

NEW EXECUTIVE

John Foreman, regretfully, announced his intention of retiring the chairmanship. An ad hoc committee nominated that the new chairman be Huw Jones, Physics Department, University of Calgary. D. Allen proposed the list be closed, E. Bolstad seconded, and Huw Jones is your new Chairman. The Secretary remains the same. Aubrey Edwards proposed a vote of thanks to the Past Chairman.

The meeting adjourned with some 20 members retiring to the Eastview Hotel for food and drinks.

* * * * *

A SUMMARY OF THE ONTARIO PROVINCIAL NOISE PROGRAM 1973/1974

D. Benwell
Noise Pollution Control Section
Air Management Branch, Ministry of the Environment
880 Bay Street, Toronto, Ontario. M5S 1Z8

To successfully control and abate environmental noise, all levels of government should participate with short and long-range programs. The Federal government could limit the noise potential of all kinds of devices at the manufacturing level. The Provincial government could limit the operation of noises of these devices to assure that they are maintained and operated in the proper way, and enforce sensible land-use practices in the vicinity of high noise-level sources. The Municipal government can deal with the local problem of nuisance noises, and assist with enforcement of provincial legislation.

The following Table summarizes the division of noise complaints made by the residents of Ontario to the Ministries of Environment and Transportation over the past year:

<u>Noise Source</u>	<u>Approximate Percentage of Complaints</u>
1. Individual-vehicle	25%
2. Traffic flow	12%
3. Aircraft and railroad	5%
4. Stationary sources of all types (factories, business establishments, air conditioners, etc.)	45%
5. Nuisance noises (barking dogs, noisy parties, playgrounds, etc.)	10%
6. Recreational devices	3%

The various Phases of the anticipated Ontario noise program are summarized below, roughly in the order that they would come into existence. The overall cost of the program is estimated to be 10¢ per person per year in the areas that it is to be put into effect.

Phase 1 - Regulation of Operational Noises of Vehicles

Beginning in late 1973, vehicle noise regulation could be put into effect. It would limit the operational noise levels of individual autos, trucks, buses and motorcycles in different speed ranges and during acceleration. The noise levels are selected so that 5 to 10% of the vehicles may be in violation (many due to noisy driving habits). Also, it would:

- a) Place limitations on horn blowing
- b) Place limitations on noise level of replacement parts
- c) Place limitations on idling
- d) Prohibit the sale of noisy vehicles in the future (as an option).

The proposed regulation is in the final draft stages and at the present time is being field tested by Ministry of Environment personnel and is being reviewed by the Attorney General's office. It is directed toward the control of individual vehicle noise but will have a small and favourable, impact on traffic flow noise. The abatement of freeway "traffic-flow" noise would be undertaken in future years. Control of vehicle operational noise was selected to be initiated first because we are technically ready to do it and have most of the required instrumentation, and it is the most serious noise problem.

This activity could employ two-person "teams" of Air Management Branch (AMB) noise inspectors or engineers and municipal or OPP police officers, thus involving the municipal governments. The team with easily portable equipment will move around the city and at various sites measure the noise of individual passing vehicles. The measurement procedures should be fully specified in the regulation so that the measurement team has little chance to "use their imagination". The noise measurement will be made by the AMB inspector and offending vehicles will be stopped by the local police officer who will issue a violation citation. Because the program is new, "warning citations" are recommended for the first two or three months in the area where it is put into effect.

The activity in late 1973 would be concentrated in the Toronto and Hamilton areas. Early in 1974, one team would begin to visit other cities and some rural areas in Ontario on a rotational basis to introduce the program and acquaint local police officers with the program which would be coming probably next year.

Phase II - Ambient Noise Level Objectives

Ambient-noise-level objectives for the entire Province could be issued in 1974. They will specify our goals as to desirable and acceptable environmental noise levels. Noise level objectives will be specified for both day and night for the following activity areas:

1. Rural Residential
2. Urban Residential
3. Mixed Residential and Commercial
4. Mixed Residential and Industrial
5. Commercial
6. Industrial

The noise activity areas are independent of the zoning designations used by different cities and are specified in the regulation.

These ambient noise objectives have already been tentatively specified. The suggested levels, however, must be compared with the results of community-noise-level inventories being made in several smaller cities in Ontario and take into account test results being obtained by the City of Toronto before the ambient objectives are issued. These community noise inventories will be completed in the early summer which fixes a fall date for the earliest establishment of ambient noise objectives.

Phase III - Stationary Source Noise Control

Late in 1974, a second regulation could be issued to regulate the noise and/or vibration emitted from all types of stationary sources. A proposed regulation has already been drafted which places limits on property-line noise levels or at the location of a receptor of the noise. It is directed toward controlling and abating noises which are responsible for a large percentage of complaints coming to MOE. The issuance date is fixed by the completion of community noise surveys in London, Woodstock, and Toronto because these results will have an impact on this regulation.

The stationary source regulation will limit noise levels at property lines. The levels which will be permitted depend upon (1) the activity in the area, (2) the time of day, (3) the duration of the noise, (4) the frequency spectrum of the noise (i.e. its tonal quality), (5) its startle effect, and (6) the existence of mobile noise sources in the area (vehicles, aircraft, trains, etc.). The emphasis is placed upon decreasing the noise level in residential areas. Measurement instrumentation and measurement methods are carefully and completely specified which is an essential feature of all our noise regulations. This regulation must be written so that the courts will accept the specified levels and measurement methods and then we must only prove that the measurements have been made in the way prescribed in the regulation.

The activity will involve the establishment of an approvals process similar to that employed in Ontario for air pollution sources, for (1) new noise sources, (2) expansions and modifications to existing sources and (3) proposed abatement measures. In addition, there will be field investigative and enforcement activity. Key people have been hired to initiate these functions and a significant increase in staff will occur from September onwards. This staff for the first year must be sufficient to serve and respond to noise complaints on a routine basis in selected areas, anticipated as being Metro Toronto and Hamilton. It is expected that over 3,000 noise investigations will be made in the first year. This activity will be expanded in future years to the entire Province by an increase in staff and assigning of people to existing Regional and/or District offices. This activity will be completely staffed by Ministry of Environment personnel.

Phase IV - Nuisance - Noise Model By-Law

The problem of local nuisance noises (noisy parties, barking dogs, loud radio and TV, noisy children, etc.) can best be handled by municipal authorities. A model by-law to combat such noise problems which could be put into effect under the Environmental Protection Act or a modified form of the Municipal Act could be drafted during the first year of the noise program. Complete enforcement by Municipal authorities will be proposed. Ministry of Environment personnel will only assist in providing technical assistance and advice to municipal officials when required to interpret and enforce the by-law.

Phase V - Control of Operational Noises of Recreational Devices

The use of recreational devices with internal combustion engines are responsible for a small percentage of the noise complaints (about 5%). However, nearly all of the complaints come in the winter months and are directed against snowmobiles. A regulation which limits operational noises of these devices will be proposed, to be put into effect in the fall of 1973. Because these machines are not confined to specific roadways this regulation cannot exactly parallel that used for vehicles.

In early winter of 1974, we will undertake a public education program among snowmobilers and begin enforcing this regulation with respect to snowmobiles at various locations in the Province. Because road vehicle noise measurements are more difficult and less meaningful in winter months due to wet pavements and other factors, some of the vehicle noise control staff will be employed to deal with snowmobile noise in the winter months.

Phase VI - Long-Range Noise Control Through Land-Use Policy

The long-range control of noise depends in large measure upon wiser land-use in the vicinity of noise sources which are difficult or prohibitively expensive to abate at the present time (airports, freeways and some industries). At the present time, land-use and residential development around airports is controlled at the provincial level on the

basis of noise exposure. Similar provincial policies and controls are needed to regulate development adjacent to freeways and highways. In addition, the planning of future freeways and highways must consider the attendant noise levels, and control to acceptable levels. The goal is to introduce policies which will not allow the perpetuation of many of our current noise problems, particularly with respect to freeways.

* * * * *

VOTE ON NEW NAME FOR THE "CANADIAN COMMITTEE ON ACOUSTICS"

At the Business Meeting on 18 October 1973 the matter of a new name was discussed. Readers are urged to review the Minutes of this meeting, printed on pages 1-8 of this issue of the Newsletter, for a complete report of the discussion.

The three names most favored by those in attendance at the Business Meeting are listed on the next page. Members are requested to rank order their preference, after writing in a name of their own choosing if they so desire - mark 1 against the name you most favour, 2 against your second choice, 3 against your third choice and 4 against your last choice (if there is a fourth choice). For the purposes of this ballot, the Editor defines a voting member as an individual person who reads this Newsletter and is interested enough to tear out and return the ballot; but not including a library, university department or office, or any company or consulting organization - in short, people can vote but offices and organizations can't.

Each person may vote once only and must write his name and full mailing address on the ballot. We shall use this latter to correct and up-date our mailing list, at least in respect to those who return ballots. Please return ballots within one week of receiving this issue of the Newsletter if possible, and in any case no later than 28 December 1973.