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**Alberta Utilities Commission**

to Mrs. Joan Yu and

via email: [joan.yu@auc.ab.ca](mailto:joan.yu@auc.ab.ca)

*Date* Sunday, May 14, 2023  
*Project* AUC Rule 012 Update as communicated via AUC Bulletin 2023-01 April 25, 2023  
*Re:* Stakeholder Consultation  
*Our Reference* AUC2023-M1  
*Your Reference*

Mrs. Yu,

dBA Noise Consultants Ltd. has taken the opportunity to review the proposed changes on document “2023-04-25-Rule012-CommentMatrix” and included their responses in the table below.

Question	Question Content	Comments
1	<p>Please comment on definition of suburban and urban receptors proposed for Table 1 of Rule 012.</p> <ol style="list-style-type: none"> <li>1. Is it reasonable to add two columns to Table 1 of Rule 012 for suburban and urban receptors</li> <li>2. Has the Commission selected appropriate dwelling densities for suburban receptors and urban receptors</li> </ol>	<p>dBA Noise Consultants remains of the opinion that dwelling density might no longer be fitting for the current Alberta situation, see our comments from July 7 2022 AUC Bulletin 2022-08. If the Commission however want s to move forward with Table 1 based on dwelling density then we have the following comments:</p> <p>Ad 1: The Table should include 3 instead of 2 categories, following HC guidance (<i>Guidance for Evaluating Human Health Impacts in Environmental Assessments: Noise</i>).</p> <p>Ad 2: No, first of all it is miscalculated because the conversion from density per square kilometre to density per quarter section has not been made. Secondly the division in two categories is too coarse.</p> <p>dBA Noise Consultants is also of the opinion that the definition of “noise receptor” should align with Health Canada’s definition of noise sensitive receptors and move that these noise sensitive receptors need to be clearly codified and identified on formal maps.</p>
2	<p>Please comment on basic sound levels for suburban and urban receptors proposed for Table 1 of Rule 012. In particular, the Commission requests that noise consultants and others who may represent members of the public comment on the basic sound levels for suburban and urban receptors from the perspective of suburban and urban residents.</p>	<p>As indicated in the answer to question 1, the dwelling density was miscalculated. Also the division in just two urban categories is too coarse. To align these categories with the HC guidance categories and assuming that the indicated population density in a category is the mid value for that category, the following would be our suggestion: see table below.</p>
3	<p>Please suggest changes to subsection 2.5(2) of Rule 012. In particular, please specify an appropriate development milestone for a facility that has been predicted or measured to be compliant with Rule 012. After this milestone, owners/residents of a new dwelling should be aware that a new facility will be located nearby and the PSL at the new dwelling will be the greater of the modelled CSL at the start of the dwelling construction or the PSL as determined in section 2.1 of Rule 012.</p>	<p>No comment.</p>
4	<p>Please comment on whether Rule 012 should include tonality evaluation for all audible frequencies</p>	<p>Yes it should, but it should not be limited to only tonal noise. following HC guidance and ISO 1996-1 (<i>Acoustics – Description, measurement and assessment of environmental noise</i>) , impulsive noise (regular impulsive, highly impulsive and high-energy impulsive) should also be included as well as a correction for areas where there is a greater expectation of peace and quiet.</p>
5	<p>If Rule 012 should include tonality evaluation for all audible frequencies, please comment on the circumstances where it would be appropriate to evaluate tonal noise:</p>	<p>For both of the indicated situations. Evaluation should include audibility at the receptor again following HC guidance and ISO 1996-2.</p>

Question	Question Content	Comments
	<ol style="list-style-type: none"> <li>Should tonality evaluation be required in all CSL surveys ordered by the Commission?</li> <li>Should tonality evaluation only be required in CSL surveys arising from complaints?</li> </ol>	At the prediction stage proponents should endeavour to include as much of an assessment of tonality as possible to prevent situations where tonality could become an issue after the fact. Especially if the noise sources are known to have tonal components like e.g. Substations.
6	Please comment on potential unintended consequences if Rule 012 were to require tonality evaluation for all audible frequencies.	Audibility can only be determined after a facility is operational. Therefore applying the correction factor based on a prediction might result in potentially limiting the applicant unnecessarily. For existing situations including a tonality correction for all frequencies might result in a reduced PSL and a potential non-compliance. This could be resolved with a grandfather clause for existing situations.
7	If the Commission were to require tonality evaluation for all audible frequencies, should any changes be made to the current criteria for low frequency noise? In particular should the dBC minus dBA element of the low frequency evaluation be eliminated?	dBA Noise Consultants is of the opinion that the AUC should allocate appropriate funds to perform research into these topics and not transfer this burden to consultants and other stakeholders. Instead of putting these questions out in the community, the AUC should come up with properly researched proposals.

Proximity to transportation	Dwelling density per quarter section					
	1-14 (1-8)*	14-109 (1-160)*	110-280 (160-280)*	281-950	951-3000	>3000
HC qualification	Quiet rural	Quiet suburban residential	Normal suburban residential	Urban residential	Noisy urban residential	Very noisy urban residential
Category 1	40	43	48	53	58	63
Category 2	45	48	53	58	63	68
Category 3	50	53	58	63	68	73

Sincerely,



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