Committee Secretary
House of Representatives Standing
Committee on Communications, Transport &
The Arts,
Parliament House
CANBERRA ACT 2600

Dear Sir,

Managing Fatigue in Transport

Australian Drug Management & Education assists companies and organizations in establishing drug-free workplace programs. We are the leading provider of these programs in Australia with clients such as the Australian Federal Police, Ansett, the Canberra Raiders, 1st Fleet, National Rail Corporation and a number of other transport organizations. See appendix 1 for more information on our company.

The following submission is based upon our experience, professional knowledge and experience in the field of drug-free workplace programs including drug testing and deals primarily with the issue of drug misuse and its correlation with fatigue.

If you would like any further information or clarification on any of the issues raised please do not hesitate to contact me.

Yours sincerely

Norman Marshall
Chief Executive

10 January 2000

Main Points

1. Evidence from Australia and world-wide sources clearly document the link between drug misuse (including alcohol) and fatigue contributing to accidents;

2. The set-up of drug-free workplace programs in all sectors of the transport industry will significantly reduce the degree of drug misuse and fatigue - thus markedly lowering the risk of accidents. Evidence of the success of these programs is drawn from overseas drug-free workplace programs, random breath testing, smoke-free workplace programs and drugs in sport.

Managing Fatigue in Transport

The issue of transport safety is one that affects both the transport industry and the general public. Transport accidents and incidents involve not only employees in the industry and expensive equipment but also passengers, other road, air, sea users and even pedestrians. Public perception of safety for all users is, therefore, critically important for this industry to maintain its creditability. Even more importantly all sectors of the transport industry have a special obligation and duty of care to accept safety standards of international best practice. The Australian High Court has upheld this expectation by ruling that "the employer's duty to provide a safe system of work is a duty to establish and enforce such a system and includes a duty to take account of the employee's negligence, inadvertence and carelessness in carrying out their work….. Accident prevention is unquestionably one of the modern responsibilities of an employer[1].

The link between drug misuse and fatigue is an important factor for consideration in reducing transport accidents and risks to safety. In the USA the National Transportation Safety Board conducted a safety study on 'Fatigue, alcohol, other drugs in Fatal-to-the Driver Heavy Truck Crashes' to assess the role that alcohol and other drugs played in these accidents. The results of this study[2] (from toxicological tests involving 186 driver fatal injuries) found that:

- 33% of the fatally injured drivers tested positive for alcohol and other drugs of abuse;
- The most prevalent drugs found were marijuana and alcohol (13%), cocaine (9%), amphetamines (7%), other stimulants (8%) and codeine & phencyclidine (less than 1%);
- Fatigue and fatigue-drug related interactions were involved in more fatalities than alcohol and other drugs;
- The most frequently cited accident probable cause was fatigue (57 drivers or 31 percent % followed by alcohol and other drug use impairment (53 drivers or 29 percent);
- Of the 57 drivers who were fatigued, 19 were also impaired by alcohol and/or other drugs;
- There is a strong association between violation of the Federal hours of service regulations and drug usage;
- There is a significant relationship between drug positive test results among professional drivers a shipment deadline for the load being carried;

[1] Mclean v Tedman (1984) ALJR Vol 58, p541

[2] US NTSB safety study 'Fatigue, alcohol, other drugs and medical factors in Fatal-to-the-Driver Heavy Truck Crashes (Vol 1) Feb 90 (copy at appendix 2)

Similar results in Australia have also been recorded. In three states during 1993 40% of fatally injured drivers of heavy trucks were found to have drugs in their system (stimulants 21% and alcohol 19%)[3]. Other sectors of the transport industry have recorded fatal accidents relating to drug misuse and fatigue. For example, Central Airlines Flight 27[4] (Newark International Airport, New Jersey 30 March 1983), the Exxon Valdez shipping disaster and a number of US rail accidents[5].

The Australia situation with regard to drug misuse (both licit and illicit) is rapidly increasing and is closely mirroring the growth of drug misuse in the US during the late 1980s and early 1990s. An example of this increase can be seen in the rapid growth of cocaine use in Sydney alone during 1999[6]. In the US the National Institute of Drug Abuse has estimated that approximately 74% of the 12 million drug users are employed with as many as 23% in full time employment[7]. Alcohol and drug misuse costs approx US$140 billion annually in healthcare costs, lost productivity and workers compensation claims. The most significant figure is that in the US it is estimated that 47% of all workplace accidents are alcohol and drug related.

In Australia the pattern of drug misuse is becoming similar to the USA and is an issue of paramount importance for the transport sector as well as all safety-sensitive occupations. A recent Australian Institute of Criminology study shows the clear correlation between crime, social misbehaviour and all types of criminal offenders with drugs, particularly illicit drugs. At a Queensland watch-house about two-thirds of all people arrested tested positive to a drug at the time of arrest – the most common being cannabis (violent offenders 58%, property offenders 70% and drink-driving 62%)[8]. There are predictions of significant increases in all illicit drug use in Australia. Just as there has been a gross underestimation of the link between drug misuse and crime there is also a gross underestimation of the correlation between drug misuse and both fatigue and accidents.

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[3] 1994 Victorian Institute of Forensic Pathology report 'Drugs in Drivers killed in Australian Road Traffic Accidents'.

[4] US NTSB Aircraft Accident Report – 7 August 1984

[5] US NTSB safety study 'Alcohol Drug use and it's impact on railroad safety' (copy attached at appendix 3)

[6] *News and Views*, Drug and Alcohol Review, Vol 18, No 2, June 1999 p238 – one serious implication of this increase will be felt in the ability to supply clean needles. Cocaine is being injected and a user will inject up to 15-20 times per day. As a result there is the distinct possibility that Australia could (after-all) have an uncontrolled HIV epidemic.

[7] Horgan, "Science & the Citizen", Scientific American, March 1990, p18

[8] Drug Use Monitoring in Australia (DUMA):Preliminary Results from the Southport Site, 1999

Other countries are aware of the enormous risk factors involved with drug misuse and road safety and have instigated steps to combat these risks. In Sweden & Germany there is a zero limit for narcotic substances for drivers of motor vehicles, trains and trams[9]. In Norway 45% of drivers apprehended on suspicion of driving under the influence of alcohol or drugs were positive to cannabis[10]. All of these countries are proceeding with drug-free programs similar to the recommendations from the 1996 Road Safety Committee, Parliament of Victoria, Inquiry into the Effects of Drugs on Road Safety In Victoria - which recommended zero use of alcohol and drugs for transport operators.

In Australia many operators in the transport industry are already aware of the enormous potential for accidents related to drugs and alcohol. For example, National Rail and other operators in the rail, road and air sectors have introduced drug-free workplace programs. Both major airlines are considered these programs in accordance with the International Civil Aviation Organisation's recommendations.

One of the most effective measures to reduce both the fatigue factor linked to drugs and their use by transport industry personnel is to deter the use of drugs. The set-up of an Australian Transport Industry Drug-Free Program would be a major part of such a campaign and would need to be carefully planned. The aim of the program should be deterrence rather than detection per se – much in the same approach as the Australian random breath testing programs (RBTs).

In addition we suggest that the issue of drug and alcohol misuse be treated as a medical issue in a sensitive and cooperative manner. It would, therefore, be part of a holistic approach that includes education, media announcements, testing, assistance, positive alternatives, counselling, rehabilitation and law enforcement.

Evidence of the success of this approach can be seen from overseas and Australian drug-free workplace programs, roadside RBTs, smoke-free workplace programs and the Australian approach to drugs in sport. A number of US drug-free workplace programs have carefully monitored the success of their programs. For example the US Navy was able to reduce the number of positive drugs tests from approximately 48% to less than 2% within a few years and the US Postal Service estimated that it would have saved $105 million over a three-year period by not employing personnel who used illicit drugs[11].

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[9] 1999 NRMA-ACT Road safety Trust Churchill Fellowship presentation, Senior Constable Mick Guy (copy attached at appendix 4)

[10] Bjorneboe et al (1987) 'Retrospective Study of Drugged Driving in Norway', Forensic Science Journal, No 33,p243-251

[11] Bunn, GA "The role of EAPs and Drug Testing", Professional Counsellor, May/June 1990, p35 and "Effectiveness of Applicant Drug Tests Shown by Postal Service Study", Drugs in the Workplace, Business Research Publications, New York, Dec 93, Vol VII, No 2, p1.

RBTs in Australia provide convincing evidence of the effectiveness of these programs in reducing drink-driving, drink-driving fatigue and road trauma. Two general conclusions, which can be drawn from the research into RBTs, are that[12]:

(i) testing for drink-driving has a significant impact on measures of drink-driving outcomes;
(ii) testing needs to be supported by a high level of publicity in order to be effective.

Recent research into the outcomes of smoke-free workplace programs also indicates that drug-free workplace programs will significantly reduce the risks of drug-related fatigue and accidents. Smoke-free workplaces are currently responsible for an annual reduction in Australia of 602 million cigarettes or 1.8% of all cigarettes that might otherwise be consumed and if all workplaces in Australia were universally smoke-free the number of cigarettes forgone would be 1.4 billion or 3.4%[13]. On the basis of this research the effectiveness of drug-free workplace programs would be far greater as the use of certain drugs would be curtailed not only during work but also outside of work hours.

Australian sport is widely held as one of the cleanest in the world. This achievement is one that is proudly recognised by Australian athletes and the general public. It has been reached through the set-up of one of the finest drug-free sport programs in the world which uses testing in conjunction with other measures to deter athletes from misusing drugs.

It is, therefore, suggested that the House of Representatives Standing Committee inquiring into fatigue in transport recommends to the Federal Government that all transport operators be required to set-up drug-free workplace programs. Not only will there be significant benefits to the transport industry in terms of drug related fatigue and drug related safety but there will also be significant benefits to the Australian society as a whole in terms of crime reduction, costs, health and well-being.

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[12] Hommel, R & Mackay, P (1997) *The long term effectiveness of random breath testing in 4 Australian States: a time series analysis. An unpublished report to the Federal Office of Road Safety, Canberra &*
Stanislaw,H (1996) *"Long term effectiveness of random breath testing program on drink-driving crashes in NSW,* Road and Traffic Authority of NSW, Research Note RN 1/96

[13] Chapman, S et al (1999) *The Impact of Smoke-Free Workplaces on Declining Cigarette Consumption in Australia and the Unites States,* American Journal of Public Health, July 1999, Vol 89, No 7, p1018