Norman Longworth

Saturday, 10 June 2006

The Productivity Commission
Locked Bag 2
Collins St East
Melbourne
VIC 8003

Dear Sir/Madam,

PRODUCTIVITY COMMISSION DRAFT REPORT FOR COMMENT
WASTE GENERATION AND RESOURCE EFFICIENCY

I attach some comments on this most important study.

I look forward to seeing the final Document and I hope my contribution is of value.

The economic future of our Nation depends on increasing efficiency and productivity. If our total cost structure is not contained, the living standards for our Grand Children will not be good.

Having written off many of our large and less efficient manufacturing enterprises, it is time to focus on our Governmental Sector, and this work focuses on a typical area. I am sure the Commission can pursue other such areas.

Regards,

Norman Longworth

encls:

Norman Longworth

I am a Professional Engineer (NPER3) with considerable experience in manufacturing in Australia. My CV is enclosed.

I believe the Commissions work so far contributes greatly to identifying the "waste phobia" from which some parties seek personal riches. From the National economic point of view, the work also identifies the resources being expended on what is a relatively small problem.

I have been unable to examine this report thoroughly due to my limited resources, but I wish to focus my comments on two aspects.

* The structure of the report as a communication tool
* Lack of thorough appraisal of the incineration option.

STRUCTURE

I worked for a major engineering firm which dictated that if the communication could not be reduced to an A4 page, it was too verbose for effective communication.

5 pages of each of 5 bullet points max 10 words each should be adequate to convey the basic findings, backed up where necessary with references and appendices, where possible with abstracts. Your findings and recommendations exceed this level considerably.

It was argued if this could not be achieved it indicated insufficient distillation of data.

Although it does not strictly comply with the above criteria, I found the UK House of Lords paper on "The economics of Green House Gases" a very good communicating document. A number of people I have referred it to also found it so.

Where possible I have drilled into your data and found much value in areas I am competent, but it is a difficult and frustrating task. It is important for these facts to be established and communicated to those responsible. For example the fact that methane is 21 tines worst per kg of carbon than Carbon dioxide in greenhouse effect, but no mention of the figure for ozone layer depletion. I think this fact indicates that anaerobic composting is environmental vandalism!

In NSW there is no shortage of voidage for landfill provided by Coal mining Industry. With rail access for good transport (in the unloaded direction). That situation may not be valid for other waste generating locations. The mines totally create in excess of $lx10^9$ tonnes of voidage per annum, albeit most is back filled.

I feel that even your terms of reference are poorly structured.

It maybe that you wish to soften the blow to the "Green" pressure groups, by breaking the facts gently. Can I suggest that these largely foreign controlled bodies are bent on political and monetary power and it is not possible to change their minds with facts. Most are not interested in Australia's economic efficiency. The important target must be some 500,000 Australian citizens, who are prepared to seek real facts. Good communication to this target will promote debate for the benefit of Australia.

I estimate to study your report would take a minimum 50 hours. To achieve good benefit then 25,000,000 hours must be consumed. The target groups time is worth a minimum of $100 per hour, so we now have $2.5

billion dollars. $77,203 per annual tonne of waste. That resource will not be spent, is not available and such resources can be better used elsewhere for the benefit of Australia.

As the Australian productivity commission it may appear that you are guilty of being inefficient and non-productive. Surely that is contrary to your mandate.

Please restructure the document.

The figures for Municipal Waste in Table 2.1 seem high for NSW. My figure would have been under $2x10^6$ tonnes, but paper recycling may have a significant impact on that figure. Clearer definition is probably the answer. The details of the Collex contract for Woodlawn landfill maybe a good source of data.

C&I is low but obviously does not include the Steel Industry, Scrap Metal Industry and Automotive Industry recycling and all mining wastes. The latter may fall outside your terms. They are partly internal waste loops.

Your use of "externalities" is an interesting. Surely the term "Societal Costs" would be clearer. For example being separately woken up by three collection trucks instead of one between 4 and 6 am is a Societal cost not necessarily an externality? I understand that Societal Cost = externalities + internalities.

INCINERATION

It maybe in your report, but I could not find an informed appraisal of incineration. With the low cost environmentally acceptable option of land fill in mines, it may not be important for NSW, but it might need consideration in other locations.

Why for example has Japan such large use of incineration? Japan has been a very pollution sensitive nation for many decades.

There was a large commercial incinerator in Sydney, which was closed down, was this a good decision?

In the UK I have heard comment that incineration is the way of handling Municipal Waste.

In Box 1.1 polychlorinated biphenyls (PCB) are given as an example of a carcinogen. There should be better examples. Although PCB's have been suspect for some 40 years and for that reason removed from common use, there was some doubt if in the unburnt condition that they were in fact carcinogenic. They are certainly pollutants, as they are very stable, and for that reason disposal is carefully monitored through out the world. Very little PCB would be in the waste stream other than within the controlled industrial area, ie Power transformers, capacitors and fire proof hydraulic oil. These are now cheaply destroyed in the cement industry, to the anguish of investors in special high temperature incinerators.

It is the stability of PCB's, that probably prevents them from being carcinogenic, if for instance small quantities appeared in a landfill.

It is beyond my field, but some of the other examples of ecotoxic materials in this box may also be of little consequence. I do know of numerous cases where resources were invested in developing methods to deal with dangerous waste, only to find the problem was a non-event and the resource wasted.

CV200

NORMAN JAMES LONG WORTH

DATE OF BIRTH :11-12-30

Married - Jenifer, 2 Sons 42 & 40, 1 Daughter 37 years
Geologist, Civil/Transport Engineer, Accountant/Risk Manager

Operating Company AUSMAN ENGINEERING & Associates P/L
ABRN 22 052 903 394

QUALIFICATIONS

Cranbrook School 1937-48
Sydney University B.E. Mech & Elect 1954
Chartered Profession Engineer Registered on NPER-3
FAICD

PROFESSIONAL FIELDS OF INTEREST

- Dense Phase Coarse Particle Hydrotransport
- Yacht fitting design & manufacture (RCB Travellers)
- Thickened discharge waste disposal techniques.
- Problem solving particularly in manufacturing industry. Integration of Design, Market and Manufacturing Techniques.
- Product development.
- HV equipment, drive selection, material selection - ferrous and plastics.
- R&D management, experience in IC engines, pumps, hydro transport, plastics, ferrous material selection.

PASTIMES

Yacht Racing (Dragons), Sailmaking, Cruising.

ADMINISTRATION:-

- Chairman of the Board, Ashtonfields Management PAL
- Past Commodore, Royal Sydney Yacht Squadron
- Hon. Measurer Royal Prince Edward Yacht Club
- International Measurer ISAF
- Resident Delegate Yachting Australia Racing Rules Committee for Tasmania.

PROFESSIONAL ACTIVITIES

- 1991-Present Managing Director **AUSMAN ENGINEERING.** Yacht fitting design and manufacture, Mining Waste disposal, Hydrotransport, Mining Market Surveys, Product development and marketing, Technical liaison with Indonesian interests, Investment Management.

- 1991-1988 General Manager **ABB Mineral Slurry Transportation** P/L. Dense phase coarse coal Slurry technology. Still Consulting to this activity.

- 1988-1986 Marketing **ABB-MST.**

- 1986-1970 **ASEA** then **ABB Manager Heavy Industrial Group** NSW, Robots, V/S drives, Minewinders, Process lines and rolling mills, Secondary Steel making, Continuous Casters, Container Cranes, Sugar centrifugals, Weighing Systems.

- 1970-1966 **Australian Line Material** (ALM) HV Switchgear including development of 330kV 50 kAmp isolators, Lightning Arresters, HV fuses.

- 1966-1958 **ASEA Industrial** work in NSW as for 1986-1970 but also including Electrostatic Precipitators and Furnaces.

- 1958-1955 **AEI Diesel Electric Locos,** supervision of manufacture under sub contract and service work.

- 1953-1952 **Bristol Aeroplane Company Car Division UK** liaison between design office and R&D on rig testing and failure analysis.

OVERSEAS VISITS

1952	
England	Bristol Aeroplane Company, Cooper Car Company, Cambridge University

1965 USA, Sweden, UK.
ASEA Vasteras, STAL, Flakt, Stora Kopparberg, Head Wrightson

1969 USA, Canada S&C, McGraw Edison, Ontario Hydro, Pacific Power & Gas, SMUD

1973 Sweden, UK. ASEA Vasteras, Halsingborg, Ludvika, STAL

1974, 76,79, 83,86,89,90
Singapore, Malaysia, Hong Kong
Kookaburra Paper Products, ASEA

1983 Sweden, UK. ASEA Vasteras, STAL, Stora Kopparberg, Kiruna.
1986 Sweden, UK. Italy ASEA Metallurgy Conference, ASEA-SKF Users Conference, SSAB Domnarvet, Surahammar.
1992 San Diego, Costa Mesa, Baton Rouge, New Orleans.
1993 Vancouver, Calgary.
1994 Newport RI, Boston, Atlanta, Augusta
1994 Singapore, Jakarta, Sulewesi
1995 Vietnam
1996 UK, Russia, Japan, South Africa.
1999 UK, Hamburg, Singapore
2001 UK, Singapore
2004 Hong Kong, Shanghai
2005 Shanghai, France, Xian, Beijing

MAJOR PROJECTS

In involved at various levels in following substantial projects:

- AIS 50 tonne Electric Arc Furnace,
- Vales Pt. No.4 Electrostatic Precipitator,
- Cobar Mine Winder,
- Introduction of Thyristor Batch Sugar Fugals,
- 330kV Airbreak switches Liddel Power Station,
- AIS Electrolytic Tinning line,
- Sydney Harbour Container Cranes,
- TEMCO Bell Bay Ferro Alloy Smelter, Electrics
- West Cliff 870 Ton/Hour Mine Winder

- Automation, Instrumentation, Electrics AIS Continuous Casting machine
- West Cliff Mine Drainage Gas Turbines.
- Full batten RCB Cars on one of Australia's largest modern pleasure yachts.

PATENTS

Valve Porting for Rotating Barrel Ram Pump priority date 04-06-91 in all cases

South Africa	91/4236	Granted
Canada	2,084,299-7	Granted
USA	5,316,451	Granted
Australia	646,051	Granted

Sail sheeting system

Australia	PN9316	Granted

Bearing Systems (PTFE)

Australia	PS0280	Pending
UK	GB 2386650	Granted
USA	US 6,948,850 B2	Granted
Denmark	PA 200300074	Granted

PRESENTED PAPERS

Hydrotransport 13

SUPPLEMENTAL SKILLS

- Lotus, Windows, Microsoft Office, Autocad RL14, Beam, Portfolio Reporter, Attache BP, MYOB, Quickbooks, Autometrix Sail design. General usage level.