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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* Thursday, July 7, 2022  
*Project* AUC Rule 012 Update as communicated via AUC Bulletin 2022-08 June 3, 2022  
*Re:* Stakeholder Consultation  
*Our Reference* AUC2022-M1  
*Your Reference*

Mrs. Yu,

The Alberta Utilities Commission (AUC) is reviewing its rules with a focus on eliminating requirements that may have become outdated or unnecessary and is exploring opportunities to streamline and improve regulation and adjudicative processes. DBA Noise Consultants Ltd. has taken the opportunity to review the proposed changes on document “2022-06-03-Rule012-CommentMatrix-Revisions” and to provide comments in section 1 below following the topic structure in set document. Section 2 includes several considerations for changes to Rule 012 that in the opinion of dBA Noise Consultants Ltd. would align it better with the current Alberta society and national and international regulations on noise.

## **1 Comments on 2022-06-03-Rule012-CommentMatrix-Revisions**

### ***Topic 1.1 Noise receptor***

dBA Noise Consultants Ltd. thinks that the term “Facility Property Boundary” should be replaced by “Facility Fenceline” to prevent sterilization of lands. Likewise for the other incidences of the term “boundary” which is open for

interpretation. The term “fenceline” would be more defined.

### ***Topic 1.2 Overview of Noise Impact assessment Terminology and 1.3 New Noise Impact Assessment Flowchart***

dBA Noise Consultants Ltd. believes that this section only convolutes the Rule and that categories a) (flowchart NIA) and b) (summary form NIA) should be one category, the “summary form NIA” category. This category would address all of the more simple situations in which an initial hand calculation according to the formula's provided in Appendix B demonstrate a noise impact at receptors of at least 3 dB below the PSL. If this summary form NIA demonstrates that the predicted noise impact is less than 3 dB below the PSL a full NIA would be required. No nett increase of 0.4 dB would be deemed acceptable in cases where the noise contribution of third parties cannot be assessed in detail and in which case it is deemed that they used all available noise room.

In regards to the existing text in Appendix B: How is a near field and a far field residence defined. These are discretionary terms and create confusion in general and in regards to the terminology for the acoustical near field and far field. The acoustical near field and far field are defined technical terms and the AUC suggested definition is not aligned with the technical meaning.

The formulas provided for the calculation of the sound pressure at a distance based on the sound power level of a source assumes a worst case scenario of full sphere radiation. However in many cases sources radiate as half spheres.

### ***Topic 1.4 Submission and retention of noise impact assessment records***

dBA Noise Consultants Ltd. welcomes the idea to have just one clause in Rule 012 in this regards. However we would like to expand the new clause in section 3.4 to also include all communications and records with stakeholders that relate to

the noise impact of a facility not necessarily limited to only those pertaining to a noise impact assessment.

### ***Topic 1.6 Ambient Sound Level***

dBA Noise Consultants Ltd. would welcome the following changes to these sections:

Since the population of Alberta has increased significantly over the past decades with significant changes to its towns and cities, we feel that the approach taken in Rule 012 has become outdated especially with its referral to the rural ambient sound level and its approach to determination of the PSL based on dwelling density only. We therefore propose to delete the first sentence in the proposed section 2.6(2) and to offer the option of either using the assumed ambient sound levels according to Table 1 with an explanation on why an applicant thinks these are valid or provide the option to establish the ambient sound level by measurements or calculations (the latter in case of receptors mainly impacted by traffic noise) and use these instead of Table 1. The whole A2 adjustment with its separate application and approval procedure could then be eliminated and replaced by a regular noise assessment with a PSL based on a measured or calculated (traffic noise) ASL. This would resolve a lot of the discrepancies that arise in urban areas currently and diminish the regulatory burden for proponents. Also, concerned stakeholders typically do not understand why no ambient sound level survey was conducted, and frequently request one.

Current 2.6(6) Both applicants and stakeholders should have equal rights in regards to the determination of the ASL. Therefore in circumstances where applicants and stakeholders find that the ASL from Table 1 is not representative of the project area, measurements for an A2 adjustment may be considered, and not left to the discretion of the AUC.

### ***Topic 1.8 Conditions for a time extension request***

dBA Noise Consultants Ltd. feels that the original condition a) “the licensee is considering major amendments to the approved facility.” should not be removed.

### ***Topic 1.10 Statistical Method***

dBA Noise Consultants Ltd. is of the opinion that the statistical method should *not* be removed in order to give some validity to the data. The simplified method does not set any limits to sample size or if an arbitrary timeframe would be considered cannot determine if the reported results have any actual value. A statistical test however can provide some insights into how accurate the actual results are.

### ***Noise receptors***

The commission proposes to add a line to the definition of “noise receptor” to acknowledge other types of receptors, for example sites of seasonal occupation or sites having ceremonial or cultural importance, on a case by case basis. dBA Noise Consultants Ltd is of the opinion that this addition is too little defined and opens the playing field for unequal treatment. We propose to align instead 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.

## **2 Considerations**

### ***Consideration to include penalties for the character of the sound***

In order to provide balance between the interests of applicants and residents dBA Noise Consultants Ltd. is of the opinion that the character of the sound should be included when assessing the noise impact of a proposed facility, such as tonal noise (e.g. transformer hum) and impulsive noise. The character of the noise should be assessed according to Health Canada guidance and international standards.

***Consideration to change the PSL determination and the classifications and classification methodology in Table 1***

We propose a discussion on changing the PSL determination and the classifications and classification methodology in Table 1 to better represent the actual current Alberta situation. In regards to Table 1 dBA Noise Consultants Ltd. has the following comments:

- “Dwelling density” as an indicator for the noise environment is no longer fitting. There are areas with a very high density and low ambient sound levels and vice versa, such as industrial or commercial areas with few dwellings, but high ambient noise levels;
- The incremental steps for proximity to infrastructure are too coarse and not representative of the actual sound environment and as such lead to problems in practice where residences are just beyond a classification boundary;
- Urban and industrial areas are not included in the table and are not represented well with the current methodology.

We therefore propose to use actual ambient sound levels as an indicator of acceptable noise levels from AUC regulated industry. Both proponents and stakeholders should be able to conduct ambient sound level surveys. The AUC has no role in allowing or not allowing to conduct an ambient noise survey as a tool in helping to set the PSL; conducting an ambient sound level survey helps to acoustically qualify an environment.

***Consideration to split Rule 012 in a regulatory and technical document***

dBA Noise Consultants Ltd. proposes to consider to split Rule 12 in two separate documents:

- a regulatory document that establishes thresholds to be adhered to and;
- a technical document describing how to conduct sound surveys to obtain

the parameters required for the assessment of the regulatory thresholds such as e.g. Noise impact assessments, ambient sound surveys, comprehensive sound levels etc.

Sincerely,



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