



NOISE ?

Is it a necessary evil or can we control the din which threatens to overwhelm urban living?

Some towns, aware of the noise problems of some of America's biggest cities, have passed excessively restrictive laws to prevent noisy industries from moving in. In some cases, these laws are made part of the zoning code; in other cases, they are added to local statutes. Certainly, these measures protect citizens against noise annoyance, but they also keep out industries which can pay sizable community taxes.

In other places, along main highways, where the noise of trailer trucks fills the air, communities are adopting strict regulations against these vehicles. Truckers have had several years now to add modern, highly efficient mufflers to their vehicles' exhaust systems, but few have done so. The result is restriction and harassment.

Local police stop trucks and check everything from required safety equipment to maximum load in order to make truckers realize that a good muffler costs considerably less than time spent on inspections. It's a tough battle, but it looks as if the communities are going to win it.

What are communities across the country doing about this complex problem of noise? What can be done to speed noise control? Pass more laws?

Some major cities have effective anti-noise legislation. Among these are Chicago, New York, St. Louis, and Milwaukee. Chicago and Warwick, R. I., have performance-type zoning codes which specify the maximum noise level permitted at the property line of the residential area that is nearest to an industrial zone.

Scores of cities with populations exceeding 100,000 have laws regarding automotive mufflers. All but nine states have laws specifying that mufflers must prevent "excessive, unusual, and/or unnecessary noise." The major problem is proving that given trucks do make

too much noise in and around cities.

Starting with Milwaukee, several cities have adopted use of a noise meter and set maximum meter levels, measured at a given distance from the vehicle. But enforcement is difficult.

The best solution of all lies in education. Your town can start a noise-

education campaign with local police issuing warning tickets to drivers of noisy vehicles. A statewide or national educational campaign could show some actual results of using a cheap and a premium muffler on demonstration trucks equipped to show power output versus fuel consumption fully loaded.

Truckers have enough trouble trying to keep taxes and license fees for their heavy vehicles down to reasonable levels. They might find communities more responsive if they themselves cooperated by reducing the exhaust noises of their trucks voluntarily.

As to industrial noise, the handful of professional engineers working in this field have helped many firms solve their problems. In one typical case, all that was required was to move some fans and blowers. In another case, equipping the steam exhaust of a hospital power station with a muffler provided relief for patients and staff alike.

In California, some owners of automobile laundries worked together to get realistic control statutes adopted and hired an acoustical engineer to help them, first in preparing basic legislation and then in redesigning equipment that did not comply.

Owners of industrial plants and shopping centers have introduced background music to reduce fatigue, boredom, and tension. It helps promote work in the plants and creates good will among shoppers.

What can an average citizen do about noise? First, make sure that you aren't creating noise nuisance. Does your car need a new muffler? Remember, a bad one costs you gas mileage. How about that power mower? Did you know you can put a muffler on it, too?

If you want to help your community get the best and most effective anti-noise laws, tell your local officials that Milwaukee has a good truck-noise law;

that New York has an enforceable regulation on automobile horns; that Warwick, R. I., has a good zoning regulation providing protection against noise; and that, for a large city, Chicago has set a good example.

You also can advise owners of local industrial plants that they can quiet their more annoying noises, often at small expense.

Finally, you can make your own home quieter. An air conditioner will not only make your home more comfortable in Summer, it can keep unwanted sounds out, too. Usually, acoustical materials aren't needed in every room. But in the kitchen, and in the hall or dining room between the kitchen and the rest of the house, acoustical tile on the ceiling will do a lot to quiet the noise of dish-washer, kitchen fan, and mixer—besides helping to make the kitchen a nicer place to work.

Noisy oil-burners, hot-air systems, and Summer exhaust systems can be quieted by applying acoustical engineering principles. It's easier, of course, to pick equipment when the house is being built, but even old equipment can be quieted effectively. One thought applies equally to trucks, industrial plants, and homes: well-maintained equipment usually operates more quietly than neglected equipment.

To sum up, noise may not drive you crazy, but it certainly can ruin your sleep, create nervous tension, upset digestion, and cause considerable annoyance. Yet noise isn't necessary!

Modern acoustical engineering provides ways to quiet almost anything—including jet planes, trailer trucks, and factory machinery. By cooperating with and trying to educate those responsible for excessive noise, you can help quiet things down without creating ill feeling or "making a Federal case" out of your noise problems.



A portable sound-level meter measures the amount of noise in a busy office.



Dr. Robert Benson, Armour Research physicist, adjusts microphone in reverberation chamber to test jet engine noises.