

SYMPOSIUM : AIR QUALITY IN THE VAAL TRIANGLE AREA

OPENING ADDRESS BY R.C.S. MEYER, PRESIDENT NATIONAL ASSOCIATION FOR CLEAN AIR
26 FEBRUARY 1987

Die agbare Burgemeester, Mnr. G. Olivier, meneer die Voorsitter, dames en here, vir my is dit nie net 'n voorreg nie maar ook 'n eer om hierdie Vaaldriehoek simposium oor lugkwaliteit te open. Saam met soveel bekende mense met belangstelling in die oplossing van plaaslike en nasionale lugbesoedelingprobleme wens ek almal wat hier teenwoordig is 'n gedenkwaardige en suksesvolle dag toe.

I prefer the use of the words "air quality" as it is a more positive term than air pollution prevention and it signifies clean air to me. This is where our National Association got its name. The National Association for Clean Air was founded as an organisation in 1969. Today it has branches in three provinces, Transvaal, Cape and Natal and has over 300 members.

Op hierdie stadium vra u miskien wat is die doelstellings van die Nasionale Vereniging vir Skoon Lug? Dit is 'n tegniese en opvoedkundige organisasie wat die wetenskap en kuns van lugbesoedelingsbestuur bevorder en sodoende lug so helder en vry van enige besoedelingsvorm as wat prakties moontlik is verseker.

The stress is on the word "practical". Our air pollution control laws are based on "the best practicable means". Although this is being questioned at the moment, it has remained a very pragmatic approach which has overcome a number of our very serious problems over the relatively short period of just over twenty years since the Atmospheric Pollution Prevention Act was promulgated in 1965.

In the late nineteen sixties I joined the steel and alloy industry in the Witbank area as a young mechanical engineering graduate. In those years it was very evident that some very serious problems existed. The tall stack policy on its own, at that time, had not proved to be an acceptable solution. Fortunately technology advanced very rapidly during the 1960's both locally and overseas. We in South Africa were then in a position to use the good experience gained and avoid the mistakes made by others.

Rand Carbide, the company I had joined at that stage, embarked on a policy of removing the smoke from their calcium carbide and ferrosilicon electric arc furnaces in the early 1970's. After our then Technical Manager, Mr. J. Meintjes (well known to the AECI Coalplex group) travelled extensively overseas, it was decided to use the proven reverse air baghouse filters. The first baghouse was successfully commissioned during 1976 and the second unit during 1980 at a cost of over R5 million. This really proved that "the best practicable means" worked.

At recent symposiums and the world clean air congress in Sydney, Australia, which I was fortunate enough to attend, some interesting points arose:

1. Air pollution knows no boundaries.
2. South Africa's NACA, represented by our Director, Gordon Grange is a respected member of the Union of International Air Pollution Prevention Associations and is one of only nine member countries on the International Executive Committee.
3. It is the responsibility of today's adults to leave their children a worthwhile inheritance.
4. The real issues of air pollution are the effects on health, vegetation, the environment and materials.
5. Air pollution is a many faceted subject where problems can only be solved through communication, understanding and co-operation.

Health is our main area of concern but must not be considered on its own. Air pollution has to be looked at as a whole. The increase of carbon dioxide through combustion processes is affecting our weather patterns through the "Greenhouse effect". Do we want to accelerate this effect by inefficient use of hydrocarbon fuel? Are our farmers aware of the dangers of veld fire smoke? Do we want to poison our soils by "acid rain" so that our food crops will be destroyed. What I am leading up to is, do we really understand our problems and are they going to decrease or increase as we continue along the road of so called "progress"? Again I stress that it is by communication and education that we can begin to understand the significance of the problems. A great deal of research has been carried out both locally as well as abroad and this has to be translated and passed on to the relevant people in industries, business and authorities. This can only be done if a suitable platform is provided for this where problems can be discussed and debated in the right atmosphere and without too much "hot air".

Our experience in the Witbank area in the late 60's and early 70's was similar to that of the Vaal Triangle area. The mass media coined the term the "armpit" of South Africa. It was through this sort of publicity that an extremely poor image was created for the area. I have lived there for the past 18 years and certainly things were not that bad. Considerable improvements have, however, taken place and today the area is only affected by intermittent problems and adverse weather conditions. Our pollution problems are no longer a major issue and do not make the national news headlines.

I believe it is your challenge to get industrialists, community leaders, doctors, health authorities, in fact all interested parties involved because:

"Your pollution future is now"

to use the theme set by the Transvaal branch of NACA during 1986. If you are really going to get to "grips" with today's problems, you must provide the opportunities, like today's symposium, for the real issues to come out into the open.

Een groot probleem is menslike houding. Al verstaan mense die probleem, hoe ver is hulle bereid om te gaan om dit op te los? Ek noem maar net die voorbeeld van sigaretrokers: moet hulle die ervaring van 'n hartaanval deurgaans of die slagoffers van kanker wees voor hulle bereid is om die gewoonte te los. Die nywerhede sal hulle probleme oplos as dit kan bewys word wat die oorsake van die probleme is.

Industries are generally long term investments and must be economically viable as well as acceptable to the surrounding community. It is, therefore, necessary for their representatives to be aware of problems that occur. A similar argument goes for the public, they need to have employment but they also need to be aware of industrial problems. Poor communication and attitudes can only lead to unsatisfactory solutions and the type of problems we are referring to. We should not be like the "ban the bomb" pacifist who shouted to his audience: "Disarm now!" When someone replied: "the other arm next!".

We must be prepared to do our part to influence the right people where real pollution problems exist. An influential body will, therefore, be more meaningful than many single voices. The "big stick" approach seldom achieves anything worthwhile. It is rather by persuasion and discussion that difficulties are overcome.

Another problem of course, is cost! Who pays? One way or another, now or later, we will pay. Whether it be in cash or kind (which could include health). Let us not be emotional but let us be realistic. There are paybacks.

In the steel and alloy industry the cost of operating air pollution control equipment runs into many millions of rands per year. At Rand Carbide, which produces ferrosilicon and has three electric arc furnaces with a total electrical requirement of over 75 MVA, (this is a relatively small plant), our operating costs which include maintenance, labour, materials, electricity, etc. now exceed R2,5 million per annum. This is only to clean the air and is a non-pro-

ductive cost. We produce over 40 tonnes of dust per day which is now to be processed and used as a special additive for cement.

The real difficulty is to continuously achieve acceptable control levels. The Department of Health has set availability requirements for bag filter units in the alloy industry at 96% . For good electrical and mechanical equipment this figure is achievable. However, there are times when equipment failures beyond normal control occur. This happened on one of our filters just five days before Christmas. One of the filter's large 1200 HP motors faulted. The motor rewinders worked 24 hours per day and we had the unit back in full operation on Christmas eve. This was reported to our local newspaper who reported positively and the public were more sympathetic.

The real price "we" have to pay is commitment, involvement and honest hard work — air pollution problems generally do not go away without some effort.

Finally the educational aspect must not be underrated. One of the fundamental issues on which civilised man can be judged is surely his ability to survive as his numbers continue to increase. Pollution in its various forms threaten man's existence. Man has been given the intelligence to solve these problems. Surely this is where education comes to the fore. Everybody, children and adults of every race need not only to be taught awareness but also a sense of responsibility. Yes, if we are really serious about overcoming our problems, which include residential coal burning problems, we will have to be involved. These problems, I believe, will only be solved if education plays its role.

To summarise, we will all agree that the quality of the air we breathe in our towns and cities needs to be improved. If our motivation is to reduce the most seriously damaging effects, which include effects on health, vegetation and the environment, then we must really understand our air pollution problems so that they can be overcome systematically and sensibly. To do this, what is required is a platform where education, discussion, communication and planning can be exercised by the various parties involved. I hope, therefore, that all the interested parties are able from today's programme to form a branch of the National Association for Clean Air and I, as the National President would like to wish you success in such a venture.