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Outdoor Noise - Case Study

eNoise Control has been involved with numerous outdoor community noise applications. We recommend hiring an Acoustic Consultant such as our firm for providing such professional services as:

- Property Line sound readings
- Noise Source analysis
- Near and Far Field sound mapping
- Sound Engineering recommendations for noise reduction
- Community Noise Ordinance analysis
- Acoustic Report generation

Typical community noise sources are:

- Transformers (transformer stations)
- Outdoor Air Cooled Chillers
- **Exhaust Stacks**
- **Power Plants**
- **Delivery Truck Yard**
- HVAC equipment (rooftop)
- Fans and Blowers
- **Gas Compressors**
- Generators
- And many others.....

Below is an actual case history of eNoise Control's involvement with outdoor environmental noise control dealing with transformer station noise.

A power company contacted eNoise Control regarding noise complaints from a residential area close to the company's transformer station. The customer attempted to erect a "plywood barrier" to help "stop" the noise. This was met with very little success.

eNoise Control was then hired to conduct a Sound Survey and Acoustic Feasibility Study. Our staff performed this

study in the field during different operating power loads. We conducted property line readings and compared those readings to any local noise ordinances. Our engineering conclusion and recommendation was for the erection of a modular acoustic steel sound barrier wall. Unger designed the height, width, and position to give the optimum sound reduction. At right is a picture of the transformer before the sound wall. The next picture is a photograph of the acoustic steel sound wall after installation.



Engineered sound control wall installed



Transformer station near residential house before

eNoise Control confirmed, with sound readings, after installation of the acoustic steel sound wall that our acoustic goals had been met. Transformer noise can be low frequency tonal in nature and we do recommend hiring an Acoustic Engineer such as eNoise Control to assist in the design of your noise abatement.