

**CAA Standards Committee
October 2014 Meeting
Environmental Noise Subcommittee Report**

Submitted by: Bill Gastmeier, HGC Engineering

The following items are carried forward or presented for informational purposes.

- MOE (Ontario) Guideline NPC 300 has been released.

It replaces (merges and aligns) Land Use Planning Guideline LU-131 used for Planning Act Applications with Noise Pollution Control Guidelines NPC 205 and NPC-232 used to obtain EPA approvals.

One new feature is providing Municipalities the discretion to create a Class 4 acoustical environment for lands designated for new noise sensitive land uses near existing industrial (stationary) noise sources. It would permit significantly higher industrial noise impacts at the building facades with restricted options for noise mitigation for those facades such that indoor sound levels remain low. Several municipalities have exercised this option, but the path forward in terms of how lands are to be designated as Class 4 is not clear and is being dealt with by Municipalities on an individual basis.

One issue which has been clarified is that vacant lots zoned to permit a noise sensitive use (agricultural or otherwise) are to be treated as noise sensitive points of reception for assessment purposes. Mitigation may not be required until development takes place, but NPC-300 is protecting the zoning permissions.

Also clarified is the issue of an infrequent event. An event which occurs less than twice a month and for less than 30 minutes can be considered as infrequent and does not need to be included in the “predictable worst case” assessment scenario.

Another noteworthy development concerning NPC-300 that has recently arisen relates to the issue of whether the sound emissions from multiple, independent industrial facilities need to be summed and assessed jointly when applying NPC-300 from the Land Use Planning perspective. That is, in the situation of a proposed new residential development adjacent to multiple existing industries, does NPC-300 require that the cumulative impact be assessed? Recently, an acoustical consultant in Ontario raised this issue with the Ministry, and received informal direction that the sound of the multiple industries (i.e., “Stationary Sources”) should indeed be summed and evaluated jointly against the limits. That consultant then circulated the Ministry’s response to a number of acoustical consultants in the Province, for reference. However, in the draft version of NPC-300 that was circulated in 2010, Section C5, “Noise Impact Assessment – Multiple Sources” stated that, “Where multiple, independent Stationary Sources are involved, each source is to be evaluated individually for compliance with the sound limits and design of mitigation.” Interestingly, this sentence was not included in the final version of NPC-300, such that as written, there is no direction on this matter. There is ongoing contention on the issue, and clarification is needed.



Jack Davis from Alberta has provided the following information. Thanks Jack.

- Direct Current Transmission Lines and Converter Stations

Alberta is continuing with new development for its electrical infrastructure. Among other projects, two High Voltage DC transmission lines (Western Alberta Transmission Line (WATL) and Eastern Alberta Transmission Line (EATL)) have been approved and are currently under construction in the province.

Recently, the Commission received a landowner complaint related to noise originated from transmission line construction using “implosive devices” to splice transmission line conductor joints. The complaint alluded that the landowner experienced a ‘concussion-like’ exposure after being subjected to repeated implosion events.

- Northeast Capital Industrial Association (NCIA)

The Northeast Capital Industrial Association (NCIA) is a not-for-profit cooperative representing more than 25 industrial members operating in Strathcona County, Sturgeon County, the City of Fort Saskatchewan and Lamont County. The NCIA in collaboration with the Energy Resources Conservation Board (now the Alberta Energy Regulator or AER) have designed a regional approach to environmental noise management—the Regional Noise Management Plan (RNMP) – a regional solution for NCIA member companies to comply with the noise regulation for energy related facilities in Alberta. The RNMP received final approval in the spring of 2013. The AUC concurred with the Alberta Energy Regulator that the NCIA RNMP and its associated regional noise baseline model is an appropriate approach to address the environmental impact of noise for facilities in Alberta’s Industrial Heartland Area. The 2014 NCIA Regional Noise Management Report was submitted to the AER and AUC in September 2014.

For more information on the NCIA follow the link to the NCIA at <http://www.ncia.ab.ca/>

- Noise Inquiries

The Alberta Utilities Commission is anticipating an increased number of inquiries regarding environmental noise emissions from electrical facilities (corona noise and transformer noise) and power plants (e.g. wind farms and natural gas fired power plants) with the increased public awareness of issues and the increased use of the ‘social media’.

- Counties and Municipal Districts

Several Counties and Municipal Districts in the province of Alberta have drafted noise bylaws pertaining to wind farm development and the Municipal District of Pincher Creek has rezoned private lands where wind turbines have been approved as ‘Wind Farm Industrial’.

- Wind Farm Measurement

The AUC is continues to review the literature to gain more insight into measurement techniques and methodologies used in the determination of compliance for wind farm operations with noise regulations.