, find L_{eq}</p> <table border="1"> <thead> <tr> <th>Noise Level</th> <th>Number of Occurrences</th> <th>A</th> <th>B</th> <th>C</th> <th>D</th> </tr> </thead> <tbody> <tr><td>81</td><td></td><td>81</td><td></td><td></td><td></td></tr> <tr><td>82</td><td>2</td><td>82</td><td>2</td><td>x</td><td>2,000</td><td>=</td><td>4,000</td></tr> <tr><td>80</td><td>0</td><td>80</td><td>0</td><td>x</td><td>1,260</td><td>=</td><td>0</td></tr> <tr><td>78</td><td>5</td><td>78</td><td>5</td><td>x</td><td>794</td><td>=</td><td>3,970</td></tr> <tr><td>76</td><td>11</td><td>76</td><td>11</td><td>x</td><td>501</td><td>=</td><td>5,511</td></tr> <tr><td>74</td><td>4</td><td>74</td><td>4</td><td>x</td><td>316</td><td>=</td><td>1,264</td></tr> <tr><td>72</td><td>0</td><td>72</td><td>0</td><td>x</td><td>200</td><td>=</td><td>0</td></tr> <tr><td>70</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>68</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>66</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>64</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>62</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>60</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>58</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>56</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>54</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>52</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>50</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>48</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>46</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>44</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>42</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>40</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>38</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>36</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>34</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>32</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>30</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr> <td colspan="2">SUM B = 22</td> <td colspan="2">SUM D = 14,745</td> <td></td> </tr> <tr> <td colspan="2">SUM D/SUM B = 670</td> <td colspan="2">$L_{eq} = 70$ dB</td> <td></td> </tr> <tr> <td colspan="4"></td> <td>• by linear interpolation in Column C and Column A</td> </tr> </tbody> </table>	Noise Level	Number of Occurrences	A	B	C	D	81		81				82	2	82	2	x	2,000	=	4,000	80	0	80	0	x	1,260	=	0	78	5	78	5	x	794	=	3,970	76	11	76	11	x	501	=	5,511	74	4	74	4	x	316	=	1,264	72	0	72	0	x	200	=	0	70								68								66								64								62								60								58								56								54								52								50								48								46								44								42								40								38								36								34								32								30								SUM B = 22		SUM D = 14,745			SUM D/SUM B = 670		$L_{eq} = 70$ dB							• by linear interpolation in Column C and Column A
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