



**Regulation Review Committee  
Parliament of New South Wales**

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**Report on the  
Dangerous Goods (General)  
Regulation 1999**

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# **Regulation Review Committee**

## **Members:**

Mr P. R. Nagle, MP, Chairman  
Hon J. A. Saffin, MLC, Vice Chairman  
Ms C. A. Burton MP  
Hon D. T. Harwin, MLC  
Hon M. I. Jones MLC  
Dr E. A. Kernohan, MP  
Ms M. F. Saliba, MP  
Mr R. W. Turner, MP

## **Secretariat:**

Mr J. Jefferis, Director  
Mr G. Hogg, Project Officer  
Mr D. Beattie, Clerk to the Committee  
Ms S. Dale, Assistant Committee Officer

## Functions of Regulation Review Committee

The Regulation Review Committee was established under the *Regulation Review Act 1987*. A principal function of the Committee is to consider all regulations while they are subject to disallowance by Parliament. In examining a regulation the Committee is required to consider whether the special attention of Parliament should be drawn to it on any ground, including any of the following:

- (a) that the regulation trespasses unduly on personal rights and liberties;
- (b) that the regulation may have an adverse impact on the business community;
- (c) that the regulation may not have been within the general objects of the legislation under which it was made;
- (d) that the regulation may not accord with the spirit of the legislation under which it was made, even though it may have been legally made;
- (e) that the objective of the regulation could have been achieved by alternative and more effective means;
- (f) that the regulation duplicates, overlaps or conflicts with any other regulation or Act;
- (g) that the form or intention of the regulation calls for elucidation; or
- (h) that any of the requirements of sections 4, 5 and 6 of the Subordinate Legislation Act 1989, or of the Guidelines and requirements in Schedules 1 and 2 to that Act, appear not to have been complied with, to the extent that they were applicable in relation to the regulation.

The Committee may, as a consequence of its examination of a regulation, make such reports and recommendations to each House of Parliament as it thinks desirable, including reports setting out its opinion that a regulation ought to be disallowed.

## Chairman's Foreword

This report sets out the Committee's consideration of the *Dangerous Goods (General) Regulation 1999* (General) Regulation 1999. As a result of concerns expressed on several aspects of the Regulation by industry and interest groups the Committee held a briefing on the regulation on 21 October, 1999 at Parliament House.

The main focus of concern related to the prohibition on the use of liquefied flammable gas in motor vehicle air-conditioning systems.

At the conclusion of the meeting the Committee resolved as follows:


*It is the opinion of the Regulation Review Committee that clause 242 of the Dangerous Goods (General) Regulation 1999 prohibiting the use of liquefied flammable gas in the air-conditioning system of a motor vehicle has not been properly assessed by the WorkCover Authority of New South Wales in compliance with the requirements of the Subordinate Legislation Act.*

*The Committee accordingly resolved to recommend to the Minister that he expedite an assessment in accordance with the provisions of the Subordinate Legislation Act of the use of liquefied flammable gas for that purpose in order to determine whether clause 242 of the regulation is justified. Further, that assessment should be carried out by persons competent in that field and involve consultation with appropriate representatives of consumers, the public, relevant interest groups, and any sector of industry or commerce likely to be affected by the regulation. The assessment should be tabled in the Parliament by the Minister for Industrial Relations when it is finalised.*

*The Committee further resolved that it supports the giving of notice of a motion for disallowance of clause 242 of the Dangerous Goods (General) Regulation 1999 (and the subsequent adjournment of that motion for a sufficient period) solely for the purpose of allowing Members of Parliament to consider the action that should be taken following the completion by WorkCover of its assessment of clause 242.*

I thank all the parties for their contribution to the briefing.

I also thank the Member for Southern Highlands, Ms Peta Seaton MP, Mr Paul Crittenden MP Parliamentary Secretary; the Honorable Ian Cohen MLC and the Honorable John Ryan MLC for their contribution to the proceedings.



**Peter R. Nagle, MP**  
**Chairman**

## Recommendations

1. The Committee recommends that the Minister put in place guidelines to ensure that the public, relevant interest groups and sectors of industry or commerce likely to be affected by a regulatory proposal are adequately consulted on it in accordance with the *Subordinate Legislation Act*. (Page 4)
2. The Committee recommends that, when the present regulation is replaced by another regulation, in particular a regulation adopting the National Standard and Code of Practice for the storage and handling of dangerous goods, each of the substantive provisions of the new regulation, and, where applicable, any incorporated standards and codes, be assessed in terms of their costs and benefits as compared with other relevant options, in the manner set out in section 5 and schedule 2 of the *Subordinate Legislation Act*. (Page 8)
3. That WorkCover amend the *Dangerous Goods (General) Regulation 1999* to remove any obvious conflicts between requirements stated in the regulation and those set out in Standards adopted in the regulation. (Page 10)
4. The Committee recommends to the Minister that he expedite an assessment, in accordance with the provisions of the *Subordinate Legislation Act*, of clause 242 of the *Dangerous Goods (General) Regulation 1999* prohibiting the use of liquefied flammable gas in the air-conditioning system of a motor vehicle in order to determine whether the regulation is justified. Further, that assessment should be carried out by persons competent in that field and involve consultation with appropriate representatives of consumers, the public, relevant interest groups, and any sector of industry or commerce likely to be affected by the regulation. The assessment should be tabled in the Parliament by the Minister for Industrial Relations when it is finalised.

The Committee supports the giving of notice of a motion for disallowance of clause 242 of the *Dangerous Goods (General) Regulation 1999* (and the subsequent adjournment of that motion for a sufficient period) solely for the purpose of allowing Members of Parliament to consider the action that should be taken following the completion by WorkCover of its assessment of clause 242. (Page 14)

# **Objectives and Content of the *Dangerous Goods (General) Regulation 1999***

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GAZETTE            27 August, 1999 at pages 6780 - 7027  
MINISTER           Industrial Relations

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## **Explanatory Note**

The object of this Regulation is to repeal and remake, with modifications, the *Dangerous Goods Regulation 1978*. The new Regulation, entitled the *Dangerous Goods (General) Regulation 1999*, deals with the following matters:

- (a) general provisions relating to:
  - (i) licences to keep or carry dangerous goods or to import, manufacture or sell explosives, and
  - (ii) the various permits under the *Dangerous Goods Act 1975* and the Regulation (Part 2),
- (b) the prescription of dangerous goods for the purposes of the Act, the classification of dangerous goods and general provisions relating to the handling, keeping, manufacture and use of dangerous goods (Part 3),
- (c) the prescription of certain dangerous goods as explosives for the purposes of the Act and general safety provisions relating to the manufacture, importation, keeping, conveying and sale of explosives (Divisions 1 and 2, Part 4),
- (d) the receipt of explosives and the issue of shotfirers' permits, collectors' permits, display fireworks permits and firework wholesalers' permits (Division 3, Part 4),
- (e) the issue by police of permits to receive explosives (Division 4, Part 4),
- (f) the regulation of persons using explosives (Division 5, Part 4),
- (g) the keeping of the records of the sale, carriage, delivery and importation of explosives by the various licensees under the Act (Division 6, Part 4),
- (h) general provisions relating to the keeping of dangerous goods (Division 1, Part 5),
- (i) particular provisions relating to the keeping of explosives (Division 2, Part 5),
- (j) particular provisions relating to the keeping of certain classes of dangerous goods (other than explosives) (Division 3 - 9, Part 5),



- (k) general provisions relating to the conveyance of dangerous goods (Division 1, Part 6),
- (l) particular provisions relating to the conveyance of explosives (Division 2, Part 6),
- (m) particular provisions relating to the conveyance of other dangerous goods (Division 3, Part 6),
- (n) the marking and placarding (labelling) of dangerous goods (Part 7),
- (o) the packaging of dangerous goods (Part 8),
- (p) particular provisions relating to the manufacture of explosives (Part 9),
- (q) special requirements relating to the handling, keeping, manufacture, use and sale of particular classes of dangerous goods (Part 10),
- (r) special requirements relating to the handling and transport of dangerous goods in ports (Part 11),
- (s) matters of a minor, consequential or ancillary nature (Parts 1 and 12),

The Regulation is made under the *Dangerous Goods Act 1975*, including section 41 (the general regulation-making power) and various other sections referred to in the Regulation.

The Regulation refers to:

- (a) the *Road Transport Reform (Dangerous Goods) (New South Wales) Regulations* in relation to the prescription of dangerous goods for the purposes of the *Dangerous Goods Act 1975* (clause 13),
- (b) those Regulations, the *Australian Code for the Transport of Dangerous Goods by Road and Rail (ADG Code)* and the *Australian Code for the Transport of Explosives by Road and Rail (Australian Explosives Code)* in relation to the classification of dangerous goods (clause 14),
- (c) those Codes, various Australian Standards and other codes and standards for the purpose of prescribing, throughout the Regulation, provisions applicable to the handling, keeping, manufacture, conveyance, use and sale of dangerous goods.

The Regulation is made in connection with the staged repeal of subordinate legislation under the *Subordinate Legislation Act 1989*.

## **Briefing**

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The Committee was given a briefing on the Regulation by officers of the WorkCover Authority of New South Wales. The briefing was held on Thursday, 21 October, 1999 at Parliament House and was attended by:

<b>Mr Paul Crittenden MP</b>	Parliamentary Secretary
<b>Ms Peta Seaton MP</b>	Member for Southern Highlands
<b>Hon Ian Cohen MLC</b>	
<b>Hon John Ryan MLC</b>	
<b>Ms Dinah Traurig</b>	Senior Policy Officer, WorkCover Authority
<b>Mr Phillip Butt</b>	Chief Inspector Dangerous Goods, WorkCover Authority
<b>Mr Peter Harley</b>	Acting Regional Manager, Regional Office South, WorkCover Authority
<b>Mr Peter Dunphy</b>	Acting Manager, Scientific Services, WorkCover
<b>Mr Ian Wells</b>	Manager Administration, Boral Refrigerants (formerly Esanty Refrigerants)
<b>Mr Stuart Chia</b>	Risk Assessment Manager, Granherne Pty Ltd
<b>Ms Belinda Smith</b>	Technical Adviser, Granherne Pty Ltd
<b>Mr Kevin Sansome</b>	General Manager, Technical Elgas Ltd
<b>Mr Alan Coulson</b>	National Safety Manager, Elgas Ltd
<b>Mr Graham Goodfellow</b>	Principal Consultant, G R Goodfellow Pty Ltd
<b>Mr Tony Tarplee</b>	Acting Chairman, Motor Vehicle Repair Industry Council
<b>Mr Colin Brown</b>	Industry Liaison Officer, Motor Vehicle Repair Industry Council
<b>Mr Brent Hoare</b>	Greenhill Technology Association Inc
<b>Mr David Gibson</b>	Safety and Training Officer, East Australian Pipeline Limited
<b>Mr Jeff Green</b>	Vehicle Air-Conditioning Specialists Association of Australasia
<b>Mr Edward Fortune</b>	Divisional Manager, Motor Traders Association
<b>Mr Richard Morony</b>	Technology Manager, Orica Explosives
<b>Dr Ian Maclaine-Cross</b>	School of Mechanical and Manufacturing Engineering, University of New South Wales

## **Adequacy of publicity and consultation in regard to the making of the regulation**

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### **Publicity**

The Committee is satisfied from the details supplied by WorkCover that adequate publicity was given to the regulatory proposal. WorkCover has supplied the following information to the Committee:

*The draft regulation and regulatory impact statement (RIS) (part 2, together with a statement of compliance with the Subordinate Legislation Act 1989) were released for public comment on Friday, 22 January 1999. All dangerous goods licensees (over 11,000) were notified during late 1998 that the draft would soon be available, resulting in over 3,100 requests for copies. All accredited dangerous goods consultants (132 at the time), New South Wales Government agencies, a number of relevant Commonwealth agencies and international organisations were also sent copies of the draft. An additional 300 copies were sent out as a result of advertising the review throughout the State. The closing date for submissions was 23 April 1999, although submissions received after this date were also considered.*

### **Consultation**

Section 5 of the *Subordinate Legislation Act* contains both the requirements for publicising a regulatory proposal and for consultation on it. Though related, these are separate requirements. Under the Act, consultation has to be commensurate with the impact likely to arise for consumers, the public, relevant interest groups and any sectors of industry or commerce. The provisions in the *Subordinate Legislation Act* relating to the preparation of regulatory impact statements (Schedule 2) require a statement of the consultation program to be undertaken. The obligation in this case to consult was not satisfied by merely publicising the regulatory proposal and replying to correspondence on it.

The regulatory impact statement for the proposal did not contain any program of consultation, it merely contained the statement that consultation with the dangerous goods industry in the development of the regulation would take place during the public exhibition period for the regulation and regulatory impact statement.

At the Committee briefing there was general agreement from industry representatives, with one exception, that no direct consultation with them had taken place.

#### **Recommendation 1**

The Committee recommends that the Minister put in place guidelines to ensure that the public, relevant interest groups and sectors of industry or commerce likely to be affected by a regulatory proposal are adequately consulted on it in accordance with the *Subordinate Legislation Act*.

## **Regulatory Impact Statement**

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A Regulatory Impact Statement was carried out for the regulation. On page 4 the RIS states:

*The proposed Dangerous Goods (General) Regulation 1999 has a limited life in that it is being introduced to simply maintain current existing requirements in relation to dangerous goods until such time as WorkCover can substantially revise its dangerous goods regulations using the National Standard as a basis. A regulatory impact statement, including a full quantitative analysis, will be undertaken for the National Standard. Given these two factors it is considered impractical to undertake a full quantitative analysis for the proposed Dangerous Goods (General) Regulation 1999 and the information contained in this Regulatory Impact Statement for the proposed Regulation is therefore, in the main, qualitative in nature.*

The RIS lists only three options and these are as follows:

### **No Regulation**

*Under the 'no regulation' option there would be no statutory requirements relating to the storage and handling of dangerous goods and the transport of explosives other than those provided by the Dangerous Goods Act 1975. While the Act does not specifically require the making of regulations it has nonetheless been written in a way which makes it unworkable without a supporting regulation. For example, dangerous goods are prescribed by the regulation, therefore, without a regulation there would be nothing classed as a dangerous good in NSW.*

*The removal of specific dangerous goods regulatory requirements is not preferred. WorkCover is committed to the maintenance of a regulatory framework for the storage and handling of dangerous goods and the transport of explosives. The consequences of having no regulatory controls include an increase in the number of serious accidents which can result in deaths and injuries and/or significant damage to property and the environment.*

*The absence of a specific dangerous goods regulation and consequent inability of the Dangerous Goods Act to operate effectively would result in industry having to comply with the general duty of care provisions under the Occupational Health and Safety Act 1983. However, due to the high risk of activities associated with the use of dangerous goods, community expectation is that there should be specific legislative controls having a wider scope than the duty of care provision under the OHS Act which only applies to places of work.*

**Nationally Uniform Dangerous Goods Legislation**

*NOHSC has released for public comment a draft National Standard and accompanying Code of Practice for the storage and handling of dangerous goods. One option would be for NSW to adopt the provisions of the draft National Standard.*

*The adoption of the draft National Standard as a State Regulation prior to its finalisation as a National Standard is not preferred. WorkCover intends to adopt the National Standard once it is declared. However, to adopt a National Standard while it is still in draft form is not regarded as good regulatory practice and could result in unnecessary discrepancies between NSW Regulations and the National Standard.*

**Proposed Regulation (Preferred Option)**

*Adoption of the proposed Dangerous Goods (General) Regulation 1999 is the preferred option. The high risks posed by dangerous goods and the potential for dangerous goods to impact on the community in general as well as workers warrants the continuation of regulatory provision in regard to dangerous goods. Adoption of the proposed Regulation will maintain current provision in regard to dangerous goods. Adoption of the proposed Regulation will maintain current provisions for the safe management of dangerous goods until such time as a more substantial review of the Regulation, based on the National Standard for the Storage and Handling of Dangerous Goods, can take place. Adoption of the proposed Regulation will also give effect to a number of minor amendments being made to bring the NSW Regulation up to date with similar legislation covering dangerous goods in other jurisdictions.*

Option 1 was rejected because there would be no requirement relating to the storage and handling of dangerous goods and the transport of explosives other than those provided by the *Dangerous Goods Act, 1975*, which without the regulation would be unworkable.

Option 2, the draft National Standard and accompanying Code of Practice for the storage and handling of dangerous goods, was rejected for immediate adoption because it was likely to be significantly amended before its final adoption. In the briefing, WorkCover indicated that the draft National Standard was due to be endorsed by the National Occupational Health and Safety Commission, NOSCO, in the week commencing 10 October 1999 but had been deferred again because of disagreement between jurisdictions, other stakeholders, and was going out for further consultation. They said that NOSCO will be dealing with it again in February and expect to put it to the Workplace Relations Ministers Council in June of the year 2000.

Option 3 is the preferred option as it is said that the high risks posed by dangerous goods and the potential for dangerous goods to impact on the community in general as well as workers, warrants the continuation of regulatory provisions in regard to dangerous goods.

One of the problems with this option of remaking the previous regulation in substantially the same form was referred to by Mr Alan Coulson National Safety Manager, Elgas Ltd. He said:

*First of all, the regulation, apparently, is an antique. There is no other word for it. It is highly prescriptive and quite frankly is just old-fashioned. It is against all the current European thinking which is self-determination, self-regulation. It is the old document just regurgitated. Also what we find in the field is severe cost constraints to ourselves and the industry as a whole. There is a substantial degree of confusion between the role of Australian Standards and this regulation. This takes great chunks of older regulations and older standards and regurgitates them.*

*The trouble is, new inspectors to WorkCover will tend to work to this. They do not tend to work to Standards initially, especially the inexperienced. This is their Bible. And I can see a horrendous time, with them sort of coming and taking this, imposing stuff in here which is all in Standards and ADG Code - why regurgitate vast chunks of it?*

The costs and benefits of the options are not quantified but have been described generally in the RIS. Adverse comment on this assessment was made in the public submissions.

The Committee dealt with a similar limited assessment in its twelfth report of the fifty first Parliament in respect of the the Aboriginal Land Rights Regulation. The Committee noted that the regulatory impact statement prepared for that regulation stated that the Government had decided to undertake only a minor revision of the regulation pending a major review of the Aboriginal Land Rights Act and that there would be a further more substantial revision of the regulation following the review of the Act.

The Committee said that the Subordinate Legislation Act requires a full assessment of every regulation which is subject to staged repeal and that there was no provision in the Act for a minor revision.

Provision exists for postponement of staged repeal, which was available in the case of the Aboriginal Land Rights Regulation but in the present case the Dangerous Goods Regulation has exceeded the number of postponements permitted by the Act.

The Committee went on to say that the Aboriginal Land Rights regulation contained a number of substantive provisions which are capable of assessment and it listed these in its report.

The same is true of the Dangerous Goods Regulation but there has been no attempt to assess specific alternatives to these substantive provisions as required by section 5 (1) of the Act. The result of the failure to assess a major substantive provision of the regulation can be seen under the heading "Use of Liquefied Flammable Gas in Motor Vehicle Air-Conditioning Systems".

In the earlier case the Committee informed the Minister that in the absence of an adequate assessment, the decision to proceed with the Aboriginal Land Rights Regulation must necessarily be in doubt. It accordingly requested that he refer these matters to the Crown Solicitor for advice.

The Crown Solicitor's advising vindicated the Committee's position and among other things said that an RIS must address the whole regulation, not merely new matters, and must look at alternatives to and the costs and benefits of the substantive provisions of the regulation.

## **Recommendation 2**

**The Committee recommends that when the present regulation is replaced by another regulation, in particular a regulation adopting the National Standard and Code of Practice for the storage and handling of dangerous goods, each of the substantive provisions of the new regulation, and, where applicable, any incorporated standards and codes, be assessed in terms of their costs and benefits as compared with other relevant options, in the manner set out in section 5 and schedule 2 of the *Subordinate Legislation Act*.**

## **Adoption of Standards**

The substantive provisions of the Dangerous Goods regulation adopt the provisions of a number of Australian Standards. WorkCover said in the briefing that New South Wales by being one of the last States to have reviewed its regulations, offers the calling up of the latest standards to have been released by Standards Australia, touching upon, basically, the storage and handling of dangerous goods.

It emerged in the briefing that the manner in which these standards were adopted caused confusion in industry. Mr Richard Morony, Technology Manager for Orica Explosives, raised concerns with respect to the applicable standard for transport and shipping of explosives, in particular, ammonium nitrate. He said that ammonium nitrate is one of a very small number of dangerous goods which are subject to specific quantitative restrictions on what can be moved across ports in just a few countries, actually, Australia, New Zealand and Singapore. For many years the limit per shipment into the major capital city ports was 150 tonnes per shipment. About 10 years ago this was negotiated up to 400 tonnes per shipment in reflection of the much greater volume of ammonium nitrate that had to be moved and it was duly codified in Australian Standards 3846 last December. He said, "It was a great disappointment to me to pick up this draft regulation and find that the 150 tonnes figure has come back in to Schedule 3."

WorkCover responded that there is written into the new 1999 regulation that Australian Standard 3846 for the handling and transport of dangerous cargoes in port areas in so far as it applies to the requirements of the *Dangerous Goods Act*, actually overrides anything in Part 11 which deals with special requirements relating to ports.

WorkCover said, "It wasn't possible at the time of making this new regulation to totally rewrite that part, so we inserted the overriding clause which means AS3846 applies: Clause 261 - Application of Australian Standards of handling and transport of dangerous goods in port areas. If there is any difference between a provision of Part 11 of the regulation and an applicable part of the Australian Standard then the Australian Standard overrides that part of the regulation."

Mr Morony responded: "I wrote specifically, I wrote two letters actually asking that this figure be changed in the regulation and I wasn't expecting to find it in a little clause that I only saw for the first time this morning."

The Committee suggested WorkCover modify the regulation to remove these contradictions so that there is less confusion for industry in its day to day use of the regulation.

WorkCover agreed to examine the matter.



**Recommendation 3**

**That WorkCover amend the *Dangerous Goods (General) Regulation 1999* to remove any obvious conflicts between requirements stated in the regulation and those set out in Standards adopted in the regulation.**

For many years the Regulation Review Committee has actively recommended reform in the manner in which standards are adopted. In 1991 in its tenth report of the Fiftieth Parliament the Committee recommended amendment of the *Interpretation Act 1987* to require a copy of the incorporated material to be tabled with the regulation and to be kept available for inspection at the responsible department.

The Committee also recommended amending the *Interpretation Act 1987* to provide for the disallowance in whole or in part of any incorporated material and that the advice of a legislative draftsman be obtained when codes are being prepared which are ultimately intended for adoption in New South Wales.

In response, the Attorney-General, who then administered the Act, advised that with one minor qualification he concurred with these recommendations. That qualification was that the Parliamentary Counsel input's apply "so far as is practicable". The Committee formally advised Parliament of this outcome on 26 February 1991. Despite much correspondence and further mention in reports to Parliament no progress was achieved on these recommendations for six years. Eventually on 5 January, 1997 the Premier agreed to make administrative arrangements to implement the Committee's recommendations.

In its Twelfth report of the Fifty-first Parliament the Committee set out its reply to the Premier. The Committee said that administrative arrangements are less effective over time than legislative provisions and said that the Regulation Review and Subordinate Legislation Acts were themselves a response to the failure of earlier administrative schemes of regulation review. The Committee recommended the introduction of changes along the lines of Victorian provisions in the New South Wales Interpretation Act.

In his response of 19 August 1997, the Premier advised that he preferred the administrative arrangements, at least on a trial basis, and that if necessary an amendment would be made at a later date. The administrative arrangements are in the Premier's Memorandum No 97-18 and require copies of codes to be kept available for public inspection and to be lodged with the Parliamentary Library at the time of the making of the rule and to be kept up to date.

## **Adoption of Standards**

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In its Eighteenth report of the Fifty-first Parliament the Committee outlined the recommendations of the OECD with respect to the *Subordinate Legislation Act*.

The OECD recommended that the Act should specifically require that incorporated materials, such as national standards, be assessed in the Regulatory Impact Analysis and tabled with the regulations that incorporate them.

The OECD found that the trend of incorporating material in legislation which is drafted by bodies external to government is particularly marked in Australia, where Standards Association standards are routinely incorporated into the legislation of State and Federal Governments. The OECD considers the widespread use of incorporated material poses a particular challenge to Regulatory Impact Analysis as it is difficult to determine the impact of material that has been drafted outside the normal legislative drafting process and later editions of incorporated materials often become law automatically without further scrutiny.

New South Wales was criticised by the OECD for failing to introduce similar provisions to those in the Victorian *Interpretation of Legislation Act* which require the tabling in Parliament of all amended documents that are incorporated in law at the time of their amendment. The OECD comments that New South Wales does not even require that incorporated material be tabled along with the principal regulation when it is first adopted.

## **Use of Liquefied Flammable Gas in Motor Vehicle Air-conditioning Systems**

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Clause 242 of the *Dangerous Goods (General) Regulation 1999* prohibits the use of liquefied flammable gas in the air-conditioning system of a motor vehicle. The regulation exempts the use of such gas for the purpose of flushing out and cleaning the vehicle's air-conditioning system.

The Committee considers this is a substantive provision of the regulation in view of its safety, environmental and industrial consequences.

The prohibition on the use of liquefied flammable gas in the air-conditioning systems of motor vehicles was inserted in the principal regulation on 3 November 1995. This change did not require a formal regulatory impact assessment to support its inclusion because it was an amendment. However at that time the Joint Standing Committee on Road Safety (STAYSAFE) offered to accept a Ministerial reference to investigate the safety issues involved. This was declined by the Minister.<sup>1</sup>

The STAYSAFE Committee reports that it has not received any representations or correspondence raising safety concerns about the use of liquefied flammable gases in motor vehicle air-conditioning systems. It also states that as far as the STAYSAFE Committee can determine, there has been no expression of safety concerns about the use of liquefied flammable gases in motor vehicle air-conditioning systems in road safety forums, either in Australia or overseas. In the letter to the Committee STAYSAFE says that the issue of the safe or unsafe use of liquefied flammable gases in motor vehicle air-conditioning systems cuts across road safety, workplace safety and product safety, and suggests, therefore, that any further investigation should ensure that appropriate representatives from the Roads, Fair Trading and WorkCover administrations are involved.

When the regulation was remade, clause 242 should have been assessed in accordance with the requirements of the *Subordinate Legislation Act*. These include an assessment of the costs and benefits of the provision, including the costs and benefits relating to resource allocation, administration and compliance. The assessment must also identify and assess the costs and benefits of each alternative option to determine which course involves the greatest net benefit or the least net cost to the community.

This clause was the subject of several submissions on the RIS and draft regulation and justification for it was challenged by various industry representatives at the briefing.

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<sup>1</sup> Letter to the Committee from the Joint Standing Committee on Road Safety dated 25 October 1999 - Annexure 2 to this Report

In their submission on the RIS and draft regulation, the representative for Boral Energy, Mr Barry Duckworth, Manager LP Gas Engineering Services, said:

*Evidence can be produced to support the safe use of hydrocarbon refrigerants in motor vehicle air conditioning systems and this is currently allowed in Victoria, South Australia and Western Australia. Approximately 200,000 motor vehicles in Australia are now using hydrocarbon refrigerants in their air-conditioning systems. Engineers of the Federal Office of Road Safety have found that they can see "no added risk to service personnel or consumers, and therefore no need for a Federal regulation". The Land Transport and Safety Authority of New Zealand has been consulted and has come to the same conclusion. Risk assessment studies by the Department of Mechanical and Manufacturing Engineering of the University of New South Wales have been peer reviewed and have confirmed that there is no added risk to service personnel or to consumers created by the use of hydrocarbon refrigerants in motor vehicle air conditioners.*

Esanty in its submission said:

*Records obtained through Freedom of Information (FOI) from WorkCover NSW, Department of Fair Trading NSW, Office of the Queensland Gas Examiner, Australian Competition and Consumer Commission, and the Federal Office of Road Safety (FORS) reveal no technical justification to support the need for clause 244. (Now clause 242)*

At the Committee briefing on 21 October 1999, Greenhill Technology Association Inc tabled as part of its evidence a letter to the Committee dated 18 October 1999 which stated that since the making of the regulation in 1995 considerable and compelling evidence of the safety of hydrocarbon refrigerants in motor vehicle air-conditioning systems had come to light which invalidated justification for the remaking of the regulation.

In its summary of submissions WorkCover said:

*The matter was not discussed in the Regulatory Impact Statement as it does not make further restrictions compared to the current regulation.*

At the Committee's briefing WorkCover confirmed that it had carried forward the prohibition because it was already in the regulation and, as an interim measure, they did not want to make major changes to the regulation. WorkCover's representative conceded that this approach was contrary to the requirements of the *Subordinate Legislation Act*.

It is therefore the opinion of the Regulation Review Committee that clause 242 of the *Dangerous Goods (General) Regulation 1999* prohibiting the use of liquefied flammable gas in the air-conditioning system of a motor vehicle has not been properly assessed by WorkCover in compliance with the requirements of the *Subordinate Legislation Act*.

#### **Recommendation 4**

The Committee recommends to the Minister that he expedite an assessment, in accordance with the provisions of the *Subordinate Legislation Act*, of clause 242 of the *Dangerous Goods (General) Regulation 1999*, prohibiting the use of liquefied flammable gas in the air-conditioning system of a motor vehicle, in order to determine whether the regulation is justified. Further, that assessment should be carried out by persons competent in that field and involve consultation with appropriate representatives of consumers, the public, relevant interest groups, and any sector of industry or commerce likely to be affected by the regulation. The assessment should be tabled in the Parliament by the Minister for Industrial Relations when it is finalised.

The Committee supports the giving of notice of a motion for disallowance of clause 242 of the *Dangerous Goods (General) Regulation 1999* (and the subsequent adjournment of that motion for a sufficient period) solely for the purpose of allowing Members of Parliament to consider the action that should be taken following the completion by WorkCover of its assessment of clause 242

## **Other Issues**

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Aside from the issue of the use of liquefied flammable gas in the air-conditioning system of a motor vehicle, a number of other significant issues were raised in the submissions on the regulation and these were also canvassed in the briefing.

WorkCover indicated that most matters raised in submissions were accepted as they corrected omissions, updated the information about standards and corrected unintended mistakes. WorkCover said there were only five submissions which were not taken up, one of which was a suggestion that they include a list of the standards referenced in the regulation itself. Parliamentary Counsel considered that unnecessary as a list is available at WorkCover. The issue of the identification of standards in regulations and their assessment is an important issue which is referred to previously in this report.

### **Appeal to the Administrative Decisions Tribunal**

The second submission that was not adopted was the need to include leave to appeal to the Administrative Decisions Tribunal, ADT, by aggrieved persons. WorkCover said that at the moment the *Dangerous Goods Act* only allows appeals to the ADT if it has to do with a matter concerning a licence or a permit. WorkCover advised that this could not be dealt with in this review because it would require amendment of the *Dangerous Goods Act* by the *Statute Law (Miscellaneous Provisions) Act*, but that it is a matter that will be considered.

### **Requirement for permits and licences**

The third submission that was not adopted was that an additional provision be included to ensure that persons sending explosives are sure that people receiving the explosives have all the permits and licences, approvals, they need. WorkCover advised that this is already covered in the Act.

### **Transit Storage**

The fourth submission that was not adopted was that a definition of the term "immediate use" be included as this term was used in the provisions concerning the transit storage of explosives. WorkCover considered this was sufficiently defined in regulation 4 (6). It emerged in the course of the briefing that the principal concern with regard to transit storage in clause 4 (6) of the regulation was the practicality of the requirement that dangerous goods could only be stored in transit for a maximum of 12 hours.

WorkCover said that this clause was rolled over without any change from the preceding regulation. The matter of transitory storage on site is a complex issue. WorkCover said that the Australian Committee for the Transport of Dangerous Goods by Road and Rail have tried to address it, as has WorkSafe Australia in their standard on the storage and handling of dangerous goods. The problem is that it is a wide-ranging matter. One can recognise that a 200 litre drum of dangerous goods on a loading dock can be safely kept there under some conditions, but it goes further than just a 200 litre drum on a loading dock. It may well be a truck load of material, or could well be at a port where a whole ship has been unloaded with, say 100 containers.

WorkCover said that the 12 hours is an arbitrary figure and that the National Standard looks at using five days, five consecutive working days, and that should remove the problem. As they were just turning the regulations over, WorkCover considered that they should not make significant changes when they were looking at an interim type of regulation. The difficulty with this view is that such provisions can impose real costs on industry in the interim.

### **List of Offences**

The final unadopted submission was a suggestion to move the list of offences under the regulation from the Occupational Health and Safety Regulation to the Dangerous Goods Regulation. As both Acts are coming up for review, WorkCover did not think this necessary at this time.

### **Fire Protection of LP Gas Tanks**

Mr Graham Goodfellow (consultant of the company G.R. Goodfellow Pty Ltd) raised an additional matter concerning regulations 127 and 131 on fire protection of storage of LP Gas tanks and charging of aerosols.

He argued for more precise controls to be set out in the regulation in the interests of public safety. WorkCover responded that the detailed recommendations provided in his submission were not considered appropriate for inclusion in this regulation without the opportunity for public comment and industry consultation, and that they would be included in the major review.

Mr Goodfellow said that one unit of LP gas, unodorised, will expand to 12,000 units of explosive vapour. One cubic metre of liquefied gas will expand to two football fields one metre high of explosive gas. It is a small industry but a most dangerous industry.

## **Appendix 1**

**Regulatory Impact Statement  
on draft *Dangerous Goods (General) Regulation 1999***



# **REGULATORY IMPACT**

## **STATEMENT**

**Draft Dangerous Goods (General)  
Regulation 1999**

**under the Dangerous Goods Act 1975**

## 1. Introduction

### 1.1 Proposal

The WorkCover Authority of NSW (WorkCover NSW) intends to make the *Dangerous Goods (General) Regulation 1999* to replace the current *Dangerous Goods Regulation 1978* which is due to be repealed under the provisions of the *Subordinate Legislation Act 1989* on 1 September 1999.

Under the *Subordinate Legislation Act 1989* all regulations sunset after a period of five years (or within any extended period of time which may be granted) and are repealed unless remade. The current *Dangerous Goods Regulation 1978* is due to lapse if a new regulation is not made. The approach adopted by WorkCover in preparing the draft *Dangerous Goods (General) Regulation 1999* is to replace the current *Dangerous Goods Regulation 1978* with only minor changes in substance.

In the longer term WorkCover further proposes to streamline the regulatory framework it administers in relation to dangerous goods. As part of this process it is intended that the regulations relating to dangerous goods, including the transport of explosives, will be substantially reformed. A precursor to this major regulatory review is a study currently being conducted by the National Occupational Health and Safety Commission (NOHSC). The study addresses requirements for dangerous goods (Classes 2 to 9) and will lead to the introduction of a National Standard on the storage and handling of dangerous goods. WorkCover intends to use the National Standard, once it is introduced, as the basis for the introduction of revised legislation for dangerous goods in NSW. The expected completion date for the introduction of the National Standard is, however, well beyond the repeal date of the current *Dangerous Goods Regulation 1978*.

For these reasons, WorkCover NSW proposes to remake the current Regulation with minor amendments as an interim measure pending the planned major review.

## 1.2 Current Situation

At present in NSW the transport, classification, packaging, labelling, marking, storage and handling of dangerous goods is administered jointly by WorkCover NSW, the Environment Protection Authority (EPA) and various Ports Authorities under the administration of the Ministry for Forest and Marine Administration. WorkCover NSW administers requirements relating to the classification, packaging, labelling, marking, storage and handling of dangerous goods and the manufacture, importation, transport and use of explosives. The EPA administers requirements relating to the transport, by road and rail, of dangerous goods (excluding explosives) and the various Ports Authorities administer requirements relating to the shipping of dangerous goods.

Until recently these provisions were all contained within the *Dangerous Goods Regulation 1978* made under the *Dangerous Goods Act 1975*, with each Authority being responsible for administering the various parts of the Regulation pertaining to their area of coverage. On 20 April 1998 the *Road and Rail Transport (Dangerous Goods) Act 1997* was enacted. This Act primarily makes provision for the transport of dangerous goods by road and rail. It is noted that the road transport provisions of this Act are consistent with the Commonwealth *Road Transport Reform (Dangerous Goods) Act 1995* in order to promote a system of nationally consistent road transport laws.

The EPA now administers the *Road and Rail Transport (Dangerous Goods) Act 1997* in so far as it relates to the transport of dangerous goods (Classes 2 to 9) by road and rail. WorkCover NSW also administers provisions relating to the transport of dangerous goods (Classes 2 to 9) by rail, together with the remainder of the Act dealing with matters relating to the classification, packaging, marking and labelling of dangerous goods.

## 1.3 Overview of Industry

Dangerous goods, broadly defined, are substances and articles having toxic, explosive, corrosive, oxidizing or flammable properties. Examples of dangerous goods include petrol, liquefied petroleum gas, fertilisers, paints, pesticides, explosives and fireworks.

The properties of dangerous goods and their ability to react dangerously with each other and with other goods present very significant risks to workers, the general community, property and the environment. Proper management of dangerous goods during their production, storage, use and disposal is therefore vital in ensuring the health and safety of all persons who may come into contact with dangerous goods and the protection of property and the environment.

An indication of the extent of use of dangerous goods in NSW is provided by the number of licences and permits issued by WorkCover for the manufacture, import, transport and sale of explosives, the storage of dangerous goods and the use of fireworks.

In the financial year 1997/98 the following licences were issued:-

Licences and approvals for dangerous goods storage sites:	10,415
Licences for the transport, manufacture, import and sale of explosives	666
Fireworks Permits	2,853

As at the end of November 1998 there were 10,845 licensed sites for the storage of dangerous goods in NSW. It should be borne in mind that dangerous goods are not just present on licensed sites, licensed sites are an indication of the number of premises where substantial quantities of dangerous goods are stored. Smaller quantities of dangerous goods would be present on many other premises, both workplace and domestic.

## **1.4 Regulatory Impact Statements**

Under the *Subordinate Legislation Act 1989* new regulations must be subject to a regulatory impact statement (RIS). Remade regulations are treated as new regulations in regard to the requirements for a regulatory impact statement.

Regulatory impact statements must:

- Contain a statement of the objectives sought to be achieved and the reasons for the objectives.
- Demonstrate that the objectives:
  - are reasonable and appropriate; and
  - accord with the objectives, principles, spirit and intent of the enabling Act; and
  - are not inconsistent with the objectives of other Acts, statutory rules and stated government policies.
- Identify alternative options by which the objectives may be achieved, either wholly or in part, including the option of not proceeding with any action.
- Assess the costs and benefits of the proposed regulation and the alternative options.
- State the consultation process that is to be undertaken.

The impacts of the proposed regulation and the alternative options may be expressed in quantitative or qualitative terms. The RIS must incorporate an evaluation of the economic and social costs of each option. The options evaluated must be realistic to ensure that they are not in conflict with the objectives, principles, spirit and intent of the enabling Act, in this case the *Dangerous Goods Act 1975*. The outcomes from evaluations of the various options considered in the RIS are compared with the 'do nothing' option, ie. the option of not proceeding with any action. The 'do nothing' option is commonly taken to be the minimal action on the part of the State Government that can be taken to fulfil the intention of the Parliament (ie. the Act under which the Regulation is made).

The proposed *Dangerous Goods (General) Regulation 1999* has a limited life in that it is being introduced to simply maintain current existing requirements in relation to dangerous goods until such time as WorkCover can substantially revise its dangerous goods regulations using the National Standard as a basis. A regulatory impact statement, including a full quantitative analysis, will be undertaken for the National Standard. Given these two factors it is considered impractical to undertake a full quantitative analysis for the proposed *Dangerous Goods (General) Regulation 1999* and the information contained in this Regulatory Impact Statement for the proposed Regulation is therefore, in the main, qualitative in nature.

## **2. Assessment Issues**

### **2.1 Regulatory Approach - General Overview**

The NSW Government has instituted a number of reforms in regard to the regulatory process. The aim of these reforms has been to ensure that, while recognising that regulatory intervention is justified in certain circumstances, due consideration is to be given to the costs imposed on the community by regulations and to encourage agencies to adopt best practice in discharging their regulatory responsibilities.

These reforms are consistent with trends in regulatory frameworks throughout the world. Increasingly it is recognised that best results are likely to be obtained by focusing on outcomes rather than by specifying the technological and other details of achieving these outcomes. Such a performance-based approach makes maximum use of the knowledge held by individual firms in running their business. Furthermore, it provides an environment where industry is encouraged to make the achievement of regulatory objectives, such as the safe management of dangerous goods, an integral part of doing business rather than simply an expensive requirement to be met. In turn this encourages industry to search for more innovative ways of achieving the stated outcomes at lower cost.

In practice there is a spectrum of regulation which recognises that there is a trade-off between assurance of certain outcomes and flexibility to industry to suit the activity being regulated. Where the consequences of an activity are potentially disastrous, a strong regulatory control approach is warranted, characterised by close prescription and strong monitoring and enforcement provisions. At the other end of the scale, a partnership approach may be more cost-effective, involving public or industry education and awareness programs. In between there are various forms of self-regulation, such as industry-based codes of practice which seek to equate private costs (commonly financial) and public costs.

## **2.2 Regulatory Approach - Proposed Regulation**

It is proposed that the new *Dangerous Goods (General) Regulation 1999* will be administered by WorkCover NSW, with the exception of Part 11 which will be administered by the Sydney, Illawarra and Newcastle Ports Authorities. The *Dangerous Goods (General) Regulation 1999* is essentially a remake of the current *Dangerous Goods Regulation 1978* with minor modifications being made to update the Regulation.

Part 11 of the *Dangerous Goods (General) Regulation 1999* sets requirements relating to the shipping and holding of dangerous goods in ports. Part 11 of the Regulation is being retained as an interim measure until such time as the proposed 'Australian Code for the Handling of Dangerous Goods in Port Areas' is introduced. This Code is being developed via Standards Australia and the Ministry for Forest and Marine Administration anticipates a completion early in 1999. It is noted that the Code is being drafted so as to be consistent with international standards on maritime activities associated with dangerous goods. Part 11 of the *Dangerous Goods (General) Regulation 1999* will cease to have effect when the proposed Australian Code comes into force.

In April 1998 NOHSC released for public comment a draft National Standard for the Storage and Handling of Dangerous Goods accompanied by a Preliminary Impact Analysis (PIA). The draft National Standard adopts a performance-based approach in providing a framework for the safe management of dangerous goods (Classes 2 to 9). An outline of the provisions and objectives of the draft National Standard is at Annexure 'A'.

WorkCover NSW anticipates adopting the draft National Standard once it has been declared. This being the case, the main purpose for making the *Dangerous Goods (General) Regulation 1999* at this time is to maintain current regulatory requirements for the safe management of dangerous goods until the National Standard can be adopted.

## **2.3 Background for Regulatory Reform of Dangerous Goods Legislation**

In 1991 the Premiers and Chief Ministers decided that differences in dangerous goods legislation were undesirable and, in fact, could lead to unsafe workplaces and be an impediment to microeconomic reform.

The 1991 meeting caused a direction to be issued which was taken up by the National Uniformity Task Force to produce a National Standard for the storage and handling of dangerous goods which could either be used as a model regulation or called up as a standard by the State and Territory jurisdictions. The resulting proposed National Standard has been drafted to complement the Australian Dangerous Goods Code.

Under the direction of Worksafe Australia an expert working group on dangerous goods has developed the draft National Standard for the Storage and Handling of Dangerous Goods. The draft National Standard adopts a performance-based approach for the safe management of dangerous goods and is supported by a Code of Practice.

During the same period the National Road Transport Commission (NRTC), under its charter of improving road safety, increasing transport efficiency and reducing the administration costs of road transport through the adoption of uniform or consistent road transport legislation throughout Australia, produced an Act entitled *Road Transport Reform (Dangerous Goods) Act 1995*. It is this Act on which the recently enacted *Road and Rail Transport (Dangerous Goods) Act 1997*, covering the transport of dangerous goods (excluding explosives) in NSW, is based.

Also in late 1997 the Sixth Edition of the Australian Dangerous Goods (ADG) Code was published. This Code reflects the Ninth and Tenth Revised Edition of the UN Orange Book which was published by the Geneva based UN Committee of Experts on the Transport of Dangerous Goods in July 1995. The proposed *Dangerous Goods (General) Regulation 1999* has been amended to reflect the updated ADG Code and, in doing so, promotes the international harmonisation of standards.

### **3. The Proposed Regulation**

#### **3.1 References to Regulations in the Dangerous Goods Act**

Division 4 of Part 5 of the *Dangerous Goods Act 1975* provides the general regulation-making power. Subsection 1 of Section 41 provides that “The Governor may make regulations, not inconsistent with this Act.....”. Section 41(1) includes paragraphs covering a number of matters which may be the subject of regulations, including the following which are considered to be relevant to the proposed Regulation:-

- “(a) the issue, renewal, transfer, suspension, cancellation, duration and terms of permits, whether under this Act or the Regulations, and licences, the fees payable for permits and the conditions subject to which permits and licences are issued”;
- “(a1) regulating or prohibiting the use of explosives in connection with the carrying out of any construction or other work, including requiring any person using or in charge of explosives for that purpose to hold a permit under the Regulations”;
- “(c) the preparation for use, packing, keeping, conveying, manufacture, use, sale, abandonment, disposal, destruction and rendering harmless of dangerous goods and containers which are intended for use, are being used or have been used in connection with dangerous goods”;
- “(e) the siting, design, construction, ventilation, illumination, fittings, fixtures and management of premises intended for use or used in connection with dangerous goods”;
- “(f) regulating or prohibiting smoking, the lighting or use of fire and any other dangerous, or potentially dangerous, prescribed activities in the vicinity of dangerous goods and on or in, or in the vicinity of premises, vehicles, containers or pipelines used or that have been used in connection with dangerous goods”;
- “(g) prescribing the procedures to be followed in respect of any premises licensed under this Act that cease to be so licensed and the persons by whom those procedures are to be followed”;
- “(k) the inspection, examination and testing of dangerous goods and equipment intended for use or used in connection therewith, and the fees payable therefore”;
- “(m) the making, keeping, production and inspection of records relating to dangerous goods and the furnishing of returns and other information relating thereto.”



Subsection (2) provides that the powers under subsection (1) may be executed notwithstanding the provisions of any Act, other than the *Dangerous Goods Act 1975*, the *Navigation Act 1901*, the *Mines Inspection Act 1901*, the *Coal Mines Regulation 1982*, the *Construction Safety Act 1912*, the *Radioactive Substances Act 1957* and the *Occupational Health and Safety Act 1983*. Apart from the *Dangerous Goods Act 1975*, under which the Regulation is being made, these Acts would have minimal specific impact on dangerous goods.

Subsections (5) and (6) provide for a regulation that prescribes dangerous goods or explosives to describe such dangerous goods or explosives by reference to:-

- a class or classes of substances, articles, dangerous goods or explosives;
- quantity;
- circumstances in which substances, articles, dangerous goods or explosives are prescribed; or
- flash point.

While Section 41 of the *Dangerous Goods Act 1975* specifies matter for which regulations may be made in regard to dangerous goods, nowhere in the Act is there an actual requirement for a regulation to be made. Arguably, the *Dangerous Goods Act 1975* could operate in the absence of regulations without being in conflict with the apparent intent of parliament when the Act was promulgated. A base case of not proceeding with any action, the 'no regulation' option, is therefore consistent with the wording of the Act.

### **3.2 Objective of the Regulation**

The object of the *Dangerous Goods (General) Regulation 1999* is to provide continuing safety for workers and the general community and continued protection of property and the environment until such time as a more extensive review of NSW dangerous goods regulations based on the National Standard for the Storage and Handling of Dangerous Goods can be made.

WorkCover aims to achieve this objective by repealing and remaking, with some modifications, the *Dangerous Goods Regulation 1978*. The modifications made in the proposed Regulation update the Regulation in regard to:-

- a) the referencing of Australian Standards, including the referencing of additional Australian Standards to make the NSW Regulation more consistent with provisions made in other jurisdictions;
- b) the removal of duplication between referenced Standards and detailed provisions made in the Regulation;
- c) consistency between the Regulation and the Sixth Edition of the Australian Dangerous Goods Code; and
- d) the transfer of provisions relating to the certification of powdermen from the *Construction Safety Act* and *Construction Safety Regulations*.

The additional Australian Standards called up to complement provisions made in other jurisdictions include:-

- AS4289 - 'Oxygen and Acetylene Gas Reticulation Systems'
- AS4452 - 'The Storage and Handling of Toxic Substances'
- AS4081 - 'The Storage, Handling and Transport of Liquid and Liquefied Polyfunctional Isocyanates'
- AS2507 - 'The Storage and Handling of Pesticides'
- AS4332 - 'The Storage and Handling of Gases in Cylinders'
- AS3667 - 'Safety Matches and Containers'
- AS2092 - 'Pyrotechnic Marine Distress Flares and Signals for Pleasure Craft'
- AS3691 - 'Liquefied Natural Gas - Storage and Handling'

The storage and use of dangerous goods and explosives, if not properly managed, has the potential for dangerous and even disastrous consequences. Such consequences have the potential to impact not just on workers involved in handling dangerous goods but can also endanger the public and cause damage to property and the environment. For example, some of the major problems posed by dangerous goods include the outbreak of fires, explosions and extensive environmental pollution. The storage and use of dangerous goods and explosives are therefore of concern not just to industry but to the wider community.

For these reasons dangerous goods legislation has traditionally extended beyond occupational health and safety issues to provisions relating to public safety and the protection of property and the environment. The proposed *Dangerous Goods (General) Regulation 1999* continues this tradition.

In proposing government intervention through the maintenance of regulatory provisions in regard to dangerous goods it is recognised that while commercial benefits to the dangerous goods industry may provide incentive for the implementation of some safety measures it may not provide sufficient assurance that the wider community issues will be addressed.

### **3.3 Summary of Proposed Regulation**

The proposed *Dangerous Goods (General) Regulation 1999* will deal with:-

- provisions relating to licences and permits for dangerous goods, explosives and fireworks;
- the keeping of records by the various licensees and permit holders;
- provisions relating to the handling, keeping, manufacture, use and sale of dangerous goods;
- provisions relating to the manufacture, import, export, sale, transport and possession of explosives;

- provisions relating to the marking, placarding and packaging of explosives;
- provisions relating to the handling, keeping and transport of dangerous goods in ports; and
- provisions relating to the certification of persons working with explosives in the course of construction work.

A detailed summary of the proposed Regulation is included at Appendix 'C' and a comparison table is attached at Appendix 'D'. The table lists the Clause numbers of the current *Dangerous Goods Regulation 1978* against the Clause numbers of the proposed *Dangerous Goods (General) Regulation 1999* to illustrate where current provisions will be covered in the new Regulation. In addition, wherever an amendment has been made, the table provides information on the proposed change.

### **3.4 Options**

#### No Regulation

Under the 'no regulation' option there would be no statutory requirements relating to the storage and handling of dangerous goods and the transport of explosives other than those provided by the *Dangerous Goods Act 1975*. While the Act does not specifically require the making of regulations it has nonetheless been written in a way which makes it unworkable without a supporting regulation. For example, dangerous goods are prescribed by regulation, therefore, without a regulation there would be nothing classed as a dangerous good in NSW.

The removal of specific dangerous goods regulatory requirements is not preferred. WorkCover is committed to the maintenance of a regulatory framework for the storage and handling of dangerous goods and the transport of explosives. The consequences of having no regulatory controls include an increase in the number of serious accidents which can result in deaths and injuries and/or significant damage to property and the environment.

The absence of a specific dangerous goods regulation and consequent inability of the *Dangerous Goods Act* to operate effectively would result in industry having to comply with the general duty of care provisions under the *Occupational Health and Safety Act 1983*. Control over dangerous goods would subsequently no longer extend to non-workplaces. However, due to the high risk of activities associated with the use of dangerous goods, community expectation is that there should be specific legislative controls having a wider scope than the duty of care provision under the OHS Act which only applies to places of work.

### Nationally Uniform Dangerous Goods Legislation

NOHSC has released for public comment a draft National Standard and accompanying Code of Practice for the storage and handling of dangerous goods. One option would be for NSW to adopt the provisions of the draft National Standard.

The adoption of the draft National Standard as a State Regulation prior to its finalisation as a National Standard is not preferred. WorkCover intends to adopt the National Standard once it is declared. However, to adopt a National Standard while it is still in draft form is not regarded as good regulatory practice and could result in unnecessary discrepancies between NSW Regulations and the National Standard.

### Proposed Regulation (Preferred Option)

Adoption of the proposed *Dangerous Goods (General) Regulation 1999* is the preferred option. The high risks posed by dangerous goods and the potential for dangerous goods to impact on the community in general as well as workers warrants the continuation of regulatory provision in regard to dangerous goods. Adoption of the proposed Regulation will maintain current provisions for the safe management of dangerous goods until such time as a more substantial review of the Regulation, based on the National Standard for the Storage and Handling of Dangerous Goods, can take place. Adoption of the proposed Regulation will also give effect to a number of minor amendments being made to bring the NSW Regulation up to date with similar legislation covering dangerous goods in other jurisdictions.

## **4. Impacts of the Regulation**

### **4.1 Costs**

When completed the National study on the storage and handling of dangerous goods will provide estimated costs for compliance with the proposed requirements of the National Standard on the Storage and Handling of Dangerous Goods. This costing will cover, with the exception of matters related to explosives, most of the areas for which requirements are proposed under the draft *Dangerous Goods (General) Regulation 1999*.

The costs arising from compliance with the proposed *Dangerous Goods (General) Regulation 1999* are currently borne by industry in complying with the current *Dangerous Goods Regulation 1978*. At present there is a high rate of compliance with the current Regulation in regard to major safety issues associated with the storage and handling of dangerous goods, therefore, maintenance of the current regulatory provisions will not, in effect, introduce new costs.

Cost implications under current regulatory provisions which will be carried on by the proposed Regulation include costs associated with:-

- applying for licences, permits and their renewals, including the fees payable to WorkCover. In the 1997/98 financial year \$7,168 was paid in licensing and permit fees to WorkCover.

WorkCover also incurs costs of approximately \$208,000 per year in administering the licensing and permit systems and a further \$526,000 per year for generally administering compliance with the Regulation.

- training requirements in regard to the handling and use of dangerous goods;
- specific control measures relating to the safe storage and handling of dangerous goods. These specific requirements include measures to:-
  - prevent accidents;
  - prevent unauthorised entry;
  - prevent dangerous goods coming into contact with water;
  - prevent dangerous goods coming into contact with ignition sources;
  - store dangerous goods in appropriate containers; and
  - package dangerous goods appropriately.
- keeping records in regard to dangerous goods;
- the provision of emergency equipment, including fire extinguishers, self-contained breathing apparatus, sprinklers and fire hose reels;
- testing dangerous goods, including tests to determine the flash point for various dangerous goods and testing of explosives;
- the destruction of explosives and containers used to hold dangerous goods, including the abandonment of underground tanks;
- the design, construction and upkeep of depots and magazines for storing dangerous goods and explosives and the design, construction and upkeep of 'charging areas' for LPG gas;
- the design and construction of fuel-dispensing areas;
- marking and placarding of dangerous goods and premises where dangerous goods are kept; and

- transporting explosives.

It is noted that some of the costs associated with the proposed *Dangerous Goods (General) Regulation 1999* are incurred by industry under similar requirements imposed by other jurisdictions. For example, in many instances, the provision of emergency fire equipment is required under Local Government provisions.

## **4.2 Benefits**

The proposed amendments to the draft *Dangerous Goods (General) Regulation 1999* will bring NSW requirements for dangerous goods into greater alignment with requirements imposed by other States. The resulting improved complementary legislation will provide benefits to those businesses who operate across State borders. In addition, the removal of certain specific provisions from the Regulation, to avoid duplication with the newly referenced Australian Standards, begins to pave the way for the introduction of a new more nationally uniform Regulation based on the National Standard for the Storage and Handling of Dangerous Goods.

Maintaining controls on the storage and handling of dangerous goods offsets the costs of inadequate controls. A likely consequence of removing controls in regard to dangerous goods is an increase in the number and severity of accidents, injuries and incidents involving dangerous goods resulting in serious injuries, fatalities and damage to property and the environment. Flow-on costs resulting from an increase in the number of accidents and injuries include:-

- subsequent increased insurance costs;
- subsequent costs related to production losses
- costs related to the restoration of damaged property, plant and the environment; and
- increased indirect costs to the community by way of increased social payments and increased costs related to emergency services.

Maintaining controls in regard to the safe management of dangerous goods results in the above costs being contained at a reduced level, benefiting both industry and the community in general.

Adoption of the proposed *Dangerous Goods (General) Regulation 1999* will allow controls for the safe management of dangerous goods to be maintained until such time as a more substantial review of NSW dangerous goods legislation, based on the National Standard for the Storage and Handling of Dangerous Goods, can take place.

## **5. Impacts of Alternate Options**

### No Regulation

Without specific dangerous goods regulatory requirements businesses would still be required to comply with the *Dangerous Goods Act 1975* and the duty of care provisions under the *Occupational Health and Safety Act 1983*. Removal of regulatory requirements would result in a lack of guidance on how persons handling dangerous goods can comply with these Acts. Businesses would face significant increased costs in the form of research and implementation costs for setting up appropriate processes to comply with these Acts.

Serious accidents can result in deaths, injuries and significant damage to property and the environment. It is likely that the removal of specific dangerous goods regulatory requirements would result in an increase in serious accidents involving dangerous goods. This would in turn create a variety of flow-on costs that would be borne by both business and the community. These costs would include such things as insurance, restoration and social payment costs.

The removal of specific dangerous goods regulatory requirements would provide benefits in terms of reduced administration costs to WorkCover. However, this benefit is likely to be at least partially eroded by the need to direct additional WorkCover resources to the inspection and follow-up of accidents involving dangerous goods which are likely to result as a consequence of the removal of regulatory requirements.

### Nationally Uniform Dangerous Goods Legislation

It is likely that the draft National Standard for the Storage and Handling of Dangerous Goods will be amended, perhaps significantly, prior to its declaration as a national standard. This being the case, a regulation based on the draft national standard is likely to require amendment within a short time of being made.

The introduction of new or significantly amended regulatory requirements generally results in some increased costs to businesses, particularly up-front one-off costs related to implementing the new requirements. To introduce new regulatory requirements in the knowledge that they are likely to be significantly changed in the near future would impose unnecessary costs on industry and is considered irresponsible.

It is noted that an economic impact assessment is to be undertaken for the National Standard for the Storage and Handling of Dangerous Goods. The impact assessment will provide details on the costs and benefits to industry should the Standard be introduced as a regulatory requirement.

## **6. Consultation**

Consultation with the dangerous goods industry in the development of the proposed *Dangerous Goods (General) Regulation 1999* will take place during the public exhibition period for the proposed Regulation and RIS.

Prior to the public exhibition period WorkCover NSW sent advice on the proposed release of the draft Regulation to the proprietors of all licensed dangerous goods sites in New South Wales. As a result over 3,000 requests have been received for copies of the draft Regulation. Copies of the proposed Regulation and RIS will be forwarded to all the licensees who requested copies. Copies will also be forwarded to the organisations listed in 'Annexure B' and approximately 130 accredited dangerous goods consultants.

In addition, the proposed Regulation and RIS will be forwarded to the Workers Compensation Advisory Council (WCAC) for comment and advice.

## **7. Conclusion**

The proposed *Dangerous Goods (General) Regulation 1999* is designed to promote the safe management of dangerous goods. WorkCover NSW believes that the regulatory proposals will continue to provide a framework for the safe storage and handling of dangerous goods.

WorkCover NSW proposes to undertake an overhaul of the regulatory system for dangerous goods in NSW in the future but this will need to wait for the completion of a major national review of dangerous goods standards and codes. The proposed Regulation is an interim measure to ensure adequate controls remain in place for the safe management of dangerous goods until the more extensive review of dangerous goods regulatory provisions can take place.



## **Annexure 'A'**

### **Draft National Standard for the Storage and Handling of Dangerous Goods- Outline of Provisions and Objectives**

- 1/ The objectives of the draft National Standard for the Storage and Handling of Dangerous Goods are to protect the safety and health of persons and to prevent damage to property and the environment from hazards arising from the storage and handling of dangerous goods.
- 2/ The scope of the draft National Standard, as with traditional dangerous goods legislation, extends beyond the workplace to address public safety and the environment. However, unless non-workplaces hold large quantities of dangerous goods they will not have to comply with the specific provisions of the National Standard.
- 3/ The draft National Standard adopts a performance-based approach for the safe management of dangerous goods and identifies safety outcomes. This simplified approach gives enterprises, including small businesses, the flexibility of developing control measures tailored to their circumstances without being forced to follow prescriptive requirements.
- 4/ The draft National Standard provides a framework for the safe management of dangerous goods through the process of hazard identification, risk assessment and risk control. It also provides a framework for the management of emergencies, in consultation with emergency services bodies, which is vital in terms of public safety and the protection of property and the environment.
- 5/ The proposed National Standard will reduce the existing regulatory burden through:
  - provision of nationally consistent OHS, public health, environmental and transport legislative requirements;
  - a concise set of performance-based requirements;
  - rationalising and removing existing piecemeal requirements;
  - creating consistency between existing jurisdictional legislation which has differences in scope and application; and
  - limiting the referencing of Australian Standards which are detailed and prescriptive.
- 6/ The proposed National Standard aims to achieve nationally consistent health and safety outcomes.

- 7/ The proposed National Standard should result in a range of benefits to industry, employees and the community in the form of reduced costs associated with workplace accidents. There are also potential benefits in the form of significant reductions in costs relating to the administration and organisational structures of firms, particularly those operating in more than one State or Territory.
- 8/ There will be costs involved in the implementation and ongoing compliance with the proposed National Standard. There are some cost implications for small business, arising in part from the move from a prescriptive to performance-based approach. However, the referencing of technical standards produced by Standards Australia in a National Code of Practice will limit the impact on those small businesses which currently comply with these technical standards.
- 9/ The main benefits to be obtained from the implementation of the proposed National Standard are:
- a nationally consistent approach to the management of hazards arising from the storage and handling of dangerous goods;
  - improved safety for workers and the general community;
  - better protection of property and the environment;
  - flexibility for industry in dealing with changes arising from the introduction of new technology, products and processes; and
  - removal of barriers to interstate trade and the removal of inconsistencies affecting national companies.

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Note: Enquiries on the draft National Standard for the Storage and Handling of Dangerous Goods can be directed to the National Occupational Health and Safety Commission on (02) 9577 9571.

**Annexure 'B'**

**Organisations receiving copies of the proposed Regulation and RIS**

Adhesives & Sealants Manufacturers Association of Australia	Department of Energy
Allgas Energy Ltd	Department of Fair Trading
ALP Risk Management	Department of Health
Ambulance Service of NSW	Department of Housing
Anti-Discrimination Board	Department of Industrial Relations
Association of Australasian Diesel Specialists Inc	Department of Land & Water Conservation
Association of Australian Ports & Marine Authorities Inc	Department of Local Government
Australia & New Zealand Environment & Conservation Council	Department of Mineral Resources
Australian Chemical Specialities Manufacturers Association	Department of Public Works & Services
Australian Institute of Petroleum Ltd	Department of School Education
Australian Liquefied Petroleum Gas Association	Department of Sport and Recreation
Australian Maritime Safety Authority	Department of State & Regional Development
Australian Paint Manufacturers' Federation Inc	Department of Training & Education Coordination
Australian Petroleum Agents & Distributors Association	Department of Transport
Australian Petroleum Production & Exploration Association Ltd	Department of Urban Affairs & Planning
Australian Railway Association Inc	Electoral Commissioner
Australian Retailers Association	Environment Protection Authority
Australian Road Federation	Ethnic Affairs Commission of NSW
Avcare Ltd	Fire Contractors Federation
Bicentennial Park Trust	Fire Protection Association Australia
BOC Gases	Gas Council of NSW
BOC Gases Australia Ltd	Hazardous Chemicals Advisory Committee
Boral Energy	Hunter Water Corporation Ltd
Boral Gas (NSW) Pty Ltd	Institute of Ambulance Officers (Australia)
Building & Construction Industry Long Service Payments Corporation	Integral Energy (Shoal Gas)
Casino Control Board	Labour Council of NSW
Centennial Park & Moore Park Trust	Land Titles Office
Chamber of Manufacturers of NSW	Law Reform Commission of NSW
Construction, Forestry, Mining & Energy Union	Maritime Union of Australia
Department for Women	Medical Services Committee
Department of Bush Fire Services	Metal Trades Industry Association of Australia (NSW Branch)
	Motor Accidents Authority
	Motor Vehicle Repair Industry Council
	Myros Services
	National Parks & Wildlife Service
	National Rail Corporation Ltd
	National Safety Council of Australia Ltd

Natroad Ltd	Standards Association of Australia
NSW Academy of Sport	State Authorities Superannuation Board
NSW Agriculture	State Emergency Services
NSW Fire Brigades	State Forests of NSW
NSW Fisheries	State Rail Authority of NSW
NSW Institute of Sport	State Sports Centre Trust
NSW Lotteries	State Transit Authority
NSW Ombudsman	Sydney Cricket & Sports Ground Trust
NSW Police Service	Sydney Water Board
NSW Valuer General's Office	The Australian Gas Association
Office of Marine Safety & Port Strategy	The Institution of Gas Engineers (Aust)
Pacific Power	The Treasury
Packaging Council of Australia	Totalizator Agency Board of NSW
Plastics & Chemicals Industries Association Inc	Tourism NSW
Reckitt & Coleman	Transport Workers Union of Australia
Road Transport Forum Ltd	Waste Service NSW
Roads & Traffic Authority of NSW	Zoological Parks Board of NSW
Royal Australian Chemical Institute	
Royal Botanical Gardens & Domain Trust	

**Annexure 'C'**

**PROPOSED DANGEROUS GOODS (GENERAL) REGULATION 1999**

**SUMMARY OF PROVISIONS**

**PART 1 - PRELIMINARY**

This part covers:

- Name of Regulation
- Commencement date
- Limit on application – regulation does not apply to the transport of dangerous goods (other than explosives) by road or rail
- Definitions

**PART 2 - LICENCES & PERMITS (GENERAL PROVISIONS)**

Licences are required to keep dangerous goods or to keep, carry, import, manufacture or sell explosives. Permits are required for a number of activities including the purchase of explosives and the setting off of fireworks. This Part prescribes the obligations of the licence holder or applicant when applying for, transferring and making changes to licences and permits with WorkCover.

**PART 3 - DANGEROUS GOODS (GENERAL)**

This Part outlines which substances and articles are prescribed as dangerous goods under the Act and are thereby covered by the Regulation. Dangerous goods are classified by cross-reference to other codes and regulations.

The Part also sets out arrangements and requirements for various matters related to dangerous goods. In particular this Part:

- sets fees for the examination and testing of dangerous goods;
- requires persons who handle dangerous goods to be adequately informed in safety procedures and be competent to operate safety equipment;
- identifies various general precautions to be taken at premises where dangerous goods are stored;
- requires the maintenance of records for consignment and delivery of dangerous goods;

- defines dangerous occurrences and sets procedures to be followed for notification and use of premises in the event of a dangerous occurrence;
- prohibits the manufacture, import or sale of dangerous goods that are unsafe for carrying or keeping;
- imposes restrictions on the supply of liquid and gaseous flammable dangerous goods using fuel dispensers at premises such as service stations;
- sets requirements that need to be met for fire extinguishers and breathing apparatus;
- prescribes the manner for determining the flashpoint of a liquid; and
- makes provisions for WorkCover to grant approvals and to exempt a person from the provisions of the Regulation.

#### **PART 4 - EXPLOSIVES (GENERAL)**

This Part prescribes

- which dangerous goods are regarded as explosives under the Act;
- the application of the Act and Regulation to explosives;
- the procedure to be followed to apply for an explosive to be declared an authorized explosive;
- general safety provisions for the manufacture, storage and supply of ammunition, electric detonators, fireworks and marine distress flares and signals;
- prohibitions and restrictions on certain hydrogen/oxygen explosives;
- requirements for the storage, setting and destruction or other disposal of explosives;
- restrictions and conditions on the sale of distress signals, fireworks and model rocket motors;
- procedures for the consignment of explosives to other persons;
- requirements to notify WorkCover of arrival into and export from NSW of explosives;
- the conditions under which a person may receive explosives;

- the conditions under which WorkCover may issue or refuse a permit for –
  - purchasing or receiving explosives
  - collecting of ammunition for historical interest
  - receiving and using display fireworks
  - wholesaling fireworks
  - selling display fireworks;
- conditions under which police may issue or cancel permits to purchase or receive explosives;
- requirements for persons using explosives in the construction industry to hold a certificate of competency and the conditions under which WorkCover may issue or refuse such a certificate [these provisions transferred from the Construction Safety Act and Regulations]; and
- details of records that must be kept covering manufacture and movement of explosives.

## **PART 5 - KEEPING OF DANGEROUS GOODS**

### **Division 1- General**

This Division sets general provisions for the keeping of dangerous goods. The Division has only limited application to dangerous goods while they are being used as part of a manufacturing or maintenance process, apart from explosives.

The Division sets requirements for depots and prescribes:

- goods that must be kept in a licensed depot;
- limitations as to where on the premises a depot may be located including separation distances from certain other exposures both on and off the premises;
- obligations on the occupier that must be met to prevent the escape of liquid, gaseous or molten dangerous goods from a depot; and
- the capacity for WorkCover to require the appointment of a watchman for a depot.

The Division imposes restrictions on the keeping, handling and movement of dangerous goods on licensed premises. The Division also places a minimum age of 16 years for persons that may be employed in a licensed depot.

The Division imposes extensive requirements on the prevention and minimisation of fire hazards, including:

- restrictions on smoking or the use of any flame-producing equipment such as welding or oxy-acetylene cutting equipment;
- restrictions on the type of vehicles and motors that may be used in licensed depots containing flammables;
- suitable protective designs that may be applied to appliances to limit the risk of ignition of dangerous goods;
- standards that must be met for electrical apparatus and wiring in a depot containing flammables; and
- provision of sprinklers, fire hose reels and fire-fighting equipment including portable fire extinguishers.

The Division also requires dangerous goods to be removed from premises if a licence is terminated, prohibits the blocking of ventilation, and specifies details of appropriate notices and labels to be displayed at depots.

#### **Division 2 - Keeping of Explosives**

This Division sets requirements for the manner in which explosives may be stored or held for sale. It allows for the keeping of small quantities of explosives on unlicensed premises and makes specific provisions for particular types of explosives.

Requirements imposed by this Division include:

- specific conditions for the storage of propellant powder, detonators, blasting and other explosives;
- conditions under which distress signals, fireworks and safety cartridges may be kept for sale;
- Separation distances to be maintained between various classes of licensed external magazines and
  - protected places
  - protected works
  - other magazines
  - process buildings
  - ammonium nitrate depots
- standards for the construction of external magazines;



- details of notices to be posted within magazines;
- prohibition against keeping explosives of different compatibility groups in one magazine;
- measures to be taken to prevent the carrying of flammable or burning materials into a magazine;
- the need for magazines to be kept locked when not in use;
- restrictions on the packaging of gunpowder;
- evacuation of persons from a magazine during a thunderstorm;
- restrictions on the use of internal magazines, including quantities of particular explosives that may be kept;
- additional conditions for the keeping of propellant powder and fireworks.

**Division 3 – Keeping of dangerous goods of Class 2 (Gases)**

This Division provides particular requirements for the storage of gases, including details of which gases (type and quantity) are not required to be kept on licensed premises.

Provisions imposed by this Division include:

- detailed requirements for depots, including pressure vessel construction, building construction and fenced areas to be used as depots;
- fire protection measures;
- levelling requirements for tanks containing liquefied gas with common connections;
- separation distances for depots for flammable gases;
- requirements for vehicles delivering unodorised LP Gas to depots;
- safety precautions for charging aerosol and disposable containers with LP Gas;
- conditions including separation distances for the storage of toxic gases; and
- specific requirements for the storage of cryogenic liquids.

**Division 4 – Keeping of dangerous goods of Class 3 (flammable liquids) and combustible liquids**

This Division provides particular requirements for the storage of flammable and combustible liquids, including details of which liquids (type and quantity) are not required to be kept on licensed premises.

Provisions imposed by this Division include:

- requirements for self-service vehicle fuel pumps;
- location of fuel tanks;
- fire protection systems for certain above-ground tanks;
- Measures to be taken if carbon disulfide is to be kept;
- Requirements for abandoning underground tanks; and
- floating pans in cone roof tanks.

**Division 5 - Keeping of dangerous goods of Class 4 (flammable solids)**

This Division provides particular requirements for the storage of flammable solids, including details of which flammable solids (type and quantity) are not required to be kept on licensed premises.

Requirements in this Division comprise construction specifications for depots for various classes of flammable solids.

**Division 6 - Keeping of dangerous goods of Class 5 (oxidizing substances and organic peroxides)**

This Division provides particular requirements for the storage of oxidizing substances and organic peroxides, including details of which of these goods (type and quantity) are not required to be kept on licensed premises, and separation distances in such cases.

Provisions in this Division comprise:

- Construction specifications for depots for various classes of oxidizing substances and organic peroxides;
- Additional storage requirements for specific substances within depots, including location of these goods in relation to other goods to minimise the risk of spontaneous combustion.

**Division 7 - Keeping of dangerous goods of Class 6 (toxic substances)**

This Division provides particular requirements for the storage of toxic substances, including details of which of these goods (type and quantity) are not required to be kept on licensed premises.

The Division also requires compliance with various Australian Standards for specified quantities of toxic substances that are kept on licensed premises.

**Division 8 - Keeping of dangerous goods of Class 8 (corrosive substances)**

This Division provides particular requirements for the storage of corrosive substances, including details of which of these goods (type and quantity) are not required to be kept on licensed premises.

The Division also requires compliance with various Australian Standards for specified quantities of corrosive substances that are kept on licensed premises.

**Division 9 - Keeping of dangerous goods of Class 9 (miscellaneous dangerous goods)**

This Division makes provision for the storage of liquid environmentally hazardous substances by requiring compliance with particular Australian Standards.

The Division also makes storage isolation provisions for goods kept at elevated temperature and other goods that fall within Class 9.

**PART 6 - CONVEYANCE OF DANGEROUS GOODS**

This Part provides detailed prescription to support *Division 2 – Conveyance of the Dangerous Goods Act 1975*.

**Division 1- General**

This Division sets general provisions for the conveyance of dangerous goods by transport container and through a pipeline. Certain classes of goods are exempted from the Division, as are vessels exporting dangerous goods from NSW and any transport which is covered by the Road and Rail Transport (Dangerous Goods) Act 1997.

Particular provisions of the Division include:

- carriage of explosives above certain stipulated quantities must be by licensed vehicle or vessel;
- WorkCover may inspect transport containers;
- restrictions on quantities of dangerous goods that may be conveyed by public passenger vehicle;
- ullage requirements for tanks carrying liquid dangerous goods;

- specific requirements for vehicles carrying liquid dangerous goods;
- fire precaution measures to be taken;
- prohibition on compartments containing dangerous goods being left open except for the purposes of loading and unloading;
- method of identifying pipelines conveying dangerous goods; and
- procedures to be followed when pumping dangerous goods.

**Division 2 - Conveyance of explosives**

This Division sets requirements for the transport of explosives and requires compliance with the Australian Explosives Code.

Other specific provisions include:

- restrictions on the quantity of explosives which may be carried within certain areas of NSW;
- measures to be taken to avoid ignition or explosion of explosives;
- conditions regarding the carriage of explosives by rail or tramway; and
- conditions regarding the carriage of explosives by vessel.

**Division 3 - Conveyance of dangerous goods of Class 2 (gases)**

Provisions imposed by this Division include:

- breathing apparatus to be available in vehicles carrying more than 1 tonne of toxic gas;
- requirements for pumps used to pump gases; and
- construction requirements for pipelines used to convey gases.

**Division 4 - Conveyance of dangerous goods of Class 3 (flammable liquids)**

Provisions imposed by this Division include:

- compliance requirements for vehicles carrying flammable liquids;
- restrictions on taking tanks and vehicles carrying flammable liquids into buildings;

- restrictions on the types of pumps that may be used on vehicles carrying flammable liquids;
- restrictions on pumping from vehicles to above-ground tanks for certain flammable liquids;
- safety procedures for the filling and emptying of tanks or vehicles;
- criteria for premises to be eligible for approval as open hatch filling stations; and
- requirements for the construction, laying, use and maintenance of pipelines for flammable liquids, including approvals from WorkCover.

**Division 5 - Conveyance of dangerous goods of Class 5 (oxidizing substances and organic peroxides)**

This Division requires persons carrying ammonium nitrate, ammonium perchlorate and ammonium nitrate fertilisers, together with explosives, to meet the same provisions for these goods as if they were explosives.

**Division 6 - Conveyance of dangerous goods of Class 6 (toxic substances)**

This Division sets construction requirements for bulk tanks for carrying tetraethyllead and tetramethyllead.

**PART 7 - MARKING AND PLACARDING OF DANGEROUS GOODS**

This Part specifies the marking and placarding requirements for the packaging of explosives and other dangerous goods.

**PART 8 - PACKAGING OF, AND CONTAINERS FOR, DANGEROUS GOODS**

This Part sets requirements for approval and use of packaging and intermediate bulk containers (IBCs) for dangerous goods. Containers of dangerous goods below certain stipulated quantities are exempt from these requirements.

In addition to general requirements the Part also stipulates special packaging requirements for:

- pool chlorine;
- gases;
- explosives with a mass explosion hazard (Class 1.1); and
- explosives generally.

Provisions are also included for portable plastic fuel containers.

## **PART 9 - MANUFACTURE OF EXPLOSIVES**

This Part sets provisions for the manufacture of explosives, including:

- a requirement for all buildings used in the manufacture of explosives to be licensed by WorkCover and details to be included in a licence;
- information to be displayed in licensed buildings and magazines;
- separation distances which must be maintained between buildings;
- procedures to be observed when repairing buildings;
- provision of lightning conductors and measures to be taken during thunderstorms;
- means of heating buildings;
- a requirement to remove explosives and ingredients from process buildings when the manufacture is complete;
- procedures for the removal of foreign matter from ingredients;
- restrictions on types of tools and vehicles that may be used in the manufacture of explosives;
- measures to be taken to minimise the risk of fire;
- prohibition of persons under 16 years being employed or admitted unaccompanied into process buildings;
- procedures to be followed in the manufacture of explosives from ammonium nitrate and fuel oil;
- procedures to be followed in the manufacture and conveyance of liquid oxygen explosives;
- conditions under which explosives may be blended on site; and
- procedures for the filling of safety cartridges.

## **PART 10 - SPECIAL REQUIREMENTS FOR CERTAIN GOODS**

This Part sets special requirements for the handling, keeping, manufacture, use and sale of particular classes of dangerous goods. These requirements should be read in conjunction with other Parts of the Regulation that deal with the dangerous goods concerned.

### **Division 1 - Dangerous goods of Class 2 (gases)**

This Division sets provisions including:

- general requirements for the filling, keeping and handling of gas cylinders;
- installation and use of oxygen or acetylene reticulation systems;
- safety relief device requirements for liquefied gas cylinders;
- restrictions on installing gas containers etc on vehicles;
- restrictions on the use and handling of liquefied flammable gas;
- Australian Standards and other conditions to be complied with in the use and filling of cylinders for:
  - acetylene
  - anhydrous ammonia
  - chlorine
  - liquefied natural gas
  - unodorised liquefied natural gas
- certification requirements for the transport of LP Gas
- general requirements for valve protection on gas cylinders; and
- restrictions on the filling of balloons, etc with certain gases.

### **Division 2 - Dangerous goods of Class 3 (flammable and combustible liquids)**

This Division sets provisions for flammable and combustible liquids including:

- storage and handling of potable liquid (e.g. OP rum) to comply with all provisions of AS1940;
- requirements for pump equipment used for transferring flammable liquid;
- kerosene to be coloured blue;
- restriction on flammable liquids used in hairdressing to those that can be mixed with water; and

- requirements for the design, construction and installation of oil fuelled heating systems in high rise buildings.

### **Division 3 - Dangerous goods of Class 4 (flammable solids)**

This Division:

- sets requirements in regard to the manufacture, repair and use of nitrocellulose products;
- requires safety matches to comply with AS 3667.

## **PART 11 - SPECIAL REQUIREMENTS RELATING TO PORTS**

This Part sets the conditions for the safe handling and conveyance of dangerous goods in ports, on wharves, in a storage tank on a wharf or on property administered under the *Ports Corporatisation and Waterways Management Act 1995*. The Office of Marine Administration administers this Part.

Issues addressed in this Part include:

*Division 2:* General requirements in ports, including approval to enter into ports with dangerous goods, handle dangerous goods in ports and general safety procedures to be followed.

*Division 3:* Procedures and safety precautions to be followed for the conveying, handling and storage of dangerous goods in packaging (except goods in bulk). This Division also prescribes separation distances for dangerous goods stored on wharves.

*Division 4:* Approvals, procedures and safety precautions for handling dangerous goods in freight containers, at ordinary berths, container terminals and depots.

*Division 5:* Approvals, procedures and safety precautions for handling bulk dangerous goods as liquids and gases.

*Division 6:* Construction, installation and maintenance requirements for pipelines and flexible hoses used to handle dangerous goods, including Australian Standards to be complied with and testing regime for flexible hoses.

## **PART 12 - MISCELLANEOUS**

This part deals with prescribed forms and administrative procedures in case of breaches, penalty levels for breaches, the schedules on prescribed forms, handling categories of dangerous goods and the maximum quantities of dangerous goods permitted on board a vessel at an ordinary wharf. The Part also includes a dictionary of terms and technical words used in the Regulation.



Annexure 'D'

**DIFFERENCES BETWEEN  
THE DANGEROUS GOODS REGULATION 1978  
AND THE DRAFT DANGEROUS GOODS (GENERAL) REGULATION 1999**

1978 CLAUSE	1999 CLAUSE	COMMENT
1	1	
2	2	
4	4 & Dictionary	Centralises the many provisions throughout the Regulation stipulating that a recommendation in an Australian Standard is a requirement.
4A	3	
-	5	This Clause states that the explanatory note does not form part of the Regulation.
5	10	
6	11	
7	11	
9	7	
10	12	
11	13	
12A	6	
12B	7	
12C	7	
12E	12	
12F	8	
12G	13	
12	14	
14	17	
15	17	
15AA	6	
15AB	9	
15A	Nil	The old Clause is now considered irrelevant.
15B	Nil	The old Clause is now considered irrelevant.
16	15	Some minor changes have been made to this Clause but mostly of a machinery nature.
17	16	Adds a new provision that deems Ammonium Nitrate (UN 2426) to be Packing Group II. Categorisation of dangerous goods has been dispensed with.
18	18	
19	19	
20	20	

1978 CLAUSE	1999 CLAUSE	COMMENT
21	21	
22	22	
23	23	
24	24	
25	25	
26	26	
27	27	
28	28	
29	29	
30	30	
31	340	
32	31	
33	32	
34	33	This Clause has been modified to make flashpoint determinations more aligned with the United Nations Recommendations.
35	34	
36	35	This Clause relaxes some of the restrictions imposed by Divisions 4 and 5 of the Act for some distress signals and Divisions 2, 4 and 5 for toy fireworks not being of Class 1.4 S.
37	36	
38	37	
39	38	
40	39	
41	40	
-	41	A new Clause prohibiting a person from selling, manufacturing or importing certain marine distress flares and signals that do not comply with AS 2092.
-	42	A new Clause, dealing with model Rocket Propellant Devices, has been added.
42	43	
43	44	
-	45	Adds a new Clause dealing with the use of explosives in buildings, excavations and compressed air work.
44	46	
45	47	
46	48	No longer refers to the retail sale of display fireworks. A display fireworks permit is required to purchase distress signals.
46A	49	
47	50	
48	Nil	The old Clause is now considered irrelevant.

1978 CLAUSE	1999 CLAUSE	COMMENT
49	51	This Clause now includes notification of the arrival of explosives by air.
50	52	
51	53	
52	54	
53	55	
54	56	
54A	57	
54B	58	
55	59	
56	60	
57	61	The definition of "blasting explosives" has been altered for the purposes of Division 4 of Part 4 of the Regulation.
58	62	
59	63	
60	64	
61	65	
62	66	
63	67	
64	68	
65	69	
-	70	A new Division entitled "Use of explosives in construction work" has been added. It has been moved from the Construction Safety Regulation. New Clauses 70 - 77 include provisions for certificates of competency for Powdermen.
-	71	See above comment.
-	72	See above comment.
-	73	See above comment.
-	74	See above comment.
-	75	See above comment.
-	76	See above comment.
-	77	See above comment.
66	78	
67	79	
68	80	
69	81	
70	82	The exemptions from the application of this Part now include batteries and fire extinguishers. The meaning of the phrase "immediate use" has been expanded upon.
71	83	
72	84	
73	85	

1978 CLAUSE	1999 CLAUSE	COMMENT
74	86	
75	87	This Clause has been expanded by calling up AS 3833 as an alternative acceptable method of storage.
76	88	
77	89	
78	90	
79	91	
80	92	
81	93	
82	94	
83	95	
84	96	
85	97	
86	98	
87	99	
88	100	
89	101	
90	102	This Clause has been redrafted and to some extent simplified.
91	103	
92	104	
93	105	This Clause has been redrafted and to some extent simplified.
94	106	This Clause has been redrafted and to some extent simplified.
95	107	This Clause has been expanded to include conditions for keeping display fireworks intended for sale.
96	108	
97	109	
98	110	This Clause has been expanded by calling up AS 2187.1 in lieu of AS 2188.
99	111	
100	112	
101	113	
102	114	
103	115	
104	116	
105	117	
106	118	
107	119	
108	120	
109	121	This Clause has been expanded to include restrictions on the storage of toy fireworks.

1978 CLAUSE	1999 CLAUSE	COMMENT
110	122	
111	123	This Clause has been expanded to require certain premises for storing aerosols of Class 2.1 and Class 2.3 to be licensed.
112	124	This Clause additionally calls up AS 4332 for some cylinder depots. There are now restrictions placed upon the storage of some aerosols of Classes 2.1 and 2.3.
113	125	
114	126	
115	127	
116	128	
117	129	
118	130	
119	131	The Table has been changed as a consequence of calling up AS 4332.
120	132	
121	133	
122	134	
123	135	
124	136	Old Clauses 124 - 126 have been amalgamated into the new Clause 136, requiring all cryogenic containers to comply with AS 1894.
125	136	
126	136	
127	137	
128	138	
129	139	This Clause has been redrafted and to some extent simplified.
130	Nil	The old Clause is now covered by AS 1940.
131	140	
132	141	
133	142	
134	143	
135	144	
136	Nil	The old Clause is now covered by AS 1940.
137	Nil	The old Clause is now covered by AS 1940.
138	145	
139	Nil	The old Clause is now covered by AS 1940.
140	146	
141	Nil	The old Clause is now covered by AS 1940.
142	147	
143	148	Clauses 148 - 157 are modified due to the changeover from Categories to Packing Groups.

1978 CLAUSE	1999 CLAUSE	COMMENT
144	149	See above comments.
145	150	See above comments.
146	151	See above comments.
147	152	See above comments.
148	153	See above comments.
149	154	See above comments.
150	155	See above comments.
151	156	See above comments.
152	157	See above comments.
153	158	
154	159	Some modifications have been made to the licensing thresholds. In addition UN 1479 and UN 3139, being explosives precursors, are specifically mentioned. Compliance with AS 4326 or AS 2714 is made a condition for premises not required to be licensed.
155	159	
156	160	
157	161	This Clause now calls up AS 4326.
158	162	
159	163	Part of new Clause 163 as AS 4326 is now called up.
160	163	See above comment.
161	163	See above comment.
162	164	
163	164	This Clause now calls up AS 2714.
164	Nil	Clauses 164, 165, 166 and 167 have been dispensed with as AS 2714 is now being called up in Clause 164.
165	Nil	See above comment.
166	Nil	See above comment.
167	Nil	See above comment.
168	165	This Clause has been modified by calling up AS 2507, AS 4081 and AS 4452 for premises not required to be licensed.
169	166	This Clause has been expanded by calling up AS 2507, AS 4081 and AS 4452.
169A	Nil	Now combined with new Clause 166.
170	167	This Clause has been modified by calling up AS 3780 for premises not required to be licensed.
171	168	This Clause has been expanded by calling up AS 3780.
171A	Nil	Now combined with new Clause 168.
-	169	169 and 170 are new Clauses prescribing when certain premises of Class 9 dangerous goods need to be licensed and how a number of Class 9 dangerous goods are to be kept.

1978 CLAUSE	1999 CLAUSE	COMMENT
-	170	See above comment.
172	181	
173	171	
174	172	
175	183	
178	Nil	The subject of old Clause 178, being the transport of goods too dangerous to be transported, is now covered under the Road and Rail Transport (Dangerous Goods) (Road) Regulation 1998.
179	182	The provisions of old Clauses 179,184, 189, 190,192, 205, 208, 209, 210, 212, 213, 214 and 217 are now covered by compliance with the Australian Explosives Code in new Clause 182.
180	184	
181	185	
184	182	
185	174	
187	176	
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206	182	
-	182	Compliance with the Australian Explosives Code is now required.
207	186	The old Clause has been expanded in scope.
208	182	
209	182	
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211	188	
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216	190	
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1978 CLAUSE	1999 CLAUSE	COMMENT
219	193	
220	194	
221	195	
223	Nil	The subject of the old Clause is adequately covered by the Australian Dangerous Goods Code (ADG Code).
224	Nil	The subject of the old Clause is adequately covered by the ADG Code.
225	196	
226	197	
227	Nil	The subject of the old Clause is adequately covered by the ADG Code.
229	198	
230	Nil	The subject of the old Clause is adequately covered by the ADG Code.
231	Nil	The subject of the old Clause is adequately covered by the ADG Code.
232	199	
233	200	The provisions of AS 2017 have been replaced by AS 2809 and the ADG Code.
234	201	
235	202	AS 1135 and AS CB18 have been replaced by AS 4041. AS 2832 or other approved standards or codes may now apply in addition to AS 1697 re: underground and underwater pipelines.
237	203	Now specifies the conveyance of ammonium perchlorate and ammonium nitrate fertilisers in addition to ammonium nitrate.
238	Nil	The subject of the old Clause is adequately covered by the ADG Code.
239	204	Also applies to packaging of liquid goods not exceeding 25 litres.
240	205	
242	206	Refers to the ADG Code.
243	207	
244	208	
246	209	
247	210	
248	211	Intermediate bulk containers are specified in addition to packaging.
249	212	See above comment.
253	213	
254	214	See above comment.
255	215	See above comment.



1978 CLAUSE	1999 CLAUSE	COMMENT
256	216	
257	217	
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263	223	
264	224	
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272	232	
273	233	AS 2187 is now called up. The limit for the flashpoint of clean, unused fuel oil has been reduced by 0.5° C.
274	234	Vehicles must comply with the Australian Explosives Code.
275	187	
276	235	AS 2187 is referenced.
277	236	
278	237	AS CB22 has been replaced with AS 2337.
279	238	
-	239	A new Clause that requires reticulation systems for oxygen and acetylene to comply with AS 4289.
-	240	A new Clause that requires compliance with AS 4332 for a person handling or keeping cylinders of gas.
280	241	
280A	242	
281	243	
281A	244	Allows the flushing and cleaning of motor vehicle air conditioning systems using liquefied flammable gas if removed from the system on completion.
282	245	
283	246	Chlorine Code ED 2B 03 is replaced by AS 2927.
-	247	A new Clause that requires compliance with AS 3961 for a person handling or keeping liquefied natural gas.
284	248	
284A	249	The Building Services Corporation Act 1989 is replaced by the Home Building Act 1989.

1978 CLAUSE	1999 CLAUSE	COMMENT
285	250	
286	251	
287	252	
288	253	
290	254	There is no more provision for pumping using induction non-sparking electric motor.
291	255	
292	256	
293	Nil	The old Clause is now considered irrelevant.
293A	257	
294	258	
-	259	A new Clause requiring that safety matches comply with AS 3667.
295	260	
296	261	
297	262	
298	263	
299	264	
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301	266	
302	267	
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307	272	
308	273	
309	274	
310	275	
311	276	
312	Nil	The old Clause refers to an obsolete installation.
313	277	
314	278	
315	279	
316	280	
317	281	
318	282	
319	283	
320	284	
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1978 CLAUSE	1999 CLAUSE	COMMENT
325	289	
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<b>1978 CLAUSE</b>	<b>1999 CLAUSE</b>	<b>COMMENT</b>
368	332	
369	333	
370	334	
371	335	
372	Nil	The old Clause is now considered irrelevant.
372A	Nil	The old Clause refers to an obsolete Government body.
373	336	
374	337	
375	338	
376	339	The General Manager of the WorkCover Authority is now the prescribed officer.
-	341	This Clause repeals the Dangerous Goods Regulation 1978.
-	<b>Dictionary</b>	The dictionary is a modification of old Clause 4.

## **Appendix 2**

**Letter to the Committee from the Joint Standing Committee on  
Road Safety (STAYSAFE) dated 25 October 1999**



# staysafe

Joint Standing Committee on Road Safety

Parliament House, Macquarie St, Sydney 2000

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Mr Peter Nagle MP  
Chairman, Regulation Review Committee  
Parliament House  
Macquarie Street  
SYDNEY NSW 2000



Dear Chairman,

I refer to the request for representatives of the STAYSAFE Committee to attend the briefing of the Regulation Review Committee of Thursday 21 October 1999 regarding the use of liquefied flammable gases in motor vehicle airconditioning systems. At its meeting of Tuesday 19 October 1999, the STAYSAFE Committee determined that the Director of the STAYSAFE Committee should attend the briefing.

The STAYSAFE Committee's interests, as set out in its terms of reference, include not just the review of road trauma countermeasures to address problems of excessive vehicle speeds or alcohol-impaired drivers, but extend to examination of the safe operation of the New South Wales road transport system—roads, vehicles, and the movement of people and goods within the system.

With regard to the subject of 'dangerous goods', the STAYSAFE Committee's concerns address:

- the carriage of dangerous goods by road
- the carriage of dangerous goods by rail, specifically relating to railway level crossing safety
- the fitment of fuel and refrigerant systems to vehicles, including domestic fuel systems in caravans and recreational vehicles

Over recent years, the STAYSAFE Committee has investigated and reported on various aspects of dangerous goods associated with the road transport system, with the exception of the matter subject to the Regulation Review Committee's briefing—namely the use of liquefied flammable gases in motor vehicle airconditioning systems.

The STAYSAFE Committee has been aware of safety concerns about the use of liquefied flammable gases in motor vehicle airconditioning systems since the issue was suddenly raised by the then Minister for Consumer Affairs, the Hon. Faye Lo Po' MP, in the Legislative Assembly in October 1995. The Committee had the opportunity to view a video of a test explosion of airconditioning hydrocarbon gases in a motor vehicle. The Committee indicated to the then Minister that it would accept a Ministerial Reference to investigate safety issues associated with motor vehicle airconditioning. The Minister declined to forward such a reference.

The STAYSAFE Committee has not received any representations or correspondence raising safety concerns about the use of liquefied flammable gases in motor vehicle airconditioning systems.

NAGLE.AIR

As far as the STAYSAFE Committee can determine, there has been no expression of safety concerns about the use of liquefied flammable gases in motor vehicle airconditioning systems in road safety forums, either in Australia or overseas.

The STAYSAFE Committee is attentive to the general issue of air quality within the cabin of motor vehicles, particularly as it might relate to the onset of fatigue in drivers. There has been some limited concern expressed by motor vehicle engineers and road safety workers relating to the quantity of replacement air into the cabin of motor vehicles when the windows are closed and an airconditioning system is in use with full internal cycle setting. This concern has related to the build up of carbon dioxide in a cabin without external ventilation, rather than to issues related to the leakage of airconditioning gases into the cabin airspace.

The STAYSAFE Committee notes that not only is the installation and maintenance of motor vehicle airconditioning systems a workplace safety matter, but if the motor vehicle is being used by a driver in the performance of work, or in commuting to or from work, then the maintenance of a safe cabin environment is also a workplace safety issue under occupational health and safety legislation. Thus the STAYSAFE Committee notes that the issue of the safe or unsafe use of liquefied flammable gases in motor vehicle airconditioning systems cuts across road safety, workplace safety and product safety, and suggests, therefore, that any further investigation should ensure that appropriate representatives from the Roads, Fair Trading, and WorkCover administrations are involved.

I hope these comments are of assistance in the Regulation Review Committee's deliberations.

Yours sincerely,



Ian Faulks  
Director

25.10.99

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