

# AN OLD NOISE ASSESSMENT IS RISKY BUSINESS

*How Industrial Facilities Can Prepare Their Operations for  
New Residential Developments*



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Canada is experiencing a [housing shortage](#). The Ontario government [called this a crisis](#) and announced ambitious plans to build at least 1.5 million homes over 10 years. It is a big number and space is limited.

Developers usually seek suitable land located away from industrial areas and noisy transportation. But as land zoned for residences becomes scarce, builders are looking at space near established industrial and commercial facilities. A facility may have operated for decades with no noise complaints but if a residential development moves next door, noise could have a significant impact on operations.



### THE PROBLEM

Is your old or missing Environmental Compliance Approval (ECA) a risk to your business operations?

Once new neighbours move in, the burden of noise control lands squarely on the shoulders of the long-established facility – not the housing developer. In addition to noise-control costs, this could lead to restrictions or limitations to ongoing operations. Even if a facility has an existing provincial approval, it can become an issue. It is more painful if no approvals are in place.



Provincial approval is required in Ontario for any facility generating noise, such as manufacturing and assembly plants, pits and quarries, power transmission stations, truck distribution centres, and supply depots. This includes either an [Environmental Compliance Approval \(ECA\)](#) or a registration to the [Environmental Activity and Sector Registry \(EASR\)](#).

The EASR system was implemented in 2017 to allow lower-risk facilities to get approval without a lengthy review process. This also cleared up a previous gray area – the ECA requirements for many of these lower-risk sectors were not enforced and generally weren't expected.

Historically, there has been a general policy in land-use planning that any new proposed development has to be built to accommodate an existing operation, and noise controls were part of the plans. If the plan was not practical, source-based noise controls could be installed at existing facilities at the developer's expense.

In today's highly regulated environment, the approach has shifted to strictly address only approved facility operations. So if a facility's operations are not in compliance, then the developer's responsibility, if anything, is only for the

noise mitigation above and beyond what's already needed to get the up-to-date approvals. In practice, this shifts the majority of the burden of compatibility to the industry.

It means that even a facility operating for decades with no noise complaints can be hit with new controls and operational changes, plus the installation costs to accommodate a new development if existing environmental approvals are not in place.

Even if a facility is entirely exempt from provincial approval, the risk from encroachment is still real. For example, restaurants and grocery stores are not ordinarily subject to provincial approval, but they need to meet the requirements of local municipal noise by-laws. New neighbours complaining about night-time truck deliveries or a busy patio could result in profound consequences for established businesses.

Businesses categorized as lower-risk in the eyes of the province, such as breweries or bakeries, can also be forced to mitigate noise for new developments if their provincial approval isn't current.



## CLASS 4 ACOUSTICAL DESIGNATION: THE IMPACT ON INDUSTRIAL OPERATIONS



Industrial land is not normally approved for development because it could be deemed non-compliant with its existing approvals. But the [Class 4 designation](#) was created as a tool for municipalities to permit infill developments that were ordinarily not feasible, yet remain consistent with provincial noise guidelines.

It primarily allows new developments to have more relaxed sound limits so industry and residential developments can co-exist more easily. This designation allows for higher daytime and night-time sound level limits, up to 10 dB more than would typically be permitted around residential dwellings and associated outdoor living areas. The higher noise levels are managed by specified options such as warning clauses, air conditioning to allow windows to remain closed, fixed windows, and glazed, enclosed balconies that separate the living areas from the exterior. The idea is to reduce noise complaints at high-density developments built on infill land.

Class 4 is intended to help a municipality transition away from existing industrial areas. As an existing facility with no plans to move, this should raise a red flag. With residential properties in close proximity, there is always an increased risk of complaints due to noise issues that might not be identified earlier. This may force the facility to shoulder the mitigation costs or, worse, be pushed out of the area.

The increase to sound level limits does work both ways, meaning this will allow for future expansion despite new residences. Tread carefully, though. It is not clear how the courts would address complaints from a steady noise level 10 dB above what would previously be considered acceptable under the same conditions. The potential adverse effect from an acoustical Class 4 designation is still untested by the courts.



## KNOW YOUR RIGHTS: HOW TO PROTECT YOURSELF



The *we were here first mentality* will not work. But here are some steps to protect your business with the right tools and education.

1

**Keep your provincial approvals current:** Periodically audit your compliance management system to ensure ECA requirements are still being met. This is critical to ensure any changes in operations or equipment stay within the sound-level limits. Any facility changes require a documentation update. Even with no changes, the reports must be updated every 10 years.

2

**Actively monitor for proposed developments:** Any vacant or derelict land in your area could be developed, so keep an eye out for applications. Putting your head in the sand won't help. There's often a legal requirement to mail notification to nearby facilities within a specific distance of a proposed development, but the area of influence of many facilities can be outside this setback, so don't rely on passive monitoring or mail. Stay in touch with municipal planning to find out the status of neighbouring lands and watch for mandatory posted notices of any proposed changes to a site. Companies with multiple properties will often engage an external planning agency to help with monitoring for any relevant notices. Even seemingly established lands can be quickly converted for redevelopment, so active surveillance is crucial.

3

**Be ready to appeal:** Third parties in Ontario have the right to formally appeal any Zoning By-law Amendments (ZBAs). Make sure to use this leverage to protect your operations. If possible, get involved at the Official Plan (OP) stage as this will set up future zoning changes. This right was recently proposed to be removed in [Bill 23, More Homes Built Faster Act](#), but opposition led to the right being retained. If the facility files an objection on time, they have leverage to encourage the developer to come to the table and reach an agreement to ensure operations can continue in compliance with the sound level limits.



### AVOID EXPENSIVE ENCROACHMENT ISSUES

- » An exterior insulation manufacturing facility in an urban core being forced to close up shop and move all its operations out of province.
- » A works yard without proper permitting forced to remove and alter its operations to accommodate a new neighbouring subdivision.
- » A retail store needing to implement loading area retrofits costing in the seven figures due to noise complaints.
- » An abattoir, in operation for decades without proper approvals, having minimal negotiating power with developers proposing new houses surrounding the property and limiting its future.

4

**Be open to collaboration:** The priority is to protect your future business. Being adversarial rarely works. A proposed development will not be refused simply because the neighbours weren't picking up the phone. The best-case scenario is the developer paying for facility upgrades to protect you from future noise complaints. Sometimes physical noise controls aren't possible, and a compromise or agreement is needed. A restrictive covenant registered on title or warning clauses included in all purchase and sale agreements can add some protection.

5

**Communicate:** Early and frequent communication with your local municipality and later with the residential developer ensures everyone knows what to expect and what is being done, and it creates a more positive relationship that is more conducive to agreeable resolutions.

The province needs more housing, so residential developments will continue to encroach on existing industrial operations. Being aware of the regulations and being proactive can help protect industry owners and prevent being uprooted.



# CASE STUDY: VERBIO BIODIESEL CANADA



**Conscious collaboration:** How a responsible facility can accommodate an encroaching development without affecting long-term operations.

There are many cautionary tales about the potential consequences of encroachment. Verbio Biodiesel Canada is an example of how being open to collaboration can help navigate a potential noise issue with neighbours.

**The Issue:** Verbio Biodiesel Canada Corporation produces biodiesel and crude grade glycerin on an industrial scale in Welland, Ontario.

Verbio was in the process of amending its existing Environmental Compliance Approval (ECA) to accommodate a future expansion of operations when it became aware of two planning applications for separate development proposals.

The developments comprised residential subdivisions with a number of uses, including single-detached dwellings, semi-detached dwellings, schools, parks, and mixed-use lots.

# CASE STUDY: VERBIO BIODIESEL CANADA



**The Solution:** Aeroustics was engaged to quantify the noise impacts and help navigate the potential risks with a new neighbouring noise-sensitive land use. Our team reviewed the plans for the subdivisions to ensure appropriate sound-level limits will be met. We built a 3D noise-prediction model based on detailed topography information, site measurements, and specifications of proposed equipment. Using this model, we predicted the noise at the future subdivisions and identified some potential compliance issues at some of the proposed dwellings.

The developer's noise consultant had considered the facility based on the information available, but there were gaps in the noise control design due to a lack of detailed sound data and operational information. Using the potential dwellings' final grading information provided by the developer, we came to a consensus on the height and extent of a combination berm and fence acoustic barrier to protect the rear yards of dwellings along the property line.

The development proposed an acoustical Class 4 designation for the dwellings directly adjacent to the Verbio facility. This led to an interesting evaluation of compliance at the second row of dwellings, which retained the regular Class 2 sound level limits up to 10 dB more stringent than dwellings across the street. After careful consideration of the risk of noise complaints from new neighbours balanced with the headroom for future expansion, Verbio deemed the Class 4 designation acceptable.

Throughout the process, the Aeroustics team facilitated discussions between Verbio's plant manager, the developer and its noise consultant, the Town of Welland, and the Ministry of the Environment, Conservation and Parks (MECP). Not only was the client advised on the required limits, the Aeroustics team also provided guidance on the implications of the acoustical Class 4 designation and how to minimize the risk of future noise complaints.





## ABOUT AERCOUSTICS

Aercoustics is uniquely qualified to perform acoustical services and studies, as required by the MNRF, MECP and other reviewing authorities, efficiently, accurately and on schedule. Our combination of practical knowledge, familiarity with applicable MECP noise guidelines, and significant experience in producing Acoustic Assessment Reports to support our clients has maintained our position as a go-to consultant for environmental acoustical engineering services throughout North America, and abroad.

Our team has a thorough understanding of applicable guidelines and regulations, but we also know each project faces its own noise modelling and mitigation requirements. We look at every site holistically, working closely with our clients to understand their goals before delivering practical solutions that balance client priorities and community standards. For Aercoustics, every project is an opportunity to improve the soundscape of the world around us. For more information, please visit [www.aercoustics.com](http://www.aercoustics.com).

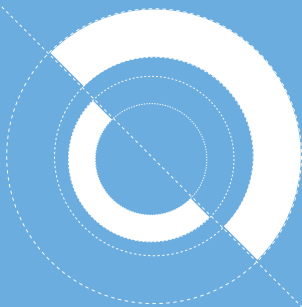
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**EXPERIENCE THE SOUND.  
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