Task Force Report to the Minister of Consumer and Corporate Affairs Canada

on Crash Protection for Infant and Child Passengers in Motor Vehicles

January, 1980

Consumer and Corporate Affairs | Consommation et Corporations

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Task Force Review Committee on
Crash Protection for Infant-
Child Passengers
Place du Portage, I
68 Victoria Street
Hull, Quebec
K1A 0C9

January 24, 1980

The Honourable Allan Lawrence, P.C.,Q.C.,M.P.
Minister of Consumer and Corporate Affairs Canada
House of Commons
Ottawa, Ontario
K1A 0A6

Dear Sir:

I am pleased to submit the report of the Task Force on the review of crash protection for infant and child passengers in motor vehicles.

The recommendations are made to you as Minister, recognizing that to some extent they go beyond the jurisdiction of your department and the regulations under the Hazardous Products Act. The recommendations are relevant however to the objective contained in the instructions to the Task Force.

The Task Force considers the Hazardous Products Act and regulations form only one facet of the action required to achieve the objective of Optimum Crash Protection for Infant and Child Passengers in Motor Vehicles.

Yours truly,

G.B. Williams,
Chairman.

Encls.

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TASK FORCE REPORT

TO

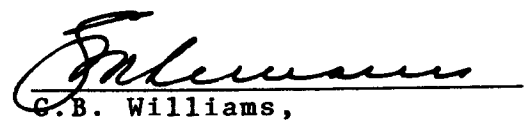
THE MINISTER

OF

CONSUMER AND CORPORATE AFFAIRS CANADA

ON

CRASH PROTECTION FOR INFANT AND CHILD PASSENGERS IN MOTOR VEHICLES



C.B. Williams,
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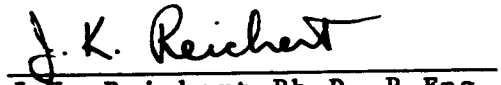

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JANUARY 1980

ABSTRACT

With the objective of providing optimum crash protection for infant and child passengers, the Minister of Consumer and Corporate Affairs Canada established a Task Force to conduct a public review of applicable regulations under the Hazardous Products Act and other relevant material.

Submissions were received from interested parties and a public hearing held. This report from the Task Force to the Minister identifies and reviews issues raised.

Recommendations are made to the Minister for revision of the current regulations and on broader issues related to achieving Optimum Crash Protection for Infant and Child Passengers.

TABLE OF CONTENTS

APPENDIX "A"

Hazardous Products Act, R.S.C. 1970, c.H-3,
the Schedule to the Act as of January 1, 1979,
including Item 23 of Part II of the Schedule.

APPENDIX "B"

Children's Car Seats and Harnesses Regulations,
C.R.C. 1978, c.921

APPENDIX "C"

Minister's letter to Task Force dated December 8, 1978.

APPENDIX "D"

Communiqué No. 1 dated December 18, 1978.

APPENDIX "E"

Task Force Activity.

APPENDIX "F"

List of Submittors.

APPENDIX "G"

Summary of representations by issue and source.

ABBREVIATIONS

CAC	Consumer's Association of Canada
CCMTA	Canadian Conference of Motor Transport Administrators
CMVSS	Canadian Motor Vehicle Safety Standards
CRS	Child Restraint System
CSA	Canadian Standards Association
ECE	Economic Commission for Europe
FMVSS	Federal Motor Vehicle Safety Standards, National Highway Traffic Safety Administration U.S.A.
HIC	Head Injury Criteria
NHTSA	National Highway Traffic Safety Administration U.S.A.
Product Safety Branch	Product Safety Branch, Department of Consumer and Corporate Affairs Canada
RSTC	Road and Motor Vehicle Traffic Safety Branch Transport Canada
SAE	Society of Automotive Engineers

1.0 BACKGROUND

1.1 THE NEED FOR REVIEW

The following statement is drawn from Public Health Comments (March-April, 1977):

"Automotive safety for children is a public health priority. Motor vehicle accidents are the major cause of mortality and morbidity for infants, children and adolescents. Epidemic childhood contagions come and go and some are gone forever. Immunization for childhood diseases have been a steady focus of educational programs for practising physicians and the general public but never has any government, private or health agency, by policy or program, indicated a priority of concern of automobile accidents, the major killer of American Youth".

Data available on accidents confirm that for children above the age of one year, vehicle crash injury is the leading cause of death. (Accident Facts, 1977: U.S. National Safety Council; Fatal Accident Reporting Systems, 1976: U.S. Department of Transportation.)

Priority action is required to reduce death and injury to children in motor vehicles.

For adults, protection from injury while travelling in motor vehicles has been dealt with through legislation on supply and the mandatory provision for use of protective devices. Since 1970, all new vehicles sold in or imported to Canada must be equipped with seat belts as specified in Canadian Motor Vehicle Safety Standards (CMVSS). Four to six seat belts are provided in all vehicles to protect adult passengers, notwithstanding the fact that,

on a statistical basis, most vehicles in use have an occupancy factor of 1.3 persons. The manufacturer must provide the belts and test them as part of the vehicle crash protection system to ensure that, in the particular vehicle, CMVSS performance requirements are met. In four provinces, it is mandatory that some or all adults use the belts.

Children must rely on the action of others for their safety. Although some steps have been taken, their effectiveness has been extremely limited. Child restraints for children in motor vehicles are available but there is considerable evidence that only infrequently (7% - 15%) do adults install and use such products to protect child passengers.

A survey conducted in the north eastern states in 1974 (American Journal of Diseases of Children, December 1976, Vol. 130) obtained results which are generally repeated in similar surveys undertaken in other parts of the country: 93% of passengers under 10 years of age were not restrained when travelling in motor vehicles. More than 75% of the children were not restrained even when the driver was. Further, where child restraints were used, 73% were used improperly. This lack of use persisted notwithstanding the availability on the U.S. market of restraint devices which were accepted as effective in protecting children in real life accidents. A study undertaken in Canada in 1978 indicated a higher degree of use, but still below desirable levels.

Statistical data on accidents involving children as a basis for evaluating performance of Child Restraint Systems (CRS) is scanty. However, the Insurance Institute for Highway Safety reported in 1978 that the use of active safety belts or child restraints reduced injuries by 39%. Similarly, a Washington

State safety belt survey (reported in a publication of Action For Child Transportation Safety, Inc.) showed that if all children in the infant to 5-year old age group had been using adequate restraint systems properly at the time of the accident, the reduction in deaths could have been 91%, with a 78% reduction in disabling injuries.

Federal regulations in Canada deal only with the safety performance of CRS and are not designed to increase CRS use. Further, the regulations do not deal with safety performance of CRS designed for infants. In only four provinces are any child passengers required to be restrained and no province requires children under five years of age to be protected.

The situation is that in Canada there are limited regulations on safety performance for CRS and limited requirements for CRS use, notwithstanding the fact that use of restraints is the best method of protecting children in vehicles. Further, it has been suggested that the existing safety performance requirements are adversely affecting the level of use.

A desire to balance the twin objectives of increased use and adequate restraint performance created a need for a comprehensive review of current regulations in this area.

1.2 ESTABLISHMENT OF THE TASK FORCE

In December 1978, the Minister of Consumer and Corporate Affairs Canada established a Task Force to review the Children's Car Seats and Harnesses Regulations (Appendix B) made under the Hazardous Products Act, (Appendix A).

The direction to the Task Force (Appendix C) set out fhe following:

Objective - Optimal crash protection for infant and child passengers in motor vehicles.

Scope - 1. - To conduct a public review and report on research studies and on general concerns and recommendations of all interested parties bearing on the objective.

2. - To make specific recommendations for amendments to Item 23 of Part II of the Schedule to the Hazardous Products Act and the Children's Car Seats and Harnesses Regulations, to address all legal, technical and general concerns insofar as such amendments can contribute to the objective through the marketing provisions of the Act.

The timing of the review was in recognition of the ongoing research in performance measurements, testing procedures and statistical analysis of accident data. There was some concern that test procedures were not sufficiently repeatable. In addition, it was influenced by reaction to the existing regulations by the Consumers' Association of Canada (CAC) and others who took the position that safety performance requirements in the regulations were restricting the use of protective devices for children in vehicles by limiting the number of CRS available in the marketplace.

Media reports on the opposition of the CAC to the present regulations were creating confusion for consumers wishing to purchase CRS; a response to these reports was also perceived as one of the desirable results of the Task Force's considerations.

1.3 CONDUCT OF THE INQUIRY

On appointment of the Task Force by the Minister of Consumer and Corporate Affairs, a communiqué was issued outlining its mandate and proposed activities and inviting written submissions (Appendix D).

The communiqué was sent to those thought to have an interest in child passenger safety including medical and safety organizations, consumer associations, manufacturers of child and infant restraints, vehicle manufacturers, federal and provincial government departments, universities and research organizations. As well, a press release was issued and a notice was published in the Canada Gazette. In response to these notifications, twenty eight written submissions were received up to May 31, 1979.

The Product Safety Branch of Consumer and Corporate Affairs Canada made its files available to the Task Force. Specialists from government departments and research and university staff were interviewed. Information was exchanged and a meeting was held with officials of the National Highway Traffic Safety Administration (NHTSA).

Public hearings were held in Ottawa July 23 and 24, 1979 at which sixteen witnesses appeared. Following the hearings, at the request of the participants, supplementary briefs or information were accepted by the Task Force up to October 1979.

1.4 HISTORICAL DEVELOPMENT OF THE CURRENT REGULATIONS

In March, 1970, the U.S. government issued a standard Federal Motor Vehicle Safety Standard (FMVSS 213) which established requirements for child seating systems for use in motor vehicles. The need for such a standard had arisen because of the wide variety of seats which had come onto the market. Many of these were convenience items for parents or nursery products which could be placed in vehicles. Many of them provided no safety to the child; in some cases, they increased the hazard to the child and other occupants. The standard adopted contained performance requirements in response to a static load applied in frontal and rear directions.

Reacting to consumer and government interest in Canada, the Canadian Standards Association (CSA) Committee on Motor Vehicle Safety Seat Belts set up a sub-committee in April, 1971, to consider a standard for Motor Vehicle Child Seating Systems. The sub-committee recognized that dynamic testing similar to that applicable to adult seat belts in vehicle systems would be preferable to static testing as a measure of safety performance. (This preference had also been recognized in the U.S. but was not acted upon.) Since the development of an entirely new standard with dynamic testing would have involved considerable delay, a standard based on U.S. FMVSS 213 with static testing was advocated as an interim step. Regulations under the Hazardous Products Act were issued on April 25, 1972 incorporating a static performance test.

The use of the Hazardous Products Act in this context was decided upon because it permitted immediate action. The publication of a CSA voluntary standard would have required legislative action in each province to incorporate the CSA standard. CMVSS requirements would have applied only to child car seats provided as original equipment in vehicles and hence would not have been applicable to the bulk of purchases or to manufacturers who were in the nursery products or toy field.

The use of the Hazardous Products Act for the initial regulations was made with the concurrence of Transport Canada, provincial regulatory authorities and most members of the CSA committee.

One of the effects of the introduction of the initial standard was to remove "convenience seats" from the market which, according to a Consumer and Corporate Affairs Canada survey, made up 70% of the pre-regulation market.

In the press announcement which accompanied the introduction of the new regulations, reference was made to progress in developing a new standard based on dynamic testing which would permit more stringent regulations in the relatively near future. The CSA Committee continued its work towards a more restrictive standard and in February, 1974, a preliminary standard was issued based on "crash simulation" with dynamic testing.

Under pressure from CAC to revise the regulations, the Product Safety Branch developed new regulations issued on May 10, 1974 (P.C. 1974-1013). These were based on the CSA draft but with a more precise definition of "survival space" and the inclusion of a lateral test.

It is relevant to note that the NHTSA has been conducting a similar review. In March 1974, a proposal for changes to standard FMVSS 213 was published. The proposed changes included not only dynamic testing (frontal, lateral and rear) but also a concept of "survival space" similar to the Canadian regulations of May, 1974. Due to opposition, no action was taken on these proposals. A new proposal was published on May 18, 1978 which significantly modified the 1974 proposal, primarily in reducing the performance requirements. Revisions to the FMVSS 213 were published in December, 1979 effective June 1, 1980.

2.0 IDENTIFICATION AND ANALYSIS OF ISSUES

2.1 GENERAL

For purposes of identification and analysis, the issues identified in the Task Force review can be broken down into five major categories: Safety, Usage, Labelling, Testing Criteria and Methodology, Responsibility for Child Protection.

While classification of this type is necessary in order to permit analysis of the individual issues, it must be emphasized that in actual practice such sub-divisions do not really exist. The indicated subject areas are not mutually exclusive: there is an essential interplay and interdependence among them. Indeed, the most difficult aspect of the work of the Task Force has been the assessment of the impact of a change in one of the subject areas on one or several of the others.

From the submission and evidence presented to the Task Force, the overwhelming need in achieving "Optimum child protection" in motor vehicles is to increase usage of CRS.

This basic concern is expressed by federal and provincial authorities, the CAC, safety organizations and child welfare groups. This concern is most frequently expressed in the form of objections to the restrictive nature of current regulations, primarily in respect of the level of safety performance required which, it is alleged, results in

- removal from the Canadian market of CRS judged acceptable by other jurisdictions
- limitations on the availability of CRS on the market, in terms of both choice of device and method of installation

- limiting applications of the protective measures to a relatively small group of child passengers
- limitations on the ability of the provinces to mandate child protection in motor vehicles.

The proponents of change in the interest of increased usage argue that the level of performance specified has not been proven to be required to achieve adequate safety. Submissions make specific recommendations for changes in regulation, additions to regulations, and matters which are not regulatory and which are beyond the scope of the Hazardous Products Act. In analyzing the various submissions, the Task Force has concerned itself primarily with items in dispute. Other items have been noted or accepted as recommended without discussion of their need or merit.

2.2 SAFETY

2.2.1 Limitation of Body Movement

The primary basis for safety in the current regulations is the avoidance of impact between the child, the vehicle and other passengers. To achieve this, the child must be restrained in such a way that possible head movement is limited within a designated "Survival Space".

The regulations define "Survival Space" as follows:

- frontal movement: 18" from front of seat backrest
- lateral movement: 15" from lateral mid point of seat position for a 90^{o} test
- vertical movement: 27" from top of vehicle seat cushions
- rear movement: 8" from rearmost point of the occupant when properly positioned.

These dimensions were selected with reference to the space available in vehicles. In general, the dimensions reflect the minimum available space recognizing a trend to small vehicles and providing an incentive for improved design.

It is recognized that more or less space is available depending on characteristics of the vehicle and location of the CRS within the vehicle.

Submissions to the Task Force challenged the "Survival Space" aspect from two different points of view.

(a) that the dimensions of the survival space are too restrictive. In this regard, the following recommendations were made:

- Frontal movement: an increase from the current 18" to a value falling in the range of 22" (recommended by CSA draft standard) to 30" (the NHTSA May, 1978 proposal). (Note NHTSA excursion is not measured from same origin as the current standard or the CSA draft.)

- Lateral movement: removal of limitation altogether and/or modification of the test procedure, i.e., conduct tests at 45^{o} or 60^{o} in addition to, or instead of, the current 90^{o}.

- Vertical movement: an increase from the current 27". The recommendations defined the distance by reference to a variety of measuring points, e.g., the top of the restraint device and the top of vehicle seat. The Product Safety Branch proposal for revised regulations recommends 36".

- Rear movement: retain the present limitation or remove altogether.

The submissions supporting (a) were based on the position that restraints approved in the U.S. market have not been proven to be unsafe in actual accident conditions.

(b) that the goal of no-impact is too rigid and hence over restrictive.

NHTSA proposal of May, 1978, and some research papers provided to the Task Force suggest that some impact is tolerable, such as some impact on the front seat where the CRS is positioned on the rear seat. It was also suggested that the no-impact criteria for safety does not take into account the possible reduction in acceleration force achieved by controlled body movement.

The Task Force considers that some of the current survival space dimensions are overly restrictive and is prepared to recommend some relaxation. However, the Task Force considers this to be an interim recommendation, as the real problem with the survival space concept may well be that current test conditions are inappropriate to assess the complex interaction in real life accidents, involving the whole vehicle system as well as the CRS on a vehicle seat.

With reference to point (b), it is difficult to resolve the fundamental question as to whether a certain amount of impact should be considered acceptable because of the absence of objective data on child injury tolerances. The absence of independently determined criteria for injury-causing curcumstances (e.g., head acceleration, impact stress) means that test procedures for determining safety performance criteria are set somewhat arbitrarily, i.e., the test procedures themselves become the determinants of the safety performance criteria.

In the view of the Task Force, it would be desirable to establish children's injury tolerance levels before specifying performance criteria and test procedures. This, of course, is a long-term objective since it would involve conducting a considerable amount of original research by medical specialists

into basic questions of injury tolerances, how they are determined and how they are expressed.

This subject is dealt with further in the section on Testing Criteria and Methodology.

Recommendations

The Task Force recommends that:

(1) As an interim measure, the existing limitations on head excursions be relaxed as follows:
- frontal movement: 32" from seat fulcrum (26" if measured from front of seat backrest)
- lateral movement: no specific dimension but the test dummy must be retained in the CRS
- vertical movement: 36" from seat fulcrum
- rear movement: no change.

These dimensions are based on information available from reported tests using a non-standard test seat. Should recommendations for a standard seat fixture be accepted, some adjustment may be required in the dimensions.

(2) Research be undertaken to determine children's injury tolerance levels with a view to establishing more realistic safety standards.

2.2.2 Restraint Force Distribution on Occupant

The restraints used to protect a child passenger from impact by limiting body movement may in themselves constitute a risk to the child through the loading applied on the child.

This risk is covered in the regulations by requiring that the restraining forces applied to an occupant be distributed at least in part to the torso of the occupant. Minimum areas of contact, rounded corners and a degree of padding where impact would occur, are specified.

In general, this element of the regulations was not the subject of comment or recommendation. A potential problem was raised concerning submarining, i.e., the possibility of a child sliding underneath the restraints in a CRS. The concern was that the design to prevent submarining could involve a crotch strap which would injure the child. The NHTSA proposal of May, 1978, includes a limitation on knee movement to control this aspect.

While the concern was raised, no evidence was produced to identify the extent of submarining and hence, its significance. Further, there is no data to support a limitation on knee excursion as a performance indicator of an acceptable level of submarining.

The Task Force is not recommending revisions to the regulations insofar as restraint stress is concerned.

It is recognized that irrespective of CRS design, the overall effect of any restraint creates an acceleration force on the occupant. Consideration of this factor is dealt with in the section on Testing Criteria and Methodology.

2.2.3 Structural Integrity

The performance requirements for structural integrity in the current regulations are (a) no separation or fracture of a joint which could lacerate or penetrate a child occupant and (b) no collapse or folding which would compress or entrap a child occupant.

Although there were no suggested revisions to these requirements specifically, it was pointed out that in the interests of comfort and consumer acceptance, some designs have been developed which, while meeting the regulations, may compromise structural integrity. There was no evidence that this is a problem and it is dealt with by the test required in the regulations.

While the regulations specify performance requirements for belt material and buckles, anchorage failure is not specifically prohibited. This prohibition is required due to the Task Force recommendation to eliminate the head excursion limit for the lateral test.

Recommendation

The Task Force recommends that:

(3) Performance requirements specify that there be no failure of CRS anchorages or structure under dynamic testing.

2.3 USAGE

2.3.1 Scope

In effect, item 23 of Part II of the Schedule to the Hazardous Products Act prohibits the sale and importation of devices for seating or restraining children when seated in motor vehicles (including special harnesses for larger children) unless such devices meet requirements of the regulations. Since item 23 does not cover infant carriers or devices for holding children in a recumbent position, these products need not meet any safety requirements. Infant carriers now on the market range from simple baskets placed loosely on the car seat, providing no protection,

to designed products capable of being secured to the vehicle and holding the child in the device.

Submissions to the Task Force request broadening of the scope to cover infants and some revision of the requirements on special harnesses for older children.

The Task Force agrees that infant restraints should be required to meet safety standards. The Product Safety Branch has proposed regulations to achieve this with performance standards based on recommendations from CSA. The performance requirement is based on retaining the infant within the carrier and preventing direct impact with the vehicle. With one exception, no adverse comment on this proposal was received by the Task Force.

The situation for special harnesses for older children is quite different. None has been tested to current regulations in Canada and reports from the U.S. indicate typical harnesses would not meet requirements.

The Product Safety Branch in its submission proposed that devices for restraining children be exempt from regulations under the Hazardous Products Act, provided they meet requirements under the CMVSS. The applicable CMVSS standard at present is CMVSS 209 which regulates, as original vehicle equipment, Type Three seat belts capable of being used by children ranging in age from 8 months to 6 years. Performance requirements are based on static testing and design specific requirements. The rationale of the Product Safety Branch proposal is that what is required as original equipment on vehicles should be acceptable as an accessory.

This logic, however, makes a distinction in performance requirements between belt systems, which under CMVSS 209 are subject to static testing, and other CRS designs which remain under the Hazardous Products Act. The regulations under the latter Act limit body movement under dynamic test. The Product Safety Branch proposal creates a disparity in performance requirements based on design, not the degree of safety provided to the occupant. Further, the exemption for products meeting CMVSS 209 would permit sale of type 3 seat belts without meeting the level of detail on labelling or providing installation instructions required under the Hazardous Products Act.

The Task Force finds the proposed exemptions unacceptable. All CRS designs should meet the same safety performance requirements.

This discrepancy brings into question the performance requirements of CMVSS 209 for type 3 seat belts for original vehicle equipment, which are not performance tested to the level required by the Hazardous Products Act or alternately subjected to vehicle crash simulation testing as is required for adult seat belts in the CMVSS 209.

In the current regulations, there is no upper age or size limit for children to be protected by CRS and hence, no restriction on development and sale of harnesses for older children. Evidence given by manufacturers indicated there was little demand for this type of restraint although CAC contend there is a requirement.

Where mandatory use of seat belt legislation is in effect, the cut off age for enforcement is five or six years, which presumes adult belts are effective above this age.

From the information available to the Task Force, there is no assurance that special harnesses would provide greater protection for a larger child than an adult belt.

Recommendations

The Task Force recommends that:

(4) Part II of the Schedule to the Hazardous Products Act be broadened to include infant restraints.

(5) The regulations be broadened to include infant restraints as proposed by the Product Safety Branch.

(6) Harness systems continue to be subject to the same performance requirements as other CRS designs.

(7) The product classification system of restraints as proposed by the Product Safety Branch be implemented.

(8) A review be undertaken to remove the inconsistencies between the regulations for CRS under the Hazardous Products Act and the CMVSS for Type 3 harnesses.

2.3.2 Availability

The present regulations prohibit marketing of CRS in Canada unless they meet the requirements of the regulations. It is not known whether each type of CRS meets these requirements. No charges have been laid or notices issued to manufacturers or retailers to remove CRS from sale.

Representations to the Task Force by manufacturers of CRS accepted in other jurisdictions made it clear that they were not entering the Canadian market because their testing indicated their product would not meet Canadian performance requirements. The manufacturers' requests were for relaxation of safety performance requirements.

Consumers and provincial authorities were concerned with the lack of choice available, both in numbers and design principle. The point was emphasized that alternate designs acceptable in the U.S. were not on the Canadian market. Those concerned with availability expressed the view that the more products on the market, the greater the use.

The relationship of number of products to usage is doubtful: in the U.S., there is more choice available, yet the surveys indicate a higher usage of CRS in Canada than in the U.S. There are other influences on usage, e.g., the mandatory use of adult seat belts in four provinces, including the most populous.

The issue is important in view of the emphasis placed on availability and choice by provincial authorities who will have a prime initiative in respect to increased usage through requiring use and undertaking educational programs.

While there is no evidence to support the premise that greater availability would increase usage, the Task Force agrees that it is desirable to have a greater number of CRS and variety available.

Recommendations:

The Task Force is not making a specific recommendation with regard to CRS availability because the Hazardous Products Act and Regulations are designed to prohibit the sale of unsafe products rather than to promote product availability. However, the effect on availability has been a factor in certain recommendations made by the Task Force.

2.3.3 Convenience

Regulations under the Hazardous Products Act can apply only to the provision of safety and set out performance requirements to define a level of safety. The regulations do not deal directly with convenience.

Many submissions equate convenience with usage. The suggestion is that performance requirements in the current regulations necessitate CRS designs that are complicated to install and use. It is contended that, since installation and use are not convenient, fewer people purchase and use CRS than would do so if they were less complicated. Many argue that CRS meeting a lower level of performance than required by current regulations do perform satisfactorily in real accident conditions and are more convenient. The U.S. proposal for revised regulations, NHTSA May, 1978, does propose a lower requirement for safety performance specifically to provide convenience with the intent to increase usage.

Some have contended that the current regulations in Canada can only be met by CRS designs requiring complicated anchorages for the CRS to the vehicle and for the child in the CRS. The anchorages are such that seats are only transferable between vehicles if each vehicle has special attachments.

The regulations do not specify a requirement for special anchorages but only a level of safety performance. At the present time, however, the level of design achievement by manufacturers of CRS has not produced products that meet regulations without special anchorages.

Recommendations:

The Task Force is not making a specific recommendation with regard to convenience because the Hazardous Products Act and Regulations are designed to prohibit the sale of unsafe products rather than to promote convenient products. However, the effect on convenience has been a factor in certain recommendations made by the Task Force.

2.3.4 Comfort

Comfort is the factor dealing with acceptability of a restraint system by a child passenger. As with "Convenience", comfort is not dealt with directly in the regulations.

Submissions place stress on comfort on the basis that if the child is not comfortable, the restraint may not be used. The issue is raised by manufacturers of restraints and supported by some consumer representatives. The issue again is that CRS with comfort features and that are accepted in the U.S. fail tests required by the current regulations.

In design, some of these restraints involve a frame to support a restraint shell providing a selection of seat angles and to lift the child to provide more vision. This provision may introduce problems structurally by potential failure of the frame and by increasing the turning moment of the child. These elements are controlled by the safety performance requirements of regulations with regard to structural integrity and limitation of head excursion.

Consumer representatives indicate a specific requirement of the Canadian market is to have CRS to accommodate heavily clothed children. The request is based on the fact that present designs for various age groups do not meet this requirement.

The Task Force agrees that this is a problem. However, rather than propose design specific solutions, it is dealt with under labelling.

As a child will probably object to any form of restraint, the comfort issue is basically a matter of parental responsibility or a manufacturer's selling feature.

Recommendations:

Comfort cannot be regulated under the Hazardous Products Act and the Task Force has no specific recommendation on this subject.

2.3.5 Cost

The regulations do not deal with costs. The performance requirements do, however, dictate design solutions which substantially determine costs.

Consumers and provincial authorities have both expressed the concern that cost is a major factor in influencing the decision to use a CRS. It is contended that the present regulations, prohibiting products acceptable in the U.S., have reduced price competition and hence, influenced the cost. Further, with

present regulations, the designs providing the most satisfactory performance involve anchorages beyond those provided by adult seat belts. The cost of installation of special anchorages is estimated to be as high as $15. The typical price range of CRS's on the North American market is reported as $35 - $75 with those requiring special anchorages in the mid range.

While cost will always be a factor in the decision to purchase, the Task Force feels the real decision is to protect or not protect the child. Once that decision is taken, price would only be a factor in product selection. Every purchaser of a new vehicle in Canada by CMVSS regulation purchases seat belts. Neither Ford of Canada nor General Motors of Canada could give a cost estimate for seat belts in new vehicles; however the replacement cost of seat belts is in the order of $400 - $600 per vehicle. The price of CRS is reasonable when compared to the cost of other vehicle safety equipment and to the cost of accessory purchases for convenience, comfort and appearance.

The CAC has proposed tax exemptions on CRS to reduce costs. The Task Force does not oppose this proposal. However, it is a matter of policy beyond the scope of this Task Force and presumably, the principle would have to be examined in relation to tax exemptions on other safety devices.

Recommendations:

Cost cannot be regulated under the Hazardous Products Act. Therefore, the Task Force makes no recommendation on cost. It is principally a marketing problem. The Task Force recommendations on performance requirements may influence the cost element.

2.3.6 Misuse

The current regulations require CRS and their containers to be labelled with information, including the following:
Identification - make, model, date of manufacture.
Capacity - minimum and maximum dimensions of child for whom products are designed.
Types of vehicle in which the CRS is or is not to be installed.
Types of motor vehicle seats in which the CRS is or is not to be installed.
Seating positions in which the CRS is or is not to be installed.
The facing direction for installation.

The regulations also require the CRS to be accompanied by instructions as to:

- the manner in which the CRS is to be installed in a motor vehicle,
- the manner in which an occupant for whom the CRS is designed is to be positioned and secured in it,
- a statement:

  "Use only in accordance with accompanying instructions and the restrictions stated above."

These provisions are to ensure that the CRS is utilized in a manner to provide maximum effectiveness as a safety device and to prevent misuse.

Notwithstanding these provisions, submissions to the Task Force have identified misuse as an issue arising from the regulations. Specifically, the objection arose from the fact that with the present regulations, the best performance achieved has been CRS designs with special anchorages, i.e., "the top tether".

The objections have been made by consumer representatives, safety associations and government agencies. The basis of the concern is that U.S. reports show that in practice the top tether is not frequently used by consumers and parents. Misuse is at the 50% level or higher. From a Canadian study, the misuse including the top tether can be inferred to be less than in the U.S. but still in the 50% area.

In many submissions, the solution proposed was relaxation of performance requirements in terms of head excursion which would permit marketing alternate designs of CRS, simple to install and use correctly and with no top tether. In addition, in some submissions, the recommendation was made that CRS designs utilizing a top tether should be required to meet the performance requirements under dynamic test without the tether strap attached. In the NHTSA proposal May, 1978, it is proposed that in addition to the 30 mph dynamic test, these CRS be tested at 20 mph with the tether strap unattached. The 20 mph was selected after testing existing CRS with tethers and determining that untethered, the CRS met requirements. Proposals to this Task Force are that the untethered test should be set at the 30 mph level.

Some concerns expressed by submittors would be met by the recommendations made by the Task Force in increasing the allowable head excursions as a definition of safety performance. This would bring into the market alternate designs of CRS not utilizing designs with tethers. The consumer could make a choice on CRS meeting performance requirements, based on method of installation and other factors dealt with previously.

The proposal for an additional test in a situation of misuse for this particular design feature introduces a problem of principle and practical application. To deal with the principle, the regulations control the manufacturer and importer to protect the consumer by producing a CRS meeting performance requirements and to provide instructions on how it is to be used. If testing in a position of misuse were adopted, the regulations would impose a further requirement on the manufacturer to protect against actions of a third party, the consumer. From a practical standpoint, the additional test would possibly remove from the market CRS with tethers as they cost more to manufacture. If the product is to be tested without the tether, there would be no incentive in attempting to sell the product with the installation requirement and additional cost to produce. This would remove from the market products providing a superior performance when properly used. From information in the NHTSA May, 1978 proposal, these CRS will probably meet requirements, when not properly installed. The introduction of the second test then would eliminate the option for the parent or consumer to utilize a superior level of protection.

Considering both principle and practice, the Task Force does not accept the proposal for a double test on a design specific basis, e.g., for tether designs.

A second design specific proposal for revision of the regulations recommends the prohibition of arm rests that flip down in front of the child and are not designed to restrain the child in a forward crash. It is contended that parents assume that such flip-over arm rests provide sufficient restraint without using the provided harness or other features. This prohibition is contained in the NHTSA May, 1978 proposal.

The Task Force does not agree with this proposal. Firstly, there is difficulty in accepting this as a problem notwithstanding the NHTSA proposal. Further, such design restrictive regulations inhibit development of innovative design for crash protection. The Task Force position is taken, having regard to the labelling and instructions required to be provided with the CRS, and recognizing that the parent has a responsibility to use the product properly.

The regulations are to prohibit marketing of unsafe CRS and to provide direction on use, not to compensate for lack of parental action.

Recommendations:

No specific recommendation arises on this issue. However, the misuse problem has been a factor in certain recommendations of the Task Force.

2.4 LABELLING

Labelling has been referred to in 2.3.6 under Misuse. The requirement for labelling is principally to ensure proper use of the CRS by the consumer. The regulations require the CRS or labels permanently fixed to the CRS to identify the product in terms of manufacturer, model number, date of manufacture, the size of child for which it is intended to be used, positioning in the vehicle, facing direction of the CRS and types of vehicles and motor vehicle seats in which the CRS may be installed.

The following statements are required:

- "This product complies with applicable requirements of the Children's Car Seats and Harnesses Regulations".

- "Use only in accordance with accompanying instructions and the restrictions stated above."

- "For maximum safety, use in a centre seating position (rear seat preferred) where the unobstructed distance forward from the foremost point on the vehicle seat backrest is not less than 18 inches."

The container in which the CRS is sold must have the same information attached to or printed on it. There is also a requirement to provide clear instructions on the manner in which the CRS is to be installed in the vehicle and how the occupant is to be positioned and secured in the CRS.

Submissions to the Task Force stressed the need for the label to clearly indicate the necessity of installing the CRS in the vehicle, and the occupant in the CRS, in accordance with the requirements of the specific design of CRS.

The proposals were principally aimed at strengthening the instructions and emphasizing the consequences of failure to observe directions on the label or in the instructions.

There was no disagreement on the desirability of providing a maximum of direction and information to the consumer. There is however a limitation on space available at the most effective location on the CRS for display to the consumer.

The possibility of a separate label to identify the product being placed in a less conspicuous location was proposed. The NHTSA May, 1978 proposal suggests that instructions include diagrams showing location and type of anchorage for each type of vehicle, i.e., sedan, hatchback, truck as is provided with some products.

Specific complaints were directed at the child size designations on current labels. It has been found that seats designated for use of children, whose size is defined in terms of height and weight, are not large enough to accommodate such a child. This is particularly so for children in bulky winter clothing.

Having regard for the reported misuse of CRS, the Task Force supports the requests for strengthening the warnings on the installation of child in the CRS and the CRS to the vehicle. On the issue of size, the manufacturer determines the size of child for whom he intends his product to be used and it would appear he is providing label size information on the basis of the dummies used for testing and not on a fully clothed child. Correcting this situation could be undertaken by the manufacturer in his desire to meet customer needs. The label is however, used by the purchaser, and in the interest of ensuring that appropriate information is provided in a standard form, a recommendation is made for revisions.

Recommendations:

The Task Force recommends that:

(9) The labelling as proposed by the Product Safety Branch be accepted, subject to the revisions proposed below.

(10) The following statements be required both on CRS and their containers:

"To protect your child in a crash, this restraint must be secured to the vehicle with a vehicle belt as specified in the manufacturer's instructions".

For products equipped with an anchorage strap (tether):

"Warning: to restrain your child safely, the top anchorage strap provided with this child restraint must be secured as specified in the manufacturer's instructions".

(11) The maximum height of child dimension will be stated as:

"For use by children where the top of the head extends not more than three inches above the top of the seat back or head rest".

(12) The weight designated is to describe a CRS size that is appropriate for a child size of that weight dressed in winter clothing.

2.5 TESTING CRITERIA AND METHODOLOGY

2.5.1 Current Regulations

The current regulations require that to be acceptable, a CRS must be able to pass a series of dynamic tests which simulate automobile impacts from the front, side, and rear.

The performance of the CRS is evaluated on the basis of its ability to maintain structural integrity, that is, no collapse or fracture occurs, and on the basis of its ability to restrict the movement of the head of a dummy occupant within the survival space.

The dynamic tests are performed using a motor vehicle seat which is mounted on a vehicle impact simulator (test sled). This arrangement is known as an "open rig" since none of the normal impact surfaces (such as the back of the front seat, the doors, or the roof) are present. The regulations specify each impact simulation in terms of a permissible velocity range and a permissible acceleration-time envelope. The latter is specified graphically. The single quantitative measurement of CRS dynamic performance resulting from the impact simulation test is the dummy head excursion. In practice, this is measured from high speed films of the impact test.

2.5.2 Submissions

The Task Force has received a wide variety of comments pertaining to the dynamic testing of CRS. No comment was received indicating an objection to the principle of using some form of dynamic testing. Generally, the comments were directed towards a single objective; achievement of an accurate and reproducible assessment of the ability of a CRS to provide a basic level of protection in a realistic use environment. The Task Force's study of the NHTSA proposed regulations and the existing regulations in other jurisdictions found a variety of dynamic test protocols and assessment criteria. The measurement of head excursion appears to be a basic performance assessment criterion common to every

CRS regulation. The most complex quantitative measure of CRS performance is found in the NHTSA proposal. This proposal includes the measurement of maximum head and chest accelerations in the dummy, as well as the computation of a head injury criteria (HIC) number from the dummy head acceleration records.

To achieve more reproducible results, submittors have suggested using a vehicle seat of standard design for the mounting of CRS on the impact simulator. Test laboratories have recommended that the instrumentation used for monitoring the impact tests should meet standards recommended by the Society of Automotive Engineers. Test laboratories have recommended that the test protocol should specify the latest and most advanced child test dummies now or soon expected to be available. Other recommendations included the specification of test temperatures and humidity and the use of multiple tests to assess variability. Research test reports presented to the Task Force indicated that reproducible results could be obtained with some CRS seat designs. This suggested that when variability is observed, it may be due to the CRS manufacturers' product quality control.

Several submittors commented on the failure of the dynamic tests to simulate adequately the real world crash environment. A fundamental criticism was that the open rig environment does not permit assessing the effects of head impact on vehicle surfaces which are normally present and, in view of the increase in small car usage, becoming more obstructive. In general terms, this becomes a comment directed at the inability of the survival space concept discussed previously to address survivable head impacts, except in the most elementary sense -- complete head impact avoidance.

Other comments on test methodology were largely directed at the directions for the dynamic tests specified in the regulations. There appears to be a general consensus among submittors who addressed the issue that some form of oblique angle testing was required. The current 90 degree lateral test was criticized as being representative of a type of accident that very rarely occurs. Some submittors pointed out that the lateral skidding and slewing of vehicles was not being simulated. Only one submission specifically called for the elimination of testing from the rear.

Submissions were received which indicated a requirement for a closer definition of the acceleration profile parameters for the impact tests. The Task Force review of the NHTSA proposals and regulations in other jurisdictions indicated that most specify acceptable acceleration test impulses by means of an acceleration-time envelope, as does the Canadian standard. A variety of methods of pulse specification were included in the submissions to the Task Force. These ranged from the use of a single upper limit acceleration-time line to various combinations of specifications for acceleration rate, duration, and peak value. The Task Force observed that 30 mph or its metric equivalent is the typical impact velocity level for the frontal tests appearing in all existing standards.

2.5.3 Discussion

The Task Force recognizes the limitations of the survival space safety criteria currently used in the standard.

Arguments presented to the Task Force to show the limitations of simple head excursion for assessing the quality of crash protection provided by a CRS are convincing. There can be no doubt that a closed rig approach more closely simulates the real accident environment for a CRS. The technical capability now exists within test laboratories to provide detailed quantitative measurements of the dynamic behavior of test dummies and seats. The major remaining difficulty for incorporating this technology in a standard is the inability to correlate these measurements with the injury mechanisms and impact tolerance levels in children.

2.5.3.1 Quantitative Measurements of Injury Potential

There is insufficient data available to establish with adequate precision the basic biomechanical properties of children pertaining to injurious impact. This situation is exacerbated by the rapid biomechanical changes which occur during the early growth years. As a consequence, the use of sophisticated analytical criteria such as the HIC cannot be recommended. There appears to be scant experimental data to validate its use even for the assessment of adult head injury potential. Within the scientific community, there is increasing criticism of its use for the assessment of head injuries not associated with skull fracture.

With increasing quantification of biomechanical data and the validation of assessment criteria, it may well become possible and advisable to introduce advanced test criteria into the standard. However, at this point, the Task Force concurs with the submission of the Product Safety Branch that these remain longer-term objectives.

No measurements are specified in the current test procedures to assess the forces which the occupant of a CRS would experience during a crash. No measurements are made to determine if these forces are applied in a reasonable and non-hazardous manner to keep the child within the survival space. For example, it is unreasonable and hazardous to apply an unnecessarily sudden and severe jerk to stop the child rather than decelerating the child smoothly over the available space, thereby spreading the load over time. Thus, there is a requirement for some measure of the quality of the CRS dynamic performance. The French and the Economic Commission for Europe (ECE) standards require that the peak resultant chest acceleration for the test dummy be limited to under 50 G's. The U.S. proposal would require resultant chest accelerations to be under 60 G's. The performance standards for adult restraints also specify chest acceleration limits. Although again there is difficulty in quantifying the effect of a specific value of peak chest acceleration on injury potential, there does not appear to be any biodynamic evidence to suggest that 60 G's is unnecessarily restrictive. This does not appear to be beyond the capabilities of current CRS designs. In the past, there appear to have been technical difficulties in making chest acceleration measurements with the child dummies. Recent published reports on modifications which have been made on the three year old test dummy indicate that consistent dynamic measurements of chest acceleration can now be made. In view of this improvement and in anticipation of similar modifications in the six year old dummy, an upper limit of 60 G's for the resultant chest acceleration could be established as a first step towards the quantitative assessment of ride down quality. This criteria cannot be applied to tests performed with the infant dummies because these dummies cannot be properly instrumented to measure chest accelerations.

2.5.3.2 Test Fixtures

In view of the uncertainty among specialists in assigning acceptable impact tolerance levels for children and the absence of definitive data relating dummy head impact parameters to real head injury, the Task Force considers that closed rig testing not be introduced at this time. The development of a closed rig test system also requires the detailed specification of a variety of geometric and mechanical characteristics. Adoption of closed rig testing might encourage CRS designs optimized for the test rig perhaps using some degree of head impact for restraint. Research has not yet established the degree of head impact, if any, that is tolerable.

Since the introduction of the Canadian dynamic tests in 1974, researchers in other jurisdictions have developed a standard test seat fixture. The test fixture specifications are provided in the NHTSA drawing package SAS 100-1000. The fixture is reported to include the salient features of a large class of automobile seats in a design which provides repeatable dynamic behavior with simple recycling procedures. It is recognized that use of this fixture may not provide the same head excursions that have been observed in previous Product Safety Branch testing or that might occur using commercial automobile seats of harder or softer design. In fact, its specification requires the same type of subjective decisions on design detail and material selection as does the closed rig approach. However, the specification of a standard test fixture is necessary to provide a greater degree of test repeatability and comparability of results from various test labs.

2.5.3.3 Dummies

The most advanced child sized dummies are those that comply with specifications in NHTSA drawing packages SA100I001 (Infant), SA103C001, (three-year old), SA106C001 (six year old in preparation). With the exception of the infant dummy, they permit the accurate measurement of the accelerations which the Task Force is recommending. To ensure future availability, specific reference to a particular dummy manufacture should not be made. In the interests of greater repeatability, dummy pre-test conditioning and position procedures as recommended by the Product Safety Branch should be adopted.

2.5.3.4 Test Practice

Based on the controversy and lack of certainty generated by differing test results and the comments of test laboratory personnel, the Task Force has concluded that the current regulations are deficient in the precision and detail used in specifying the procedures to be used for dynamic testing. All interested persons have a common interest in greater test result repeatability. Adoption of the Society of Automotive Engineers (SAE) Recommended Practice J211B as a requirement for the dynamic test instrumentation and data processing should improve repeatability. Further, the tests should be undertaken within specified temperature and humidity ranges to ensure proper dummy performance and for greater test repeatability. Belt and harness pretensioning procedures as recommended by the Product Safety Branch should be adopted. These changes, combined with the introduction of the new dummies and the standard seat, will provide for greater test repeatability.

2.5.3.5 Dynamic Test Kinematics

In specifying the kinematic parameters for the dynamic tests, a compromise must be made between test simplicity and test realism within the bounds of the technical capability of test laboratories. As pointed out in the analysis given by a technical source, a real accident often involves a variety of skidding and rotational motions. No test laboratory currently has the capability to include these types of components other than in full scale vehicle crashes. However, a variety of laboratories are available which can provide uni-directional impact simulations with accelerations similar to those of real vehicles. Working within this practical limitation, the problem is to specify those impact directions, velocities, and accelerations which best characterize the infinite variety of real impact situations.

2.5.3.5.1 Directions

Vehicle accidents occur most often from the frontal direction. Frequently, these collisions include lateral components. Hence, to provide adequate protection over the largest possible range of impacts, a CRS must provide lateral restraint. In contrast to the NHTSA proposed regulations, the Task Force considers that lateral performance testing should be retained. Further, in response to many comments, it is the Task Force's opinion that an oblique test should replace the straight lateral test. An oblique test brings into play the resistance of the seat back to lateral movement of the CRS and provides a more realistic assessment of the CRS performance in accidents involving a lateral component. Proposals were received for dynamic tests at 45° and 60°.

A submission was received which proposed the elimination of rear dynamic tests. The proposal suggested that if a CRS is installed in the front seat, there is a significant probability that failure of the front automobile seat back will severely compromise the CRS effectiveness. This, however, is insufficient reason to remove rear impact testing entirely, because if the front seat does fail, retention of the occupant in the CRS is the only protection available. For a variety of reasons, the safest location of the CRS is clearly in the middle of the back seat, where seat collapse is not a problem. The CRS must be able to provide restraint which will prevent the ejection of the child in a rear impact. The test protocol should be adjusted such that the back of the test fixture is made rigid prior to the rear test. This will ensure that the results are not affected by any seat back collapse.

2.5.3.5.2 Speed Change

The selection of 30 mph for the frontal test is advisable from the point of view of compatability with other standards, including CMVSS. Based on the analysis of crash speeds and injury potential given by a technical expert, it appears that there is an equal potential for injury if the 45^{o} oblique test is performed at 21 mph. A criticism of this approach is that the frequency of occurrence of impact for the various directions is not taken into account in the assessment of injury potential.

2.5.3.5.3 Accelerations

The acceleration window or envelope method presently used for the specification of the acceleration profile for the impact tests does not appear to present any technical difficulties for the test laboratories. The sled equipment that is now available can be suitably programmed and behaves consistently.

Information was presented to the Task Force which showed that the trapezoidal pulse shape suggested by the envelope was not in fact typical of common modern automobiles. Since a primary objective of the pulse specification is to define test pulses which are typical of automobile crashes, it is unreasonable that actual crash data does not fall in the allowable window. Further, there is a small amount of experimental data which shows that for pulse shapes which are generally in a class typical of automobile impacts and which produce the same impact speed change, the effects of second order pulse shape differences on the CRS dynamics is somewhat inconclusive, but probably not large.

Removal of the lower limit of the graphical envelope specification would allow a wider possibility of pulse shapes to be used. Adequate control over test pulse shape can be controlled by:

(a) the specification of an upper G limit,
(b) the specification of a maximum initial acceleration onset rate,
(c) the specification of pulse duration, and
(d) the specification of a velocity change.

In effect, this method of specification defines a simple upper limit curve on the acceleration time graph. However, the variety or severity of the allowable acceleration pulses is only marginally affected by this simplification due to the onset, duration and velocity constraints. The Task Force concurs with

the recommendations of the CSA drafting committee on infant restraint systems, that the peak accelerations be limited to less than 22 G's for frontal and 14 G's for oblique and rear tests. These levels are based on that Committee's review of recent automobile crash characteristics.

2.5.3.6 Other Criteria

A variety of comments have been made to the Task Force requesting that the materials used for a CRS be closely regulated. It was requested that CRS materials be resistant to sunlight, be washable and be of colour and composition which are not heat absorptive. It was also suggested that cold weather tests be performed on the CRS. While none of these items are critically important to the main CRS issues, all except for the last item have a direct bearing on comfort and convenience and therefore use. As previously discussed, comfort and convenience are primarily non-regulatory areas. The role of the regulations is primarily to examine the CRS from the point of view of technical safety; the responsibility of the consumer is to make decisions in the marketplace on the comfort and convenience of a CRS design.

The issue of cold weather tests is of particular importance in view of the severe temperature ranges over which the Canadian user will expect a CRS to perform. A CRS which fractures easily when cold, or which cannot sustain repeated temperature cycling, would not provide suitable protection for Canadian children. The inability of a CRS to perform adequately at low temperatures would not be evident to a consumer during purchase. Low temperature tests would ensure that the CRS materials are not hazardous at low temperatures due to fracture and that the materials can withstand repeated temperature cycling.

The Task Force has received comments suggesting that a minimum buckle release force be established. The concern is that with some CRS designs, the child can release the harness too easily. This problem could be overcome either through the establishment of a minimum buckle release force or by making the buckle inaccessible to the child occupant.

A recommendation has been made to the Task Force that the variability of CRS test results be addressed in the regulations by providing for multiple dynamic tests in the test protocol. However, should a particular CRS fail to provide safe performance as defined by the regulations, whether this be due to poor testing or inadequate manufacturer quality control, then it cannot be stated with complete confidence that other CRS in the same product line will be non-hazardous. It is unacceptable that a CRS which is sold as protective equipment and on which the consumer will depend has only a probability of providing the expected protection. Therefore, while multiple testing is undoubtedly a useful and necessary procedure for the manufacturer to be certain that every CRS which he produces will comply with the regulations, it is inappropriate for inclusion in the regulations.

Recommendations:

The Task Force recommends that:

(13) Use of sophisticated quantitative measurements of injury potential not be introduced at present but remain as longer-term objectives.

(14) Under dynamic test, a maximum value of 60 G's be established for the resultant chest acceleration in the three and six year old dummies as a first step towards quantitative assessment of CRS dynamic performance.

(15) Standard bench seat test fixture (NHTSA SAS-100-1000) be adopted for dynamic crash simulation tests.

(16) The standard crash test dummies, NHTSA SA-100I001 (infant) SA-103C001 (3 year old), SA-106C001 (6 year old) be adopted for dynamic crash simulation tests.

(17) The SAE Recommended Practice J211B be adopted for dynamic testing, instrumentation and data processing.

(18) A temperature range of $18^{o}C$ to $25^{o}C$ and a humidity range of 10% to 70% be adopted for dynamic testing.

(19) For pre-test preparation of dummies, seat belts and other test hardware, the proposal submitted by the Product Safety Branch be adopted.

(20) For dynamic simulated crash testing, an oblique test at 45^{o} replace the 90^{o} lateral test.

(21) The rear dynamic test be retained with the test seat fixture being made rigid for the test.

(22) The speed change for dynamic tests be set at 30 mph frontal, 21 mph for 45^{o} oblique and rear tests or the equivalent in metric.

(23) The test pulse shape be controlled by:

(a) an upper G level of 22G's for frontal and 14G's for oblique and rear tests,

(b) a maximum initial acceleration onset rate of 2500 G/sec for frontal and 1500 G/sec for oblique and rear tests,

(c) a maximum pulse duration of .120 seconds.

(24) CRS materials be required to meet performance requirements based on tests at low temperature and with temperature cycles.

(25) A minimum buckle release force be stipulated for CRS where the buckle is accessible to the occupant.

2.6 RESPONSIBILITY FOR CHILD PROTECTION

The basic responsibility for child protection in vehicles rests with the adult who places the child in the vehicle. From the record, this responsibility either has not been accepted or more likely has not been recognized through ignorance. Child welfare groups, safety associations, etc. have attempted to improve the situation and government intervention has been to support these activities. Two areas of responsibility are considered, regulatory and non-regulatory.

2.6.1 Regulatory

2.6.1.1 Jurisdiction

The protection of children in vehicles involves a number of jurisdictions. The regulations being reviewed are under the Hazardous Products Act administered by Consumer and Corporate Affairs Canada. The purpose of the Act is to prohibit marketing of products that are, or are likely to be, a danger to the health and safety of the public because of their design, construction or content. The Act is a criminal law statute which is applicable to a broad range of products for household or personal use, or for use by children, e.g., bleaches, carpets, toys, matches.

The scope of the Act is strictly limited to prohibiting the marketing of products which are unsafe. By regulation, it can grant conditional permission to market what would otherwise be a hazardous product. This conditional permission was provided with the regulations in April, 1972 for CRS for seated children.

There is no authority under the Act to require CRS to be provided or used irrespective of whether there is a need, marketplace requirement for choices on size, comfort, convenience or cost. The Act provides no authority to specify any requirements for motor vehicle design including the seat belts by means of which the CRS is installed in the vehicle. As the CRS is ultimately part of the whole vehicle safety system, changes in vehicle or seatbelt design can affect the performance of the CRS. In summary, the present regulations are to prohibit sales of unsafe CRS.

The Motor Vehicle Safety Act administered by Transport Canada controls the design and manufacture of all motor vehicles. This includes seat belts for adults. This Act provides for the issuing of CMVSS for vehicle design and original vehicle equipment. This does include Type Three seat belt systems for children exempted under regulations under the Hazardous Products Act and the discrepancy in performance standards under the two Acts has been noted previously.

Within Transport Canada, operational responsibility for the Act is with the Road and Motor Vehicle Traffic Safety Branch (RSTC).In developing CMVSS, RSTC works through the Canadian Conference of Motor Transport Administrators (CCMTA) consisting of one representative from each province, the territories and the federal government. In addition to responsibility for standards for original equipment, RSTC has the federal responsibility for promoting road and motor vehicle traffic safety including:

- developing national safety performance standards and regulations for motor vehicles and their components;
- works jointly with the provinces to develop safety improvement programs for the way, vehicle, and operator;
- initiates, undertakes and funds studies to support the development and introduction of new technology in motor vehicle transportation.

In its annual report of 1978, the list of activities of RSTC included:

- increasing the comfort, convenience and effectiveness of seat belts and determining the role passive restraints will play in motor vehicle occupant protection in Canada;
- demonstrating how seat belts work and how to use them for maximum effectiveness, comfort and convenience.

When the initial regulations for CRS were developed in April 1972, the RSTC and the provinces were consulted and it was agreed that effective application and enforcement of any safety standards for CRS could best be achieved under the Hazardous Products Act. The RSTC continued to participate in the development of more advanced standards incorporating dynamic testing, but with the issuing of the current regulation in May 1974 under the Hazardous Products Act, they report that they have taken no further action on CRS standards.

From the above, the federal responsibility has been identified as providing standards and regulating sales of vehicles and CRS with the objective of ensuring that unsafe equipment is prohibited.

The primary responsibility for safety on the highways is with the provincial authorities, who can determine what products will be used on highways and may set standards. The provinces also are in a position to make their own regulations and standards for accessory components for motor vehicles, including CRS.

In the submissions to the Task Force, representations were made by some provincial authorities that the responsibility for setting standards for CRS be transferred from the Product Safety Branch to the RSTC. This was supported by consumer representatives.

As noted previously, when the initial standards were developed, there was agreement by RSTC, the provinces and consumer representatives that the most effective control could be achieved through regulations under the Hazardous Products Act. The level of standard was however a relatively simple one patterned on NHTSA 213 in use in the U.S.A. With the introduction of the more complex standard incorporating dynamic testing in 1974 and subsequent developments outlined in this report under the section on Safety Performance, the situation is changed. There is now a need for investigation, research and a correlation between the safety performance of a CRS, an accessory, and the performance of the CRS as a component in the total vehicle safety performance. This is the process by which adult seat belts are now evaluated by RSTC and should be the objective of the performance standard for CRS. The RSTC in setting safety standards for vehicle design can consider factors to accommodate CRS installations. This could include provision of anchorage points. Without specific regulation, one manufacturer has taken this initiative. There is a need for a data base of CRS performance in accidents requiring detailed information from the provinces. Action on this has been initiated by RSTC.

Children are legitimate passengers in motor vehicles and concern for their safety must be as much the program of RSTC as the safety of adults.

The objectives of RSTC and its established working relationship with the provinces in traffic safety through the CCMTA provides a continuing arrangement for data collection and consultation with the provinces who have ultimate control of use.

Standards for CRS developed and issued as CMVSS would apply to products included as vehicle original equipment. By referencing these standards in regulations under the Hazardous Products Act, CRS sold as accessories would be controlled.

Recommendations:

The Task Force recommends that:

(26) The Road and Motor Vehicle Safety Branch of Transport Canada be responsible for the development of standards for CRS as part of the CMVSS, and applicable regulations under the Hazardous Products Act incorporate by reference those standards.

(27) The Road and Motor Vehicle Safety Branch give priority to the Multi-Disciplinary Accident Investigation Program to establish a statistical base on accidents involving child passengers and CRS.

2.6.1.2 Mandatory Use

The Hazardous Products Act cannot be employed to require use of CRS. The responsibility for using a CRS rests with the adult in charge of the child and with the provinces, which can require use in the interests of safety. In only four provinces (Quebec, Ontario, Saskatchewan and British Columbia) does legislation require adult or child passengers to be restrained. Such legislation generally does not apply to children under five years of age and in Quebec and Saskatchewan applies only to front seat passengers.

In submissions, there were representations to require, by legal action, all children to be restrained while travelling in motor vehicles. These were from consumers representatives, child safety organizations and manufacturers. Two of the four provincial regulatory authorities with legislation for mandatory use by adults have indicated support for requiring use for children. The following were suggested as pre-conditions for such a requirement:

- adequate supplies of child restraints readily available at reasonable prices;
- restraints that perform satisfactorily under the majority of crash situations;
- restraint performance standards provided for children of all ages.

The Task Force recommendations with regard to safety requirements should have the effect of meeting these concerns.

The Task Force believes it is most important for provinces, with legislation exempting children under five years, to act now to remove the exemption as the present legislation has a negative effect in that parents assume the use of seat belts for children under five is ineffective and potentially an additional hazard. The consensus of information provided to the Task Force is that any restraint system is better than none and for seated children adult belts may well be as effective as they are for adults.

A special case can be made for legislative action for child protection in all provinces on the basis that the adult can make his own decision to use a seat belt or take the consequences of not doing so. The child however relies on action by his parent or guardian and needs special protection. Therefore, in all provinces, all child passengers, whatever their age and whatever their location in the vehicle should be required by law to be safely restrained.

The Task Force considers that legislative action requiring the use of CRS coupled with the attendant publicity and an education program is the most productive way of increasing child protection in vehicles.

Recommendations:

The Task Force recommends that:

(28) All provinces be urged to require the use of restraint systems for all child passengers, regardless of age and location in the vehicle.

2.6.1.3 Approved Products or Certification

The regulations under the Hazardous Products Act and the Motor Vehicle Safety Act do not provide for approval of products or certification of manufacturers.

They do require the products to be marked or labelled indicating that the product complies with applicable regulations. The responsibility for compliance is with the manufacturer and proof of compliance is not required to be filed with a government agency before sale. Occasional spot checks are done on products but test results do not appear to be routinely available to the public.

Submissions to the Task Force from consumer representatives, supported by some provincial authorities and manufacturers, request government action on issuing of an approved products list, certification of manufacturers, more frequent compliance testing, and making test results available.

The Task Force considers that certification programs or issuing of product approval lists are inappropriate in the context of the prohibitory nature of the present legislation.

For specific products such as CRS, the manufacturers, consumers and governments could enter into a voluntary arrangement for certification as is offered for many products by CSA. Alternatively, the CAC could work with the manufacturers to produce an approved products list if it is considered desirable to assist in consumer purchasing decisions.

The Task Force does agree that there should be more frequent compliance examination, including testing, to ensure that the regulations are effective. The results of such compliance activity should be made available to the public.

Recommendations:

The Task Force recommends that:

(29) More frequent compliance examination, including testing, be undertaken.

(30) Test results be made available to the public except where this may prejudice contemplated enforcement action.

2.6.1.4 International Compatability

In the development of regulations under the Hazardous Products Act, legislation in other jurisdictions including U.S. was reviewed.

Submissions recommended that compatability with foreign standards be a consideration in developing regulations, primarily to allow the marketing in Canada of CRS available in other countries.

The Task Force agrees that compatability is desirable but within the limits of providing products safe and suitable for the Canadian market. Some of the Task Force recommendations on performance requirements will in part achieve this objective.

2.6.2 Non-regulatory

While the Task Force is recommending that all provinces require the use of restraint systems for child passengers, the experience in Tennessee and Australia and with provincial adult seat belt legislation indicates that this requirement alone is insufficient to achieve optimal child protection. Legislation must be supplemented by non-regulatory action.

The need for non-regulatory action is stressed in submissions from consumer representatives, medical associations, manufacturers and universities. The suggestions were for public education through media campaigns, informational literature, workshops for health professionals, seminars, pre and post-natal instruction by pediatricians and hospital authorities. The educational programs would be designed to inform the public of the need to use restraint systems and the importance of using them correctly.

Evaluation by the Insurance Institute for Traffic Safety of such programs conducted at hospitals in the U.S. indicates that isolated programs are helpful but they are not really effective in increasing CRS use. In the U.S., the NHTSA has now begun a comprehensive program. A series of regional workshops directed to traffic safety administrators, health authorities and educators was undertaken in 1979. This led to a major national conference in December 1979 on Child Passenger Protection.

In Canada, the programs for public education have not been well coordinated or substantial. Provincial authorities are responsible for the regulation of highway safety and within the federal government, the RSTC has as an objective the release of information to the motoring public in coordination with the provinces.

The Task Force considers that a coordinated comprehensive public education program is essential in Canada. Further, some agency or agencies should be responsible for the organization, coordination and technical support for such a program.

Recommendations:

The Task Force recommends that:

(31) The Road and Motor Vehicle Traffic Safety Branch and the Canadian Conference of Motor Transport Administrators undertake as a top priority the development of a comprehensive public education program to promote child passenger safety in vehicles, providing necessary technical, administrative, and financial support.

3.0 SUMMARY OF RECOMMENDATIONS

The Task Force recommends that:

Section 2.2 Safety

(1) As an interim measure, the existing limitations on head excursions be relaxed as follows:

- frontal movement: 32" from seat fulcrum (26" if measured from front of seat backrest)
- Lateral movement: no specific dimension but the test dummy must be retained in the CRS
- vertical movement: 36" from seat fulcrum
- rear movement: no change.

(2) Research be undertaken to determine children's injury tolerance levels with a view to establishing more realistic safety standards.

(3) Performance requirements specify that there be no failure of CRS anchorages or structure under dynamic testing.

Section 2.3 Usage

(4) Part II of the Schedule to the Hazardous Products Act be broadened to include infant restraints.

(5) The regulations be broadened to include infant restraints as proposed by the Product Safety Branch.

(6) Harness systems continue to be subject to the same performance requirements as other CRS designs.

(7) The product classification system of restraints as proposed by the Product Safety Branch be implemented.

(8) A review be undertaken to remove the inconsistencies between the regulations for CRS under the Hazardous Products Act and the CMVSS for Type 3 harnesses.

Section 2.4 Labelling

(9) The labelling as proposed by the Product Safety Branch be accepted, subject to the revisions proposed below.

(10) The following statements be required both on CRS and their containers:

"To protect your child in a crash, this restraint must be secured to the vehicle with a vehicle belt as specified in the manufacturer's instructions".

For products equipped with an anchorage strap (tether):

"Warning: to restrain your child safely, the top anchorage strap provided with this child restraint must be secured as specified in the manufacturer's instructions".

(11) The maximum height of child dimension will be stated as:

"For use by children where the top of the head extends not more than three inches above the top of the seat back or head rest".

(12) The weight designated is to describe a CRS size that is appropriate for a child size of that weight dressed in winter clothing.

Section 2.5 Testing Criteria and Methodology

(13) Use of sophisticated quantitative measurements of injury potential not be introduced at present but remain as longer-term objectives.

(14) Under dynamic test, a maximum value of 60G's be established for the resultant chest acceleration in three and six year old dummies as a first step towards quantitative assessment of CRS dynamic performance.

(15) Standard bench seat test fixture (NHTSA SAS-100-1000) be adopted for dynamic crash simulation tests.

(16) The standard crash test dummies, NHTSA SA-100I001 (infant), SA-103C001 (three year old), SA-106C001 (six year old), be adopted for dynamic crash simulation tests.

(17) The SAE Recommended Practice J211B be adopted for dynamic testing, instrumentation and data processing.

(18) A temperature range of $18^{o}C$ to $25^{o}C$ and a humidity range of 10% to 70% be adopted for dynamic testing.

(19) For pre-test preparation of dummies, seat belts and other test hardware, the proposal submitted by the Product Safety Branch be adopted.

(20) For dynamic simulated crash testing, an oblique test at 45^{o} replace the 90^{o} lateral test.

(21) The rear dynamic test be retained with the test seat fixture being made rigid for the test.

(22) The speed change for dynamic tests be set at 30 mph frontal, 21 mph for the 45^{o} oblique and rear tests or the equivalent in metric.

(23) The test pulse shape be controlled by:
   (a) an upper G level of 22G's for frontal and 14G's for oblique and rear tests;
   (b) a maximum initial acceleration onset rate of 2500 G/sec for frontal and 1500 G/sec for oblique and rear tests;
   (c) a maximum pulse duration of .120 seconds.

(24) CRS materials be required to meet performance requirements based on tests at low temperature and with temperature cycles.

(25) A minimum buckle release force be stipulated for CRS where the buckle is accessible to the occupant.

Section 2.6 Responsibility for Child Protection

(26) The Road and Motor Vehicle Safety Branch of Transport Canada be responsible for the development of standards for CRS as part of the CMVSS, and applicable regulations under the Hazardous Products Act incorporate by reference those standards.

(27) The Road and Motor Vehicle Safety Branch give priority to the Multi-Disciplinary Accident Investigation Program to establish a statistical base on accidents involving child passengers and CRS.

(28) All provinces be urged to require the use of restraint systems for all child passengers, regardless of age and location in the vehicle.

(29) More frequent compliance examination, including testing, be undertaken.

(30) Test results be made available to the public except where this may prejudice contemplated enforcement action.

(31) The Road and Motor Vehicle Traffic Safety Branch and the Canadian Conference and Motor Transport Administrators undertake as a top priority the development of a comprehensive public education program to promote child passenger safety in vehicles, providing necessary technical, administrative, and financial support.

CHAPTER H-3

An Act to prohibit the advertising, sale and importation of hazardous products

SHORT TITLE

Short title

1. This Act may be cited as the *Hazardous Products Act*. 1968-69, c. 42, s. 1.

INTERPRETATION

Definitions

2. In this Act

"advertise" «*annoncer*»

"advertise" includes any representation by any means whatever for the purpose of promoting directly or indirectly the sale or other disposition of a hazardous product;

"analyst" «*analyste*»

"analyst" means a person designated as an analyst under the *Food and Drugs Act* or by the Minister pursuant to section 4;

"hazardous product" «*produit...*»

"hazardous product" means any product or substance included in Part I or Part II of the schedule;

"inspector" «*inspecteur*»

"inspector" means any person designated as a hazardous products inspector pursuant to section 4;

"Minister" «*Ministre*»

"Minister" means the Minister of Consumer and Corporate Affairs and in sections 9 and 10 includes the Minister of National Health and Welfare;

"sell" «*vendre*»

"sell" includes sell, offer for sale, expose for sale, and distribute. 1968-69, c. 42, s. 2.

CHAPITRE H-3

Loi interdisant la vente, l'annonce et l'importation de produits dangereux

TITRE ABRÉGÉ

Titre abrégé

1. La présente loi peut être citée sous le titre: *Loi sur les produits dangereux*. 1968-69, c. 42, art. 1.

INTERPRÉTATION

Définitions

2. Dans la présente loi

«analyste» «*analyst*"

«analyste» signifie une personne désignée à titre d'analyste en vertu de la *Loi des aliments et drogues* ou par le Ministre en conformité de l'article 4;

«annoncer» "*advertise*"

«annoncer» comprend toute représentation faite par quelque moyen que ce soit en vue de stimuler directement ou indirectement la vente ou autre aliénation d'un produit dangereux;

«inspecteur» "*inspector*"

«inspecteur» signifie toute personne désignée à titre d'inspecteur de produits dangereux en conformité de l'article 4;

«Ministre» "*Minister*"

«Ministre» désigne le ministre de la Consommation et des Corporations et comprend, aux articles 9 et 10, le ministre de la Santé nationale et du Bien-être social;

«produit dangereux» "*hazardous*"

«produit dangereux» désigne toute substance ou tout produit qu'énumère la Partie I ou la Partie II de l'annexe;

«vendre» "*sell*"

«vendre» comprend le fait de vendre, d'offrir en vente, d'exposer pour la vente, et de distribuer. 1968-69, c. 42, art. 2.

OFFENCE

Offence

3. (1) No person shall advertise, sell or import into Canada a hazardous product included in Part I of the schedule.

Idem

(2) No person shall advertise, sell or import into Canada a hazardous product included in Part II of the schedule except as authorized by the regulations.

Punishment

(3) Every person who violates subsection (1) or (2) is guilty of

(*a*) an offence and liable on summary conviction to a fine of one thousand dollars or to imprisonment for six months, or to both; or

(*b*) an indictable offence and liable to imprisonment for two years.

Time limit

(4) A prosecution under paragraph (3)(*a*) may be instituted at any time within twelve months after the time when the subject-matter of the prosecution arose. 1968-69, c. 42, s. 3.

INSPECTORS AND ANALYSTS

Designating hazardous products inspector

4. (1) The Minister may designate as a hazardous products inspector for the purposes of this Act any person who, in his opinion, is qualified to be so designated.

Inspector to show certificate of appointment

(2) An inspector shall be furnished with a certificate of his designation as an inspector and on entering any place pursuant to subsection 5(1) shall, if so required, produce the certificate to the person in charge thereof.

Designating analyst

(3) The Minister may designate as an analyst for the purposes of this Act any person employed in the public service of Canada who, in his opinion, is qualified to be so designated. 1968-69, c. 42, s. 4.

SEARCH, SEIZURE AND FORFEITURE

Powers of inspectors

5. (1) An inspector may at any reasonable time enter any place where on reasonable grounds he believes any hazardous product is manufactured, prepared, preserved, packaged, sold or stored for sale and

(*a*) examine any product or substance that he reasonably believes is a hazardous product and take samples thereof, and examine

INFRACTION

Infraction

3. (1) Nul ne doit annoncer, vendre ou importer au Canada un produit dangereux mentionné à la Partie I de l'annexe.

Idem

(2) Nul ne doit annoncer, vendre ou importer au Canada un produit dangereux mentionné à la Partie II de l'annexe, sauf dans la mesure où les règlements l'autorisent.

Peine

(3) Quiconque enfreint le paragraphe (1) ou (2) est coupable

a) d'une infraction et passible, sur déclaration sommaire de culpabilité, d'une amende de mille dollars ou d'un emprisonnement de six mois ou à la fois de l'amende et de l'emprisonnement; ou

b) d'un acte criminel et passible d'un emprisonnement de deux ans.

Prescription

(4) Une poursuite en vertu de l'alinéa (3)*a*) peut être intentée à tout moment dans un délai de douze mois à partir de la date où s'est produit le fait pouvant donner lieu à la poursuite. 1968-69, c. 42, art. 3.

INSPECTEURS ET ANALYSTES

Désignation des inspecteurs de produits dangereux

4. (1) Le ministre peut désigner, à titre d'inspecteur de produits dangereux aux fins de la présente loi, toute personne qu'il estime qualifiée pour être désignée à ce titre.

L'inspecteur doit exhiber un certificat de nomination

(2) Un inspecteur doit être pourvu d'un certificat de nomination à titre d'inspecteur et, en entrant dans un lieu en conformité du paragraphe 5(1), il doit, s'il en est requis, produire le certificat à la personne responsable de ce lieu.

Désignation d'un analyste

(3) Le Ministre peut désigner à titre d'analyste aux fins de la présente loi, toute personne de la fonction publique du Canada qu'il estime qualifiée pour être désignée à ce titre. 1968-69, c. 42, art. 4.

PERQUISITION, SAISIE ET CONFISCATION

Pouvoirs des inspecteurs

5. (1) Un inspecteur peut, à tout moment raisonnable, entrer dans un lieu où il a des motifs raisonnables de croire qu'un produit dangereux quelconque est fabriqué, préparé, conservé, empaqueté, vendu ou emmagasiné pour la vente et

a) examiner toute substance ou tout produit, lorsqu'il a des raisons de croire qu'il

any other thing that he reasonably believes is used or is capable of being used for the manufacture, preparation, preservation, packaging, sale or storage of a hazardous product;

(*b*) open and examine any receptacle or package that on reasonable grounds he believes contains any hazardous product;

(*c*) examine any books, records or other documents that on reasonable grounds he believes contain any information relevant to the enforcement of this Act and make copies thereof or extracts therefrom; and

(*d*) seize any product or substance, or any labelling, advertising material or other thing, by means of or in relation to which he reasonably believes any provision of this Act or the regulations has been violated.

s'agit d'un produit dangereux, et en prélever des échantillons; examiner toute autre chose lorsqu'il a des raisons de croire que cette chose est utilisée ou est susceptible d'être utilisée pour fabriquer, préparer, conserver, empaqueter, vendre ou emmagasiner un produit dangereux;

b) ouvrir et examiner tout récipient ou colis lorsqu'il a des motifs raisonnables de croire que ce récipient ou ce colis contient un produit dangereux;

c) examiner tous livres, registres ou autres documents lorsqu'il a des motifs raisonnables de croire qu'ils contiennent des renseignements pertinents à l'application de la présente loi, et en prendre des copies ou des extraits; et

d) saisir toute substance ou tout produit, tout article d'étiquetage, de publicité ou toute autre chose, au moyen ou au sujet desquels il a des raisons de croire qu'une disposition de la présente loi ou des règlements a été violée.

Owner and other persons to give assistance

(2) The owner or person in charge of a place entered by an inspector pursuant to subsection (1) and every person found therein shall give the inspector such assistance and furnish him with such information as the inspector may, for the purpose of exercising the powers referred to in paragraphs (1)(*a*) to (*d*), reasonably require him to give or furnish.

(2) Le propriétaire ou la personne responsable d'un lieu où entre un inspecteur conformément au paragraphe (1), ainsi que chacune des personnes qui s'y trouvent, doivent prêter à l'inspecteur l'assistance, et lui fournir les renseignements, que celui-ci peut raisonnablement exiger aux fins d'exercer les pouvoirs que lui confèrent les alinéas (1)*a*) à *d*).

Le propriétaire et d'autres personnes doivent aider l'inspecteur

Obstructing inspector

(3) No person shall obstruct an inspector in the exercise of his powers or the carrying out of his duties under this Act or the regulations.

(3) Nul ne doit gêner un inspecteur dans l'exercice des pouvoirs ou l'exécution des fonctions que lui confèrent la présente loi ou les règlements.

Obstruction faite à l'inspecteur

False statements

(4) No person shall knowingly make any false or misleading statement, either verbally or in writing, to any inspector engaged in exercising his powers or carrying out his duties under this Act or the regulations.

(4) Nul ne doit faire sciemment, oralement ou par écrit, de déclaration fausse ou trompeuse à un inspecteur dans l'exercice des pouvoirs ou l'exécution des fonctions que lui confèrent la présente loi ou les règlements.

Fausses déclarations

Interference with articles seized

(5) Except with the authority of an inspector, no person shall remove, alter or interfere in any way with anything seized under this Act by an inspector.

(5) Sauf avec l'autorisation d'un inspecteur, nul ne doit enlever ni modifier un article saisi par un inspecteur en vertu de la présente loi, ni rien faire d'autre qui affecte un tel article.

Interdiction d'enlever, etc les articles saisis

Storing of seized articles

(6) Anything seized under this Act by an inspector may at the option of an inspector be kept or stored in the building or place where it was seized or may be removed to any

(6) Tout article qu'un inspecteur a saisi en vertu de la présente loi peut, au choix d'un inspecteur, être gardé ou emmagasiné dans le bâtiment ou le lieu où il a été saisi, ou il peut

Emmagasinage des articles saisis

other proper place by or at the direction of an inspector. 1968-69, c. 42, s. 5.

être transporté dans tout autre lieu approprié par un inspecteur ou sur son ordre. 1968-69, c. 42, art. 5.

Application for restoration

6. (1) Where any product, substance or other thing has been seized under this Act, any person may, within two months after the date of such seizure, upon prior notice having been given in accordance with subsection (2) to the Minister by registered mail addressed to him at Ottawa, apply to a magistrate within whose territorial jurisdiction the seizure was made for an order of restoration under subsection (3).

Demande de restitution

6. (1) Lorsqu'un produit, une substance ou autre chose ont fait l'objet d'une saisie en vertu de la présente loi, toute personne peut, dans les deux mois qui suivent la date de cette saisie, après avoir adressé au Ministre, à Ottawa, par courrier recommandé, le préavis que prévoit le paragraphe (2), s'adresser à un magistrat dans le ressort duquel la saisie a été faite en vue d'obtenir une ordonnance de restitution ainsi que le prévoit le paragraphe (3).

Notice to Minister

(2) The notice referred to in subsection (1) shall be mailed at least fifteen clear days prior to the day on which the application is to be made to the magistrate and shall specify

(*a*) the magistrate to whom the application is to be made;

(*b*) the place where and the time when the application is to be heard;

(*c*) the product, substance or other thing in respect of which the application is to be made; and

(*d*) the evidence upon which the applicant intends to rely to establish that he is entitled to possession of the thing in respect of which the application is to be made.

Avis au Ministre

(2) L'avis mentionné au paragraphe (1) doit être mis à la poste au moins quinze jours francs avant la date, à laquelle la demande doit être faite au magistrat; cet avis doit spécifier

a) à quel magistrat la demande sera faite;

b) où et quand la demande sera entendue;

c) au sujet de quel produit, de quelle substance ou de quelle autre chose la demande sera faite;

d) quelle preuve le requérant entend invoquer pour établir qu'il a droit à la possession de la chose au sujet de laquelle la demande sera faite.

Order of restoration

(3) Subject to subsections (5) and (6), where, upon the hearing of an application made under subsection (1), the magistrate is satisfied

(*a*) that the applicant is entitled to possession of the product, substance or other thing seized, and

(*b*) that the thing seized is not and will not be required as evidence in any proceedings in respect of an offence under this Act,

he shall order that the thing seized be restored forthwith to the applicant, and where the magistrate is satisfied that the applicant is entitled to possession of the thing seized but is not satisfied as to the matters mentioned in paragraph (*b*), he shall order that the thing seized be restored to the applicant

(*c*) upon the expiration of four months from the date of such seizure if no proceed-

Ordonnance de restitution

(3) Sous réserve des paragraphes (5) et (6), lorsque, à la suite de l'audition d'une demande faite en vertu du paragraphe (1), le magistrat est convaincu

a) que le requérant a droit à la possession du produit, de la substance ou autre chose ayant fait l'objet de la saisie, et

b) que la chose n'est pas et ne sera pas requise comme preuve dans quelque procédure relative à une infraction prévue dans la présente loi,

il doit ordonner que la chose saisie soit immédiatement restituée au requérant, et, si le magistrat est convaincu que le requérant a droit à la possession de la chose saisie, mais n'est pas convaincu de ce que prévoit l'alinéa *b*), il doit ordonner que la chose saisie soit restituée au requérant

ings in respect of an offence under section 3 have been commenced before that time, or

(*d*) upon the final conclusion of any such proceedings in any other case.

Where no application made

(4) Where no application has been made under subsection (1) for the restoration of any product, substance or other thing seized under this Act within two months from the date of such seizure, or an application therefor has been made but upon the hearing thereof no order of restoration is made, the thing so seized shall be delivered to the Minister who may make such disposition thereof as he thinks fit.

Forfeiture of hazardous product

(5) Where a person has been convicted of an offence under section 3, any hazardous product seized under this Act by means of or in respect of which the offence was committed is forfeited to Her Majesty and shall be disposed of as the Minister directs.

Destruction with consent

(6) Where an inspector has seized a hazardous product under this Act and the owner thereof or the person in whose possession the product was at the time of seizure consents in writing to the destruction thereof, the hazardous product is thereupon forfeited to Her Majesty and shall be disposed of as the Minister may direct. 1968-69, c. 42, s. 6.

REGULATIONS

Regulations

7. The Governor in Council may make regulations

(*a*) authorizing the advertising, sale or importation into Canada of any hazardous product included in Part II of the schedule and prescribing the circumstances and conditions under which and the persons by whom such hazardous product may be sold, advertised or imported into Canada;

(*b*) respecting the powers and duties of inspectors and analysts and the taking of samples and the seizure, detention, forfeiture and disposition of products, substances and other things;

c) dès l'expiration des quatre mois qui suivront la date de la saisie, si aucune procédure relative à une infraction prévue par l'article 3 n'a été entamée avant l'expiration de ce délai, ou

d) dès la conclusion définitive de toutes procédures de ce genre dans tout autre cas.

Cas où aucune demande n'est faite

(4) Lorsque aucune demande en vue de la restitution de quelque produit, substance ou autre chose ayant fait l'objet de la saisie en vertu de la présente loi n'a été faite, en vertu du paragraphe (1), dans les deux mois qui suivent la date de cette saisie, ou lorsqu'une telle demande a été faite mais que, après l'audition de cette demande, aucune ordonnance de restitution n'a été rendue, la chose ainsi saisie doit être remise au Ministre, qui peut en disposer ainsi qu'il l'estime opportun.

Confiscation du produit dangereux

(5) Lorsqu'une personne a été déclarée coupable d'une infraction prévue par l'article 3, tout produit dangereux, saisi en vertu de la présente loi et au moyen ou au sujet duquel l'infraction a été commise, est confisqué au profit de Sa Majesté et il doit en être disposé ainsi que le Ministre l'ordonne.

Destruction avec l'accord du propriétaire ou possesseur

(6) Lorsqu'un inspecteur a, en vertu de la présente loi, saisi un produit dangereux et que le propriétaire de ce produit ou la personne qui l'avait en sa possession au moment de la saisie, consent par écrit à sa destruction, le produit dangereux est dès lors confisqué au profit de Sa Majesté et il doit en être disposé ainsi que le Ministre l'ordonne. 1968-69, c. 42, art. 6.

RÈGLEMENTS

Règlements

7. Le gouverneur en conseil peut établir des règlements

a) autorisant l'annonce, la vente ou l'importation au Canada de tout produit dangereux mentionné à la Partie II de l'annexe et prescrivant dans quelles circonstances, à quelles conditions et par qui ce produit dangereux peut être annoncé, vendu ou importé au Canada;

b) concernant les pouvoirs et les fonctions des inspecteurs et des analystes, le prélèvement des échantillons ainsi que la saisie, la rétention, la confiscation et la façon de

(*c*) prescribing the procedures to be followed by a Hazardous Products Board of Review established pursuant to section 9 in conducting an inquiry; and

(*d*) generally, for carrying out the purposes and provisions of this Act. 1968-69, c. 42, s. 7.

c) prescrivant les procédures à suivre lors d'une enquête par une Commission d'examen des produits dangereux établie en conformité de l'article 9; et

d) d'une façon générale, pour la réalisation des objets et l'application des dispositions de la présente loi. 1968-69, c. 42, art. 7.

SCHEDULE

ANNEXE

Additions and deletions to schedule

8. (1) The Governor in Council may by order amend Part I or Part II of the schedule by adding thereto

(*a*) any product or substance that is or contains a poisonous, toxic, inflammable, explosive or corrosive product or substance or other product or substance of a similar nature that he is satisfied is or is likely to be a danger to the health or safety of the public, or

(*b*) any product designed for household, garden or personal use, for use in sports or recreational activities, as life-saving equipment or as a toy, plaything or equipment for use by children that he is satisfied is or is likely to be a danger to the health or safety of the public because of its design, construction or contents,

or by deleting therefrom any product or substance the inclusion of which therein he is satisfied is no longer necessary.

8. (1) Le gouverneur en conseil peut, au moyen d'une ordonnance, modifier la Partie I ou la Partie II de l'annexe en y ajoutant

a) quelque substance ou produit constituant ou contenant une substance ou un produit empoisonnés, toxiques, inflammables, explosifs ou corrosifs ou autre substance ou produit semblables, s'il est convaincu que cette substance ou ce produit présentent ou présenteront vraisemblablement un danger pour la santé ou la sécurité du public, ou

b) un produit destiné à servir à des usages domestiques, à des usages personnels, au jardin, dans les sports, dans les activités récréatives, comme matériel de sauvetage, comme jouet, comme jeu ou comme équipement pour enfants, s'il est convaincu que ce produit présente ou présentera vraisemblablement, à cause de sa conception, sa construction ou son contenu, un danger pour la santé ou la sécurité du public,

ou en en retranchant quelque substance ou produit dont l'inclusion n'est plus, à son avis, nécessaire.

Ajouts et suppressions dans l'annexe

Idem

(2) An order amending Part I of the schedule may be made by the Governor in Council on the recommendation of the Minister or the Minister of National Health and Welfare.

(2) Une ordonnance modifiant la Partie I de l'annexe peut être établie par le gouverneur en conseil sur la recommandation du Ministre ou du ministre de la Santé nationale et du Bien-être social.

Idem

Tabling of orders adding to Part I or II

(3) Every order adding a product or substance to Part I or Part II of the schedule shall be laid before the Senate and the House of Commons not later than fifteen days after it is made or, if Parliament is not then sitting, on any of the first fifteen days next thereafter that Parliament is sitting.

(3) Toute ordonnance ajoutant une substance ou un produit à la Partie I ou à la Partie II de l'annexe doit être déposée devant le Sénat et la Chambre des communes au plus tard quinze jours après qu'elle a été établie ou, si le Parlement n'est pas alors en session, l'un des quinze premiers jours où il siège par la suite.

Dépôt des ordonnances portant des additions à la Partie I ou II

Revocation of order by resolution

(4) If both Houses of Parliament resolve that an order or any part thereof should be revoked, the order or that part thereof is thereupon revoked. 1968-69, c. 42, s. 8.

(4) Si les deux Chambres du Parlement adoptent une résolution révoquant une ordonnance ou une partie d'ordonnance, ladite ordonnance ou partie d'ordonnance est alors révoquée. 1968-69, c. 42, art. 8.

Révocation de l'ordonnance par résolution

BOARD OF REVIEW

COMMISSION D'EXAMEN

Request for reference to Board

9. (1) Where a product or substance is added to Part I or Part II of the schedule by order of the Governor in Council, any manufacturer or distributor of that product or substance or any person having that product or substance in his possession for sale may, within sixty days from the date of the making of the order, request the Minister that the order be referred to a Hazardous Products Board of Review.

9. (1) Lorsqu'une substance ou un produit sont ajoutés par une ordonnance du gouverneur en conseil à la Partie I ou à la Partie II de l'annexe, un fabricant ou distributeur de cette substance ou de ce produit ou une personne qui est en possession de cette substance ou de ce produit en vue de les vendre peut, dans les soixante jours qui suivent l'établissement de l'ordonnance, demander que l'ordonnance soit soumise à la Commission d'examen des produits dangereux.

Demande de soumission à la Commission

Establishment of Board

(2) Upon receipt of a request described in subsection (1), the Minister shall establish a Hazardous Products Board of Review (hereinafter referred to as the "Board"), consisting of not more than three persons and shall refer the order in respect of which the request was made to the Board.

(2) Sur réception d'une demande visée au paragraphe (1), le Ministre doit créer une Commission d'examen des produits dangereux (ci-après appelée «la Commission») qui doit être composée de trois personnes au plus et doit soumettre l'ordonnance faisant l'objet de la demande à la Commission.

Création de la Commission

Duties

(3) The Board shall inquire into the nature and characteristics of any product or substance to which an order referred to it under subsection (2) applies and shall give the person making the request and any other person affected by the order a reasonable opportunity of appearing before the Board, presenting evidence and making representations to it.

(3) La Commission doit faire des recherches concernant la nature et le caractère d'une substance ou d'un produit auxquels s'applique l'ordonnance mentionnée au paragraphe (2) et doit donner, à la personne qui fait la demande et à toute personne intéressée par l'ordonnance, une possibilité raisonnable de comparaître devant la Commission, de présenter des preuves et de formuler des observations devant cette dernière.

Fonctions

Powers

(4) The Board has all the powers that are or may be conferred by or under sections 4, 5, and 11 of the *Inquiries Act* on commissioners appointed under Part I of that Act.

(4) La Commission a tous les pouvoirs qui sont conférés par les articles 4, 5 et 11 de la *Loi sur les enquêtes* ou qui peuvent être conférés en vertu de ces articles à des commissaires nommés en vertu de la Partie I de ladite loi.

Pouvoirs

Report

(5) The Board, as soon as possible after the conclusion of its inquiry, shall submit a report with its recommendations to the Minister, together with all evidence and other material that was before the Board.

(5) La Commission doit, dès qu'elle le peut, après avoir terminé son enquête, produire au Ministre un rapport contenant ses recommandations et accompagné de toutes les preuves et autres pièces qui lui ont été soumises.

Rapport

Publication of report

(6) Any report of the Board shall, within thirty days after its receipt by the Minister, be made public by him, unless the Board states in writing to the Minister that it believes the public interest would be better

(6) Un rapport fait par la Commission doit être rendu public dans les trente jours qui suivent sa réception par le Ministre, à moins que la Commission ne déclare par écrit au Ministre qu'elle croit que l'intérêt du public

Publication du rapport

served by withholding publication, in which case the Minister may decide whether the report, either in whole or in part, shall be made public.

Copies of report

(7) The Minister may publish and supply copies of a report referred to in subsection (5) in such manner and upon such terms as he deems proper. 1968-69, c. 42, s. 9.

serait mieux sauvegardé si cette publication n'avait pas lieu; en ce cas, le Ministre peut décider si le rapport, ou une partie de ce dernier, sera rendu public ou non.

Exemplaires du rapport

(7) Le Ministre peut publier un rapport mentionné au paragraphe (5) et en distribuer des exemplaires de la manière et selon les modalités qu'il estime appropriées. 1968-69, c. 42, art. 9.

DISCLOSURE

DIVULGATION

Disclosure to the Minister

10. (1) Where the Minister has reason to believe that a product or substance is a product or substance that may be added to Part I or Part II of the schedule by an order made pursuant to section 8, he may send a written notice to the manufacturer of the product or substance requesting him to disclose to the Minister the formula, composition or chemical ingredients of the product or substance and such other information in the possession of the manufacturer as the Minister deems necessary for the purpose of determining whether the product or substance is or is likely to be a danger to the health or safety of the public.

Divulgation au Ministre

10. (1) Lorsque le Ministre a des raisons de croire qu'une substance ou un produit peuvent être ajoutés à la Partie I ou à la Partie II de l'annexe au moyen d'une ordonnance rendue en conformité de l'article 8, il peut adresser au fabricant de la substance ou du produit un avis écrit le priant de lui divulguer la formule, la composition ou les ingrédients chimiques de la substance ou du produit ainsi que les autres renseignements dont le fabricant dispose et que le Ministre estime nécessaire de connaître afin de décider si la substance ou le produit présentent ou présenteront vraisemblablement un danger pour la santé ou la sécurité du public.

Idem

(2) Every manufacturer to whom a written notice referred to in subsection (1) is sent shall disclose to the Minister, within the time specified by the Minister in the notice, any information described in subsection (1) that is requested in the notice.

Idem

(2) Chaque fabricant à qui l'avis écrit mentionné au paragraphe (1) est adressé doit divulguer au Ministre, dans le délai que ce dernier a spécifié dans l'avis, tous renseignements mentionnés au paragraphe (1) qu'exige l'avis.

Information privileged

(3) Information received by the Minister from a manufacturer pursuant to subsection (1) is privileged and shall not be disclosed to any other person except as may be necessary for the administration or enforcement of this section or for the purposes of section 8. 1968-69, c. 42, s. 10.

Renseignements secrets

(3) Les renseignements que le Ministre reçoit d'un fabricant en conformité du paragraphe (1) sont secrets et ne doivent être divulgués à aucune autre personne, sauf dans la mesure où cela peut être nécessaire à l'application ou à la mise en vigueur du présent article ou aux fins de l'article 8. 1968-69, c. 42, art. 10.

PROSECUTIONS

POURSUITES

Burden of proving exception, etc

11. (1) No exception, exemption, excuse or qualification prescribed by law is required to be set out or negatived, as the case may be, in an information or indictment for an offence under section 3 of this Act or under section 421, 422 or 423 of the *Criminal Code* in respect of an offence under section 3.

A qui incombe le fardeau de la preuve en matière d'exception, etc.

11. (1) Il n'est pas nécessaire qu'une exception, exemption, excuse ou limitation prescrite par la loi soit énoncée ou réfutée, selon le cas, dans une dénonciation ou un acte d'accusation visant une infraction prévue à l'article 3 de la présente loi ou aux articles 421, 422 ou 423 du *Code criminel*, rela-

tivement à une infraction mentionnée à l'article 3.

Idem

(2) In any prosecution for an offence mentioned in subsection (1) the burden of proving that an exception, exemption, excuse or qualification prescribed by law operates in favour of the accused is on the accused, and the prosecutor is not required, except by way of rebuttal, to prove that the exception, exemption, excuse or qualification does not operate in favour of the accused, whether or not it is set out in the information or indictment. 1968-69, c. 42, s. 11.

Idem

(2) Dans toute poursuite pour une infraction mentionnée au paragraphe (1), il incombe à l'accusé de prouver qu'une exception, exemption, excuse ou limitation, prescrite par la loi, joue en sa faveur; et le poursuivant n'est pas tenu, sauf par voie de réplique, de prouver que l'exception, exemption, excuse ou limitation ne joue pas en faveur de l'accusé, qu'elle soit ou non énoncée dans la dénonciation ou l'acte d'accusation. 1968-69, c. 42, art. 11.

Certificate of analyst

12. (1) Subject to this section, a certificate of an analyst stating that he has analyzed or examined a product or substance and stating the result of his analysis or examination is admissible in evidence in any prosecution for an offence mentioned in subsection 11(1) and in the absence of any evidence to the contrary is proof of the statements contained in the certificate without proof of the signature or the official character of the person appearing to have signed the certificate.

Certificat de l'analyste

12. (1) Sous réserve du présent article, le certificat d'un analyste portant qu'il a analysé ou examiné une substance ou un produit et énonçant le résultat de son analyse ou de son examen est recevable en preuve dans toute poursuite pour une infraction mentionnée au paragraphe 11(1) et, en l'absence de toute preuve contraire, fait preuve des déclarations contenues dans le certificat sans qu'il soit nécessaire de faire la preuve de la signature de la personne par laquelle il paraît avoir été signé ni de la qualité officielle de cette personne.

Attendance of analyst

(2) The party against whom a certificate of an analyst is produced pursuant to subsection (1) may, with leave of the court, require the attendance of the analyst for the purposes of cross-examination.

Présence de l'analyste

(2) La partie contre laquelle le certificat d'un analyste est produit en conformité du paragraphe (1) peut, avec la permission du tribunal, exiger la présence de l'analyste aux fins de contre-interrogatoire.

Notice

(3) No certificate shall be received in evidence pursuant to subsection (1) unless the party intending to produce it has, before the trial, given to the party against whom it is intended to be produced reasonable notice of such intention together with a copy of the certificate. 1968-69, c. 42, s. 12.

Avis

(3) Aucun certificat n'est recevable en preuve conformément au paragraphe (1) à moins que la partie qui se dispose à le produire n'ait, avant le procès, donné à la partie contre laquelle il doit être produit un avis raisonnable de l'intention de le produire, avec une copie de certificat. 1968-69, c. 42, art. 12.

Trial of offences

13. A complaint or information in respect of an offence under this Act may be heard, tried or determined by a magistrate or a justice if the accused is resident or carrying on business within his territorial jurisdiction, although the matter of the complaint or information did not arise in that territorial jurisdiction. 1968-69, c. 42, s. 13.

Instruction des infractions

13. Une plainte ou dénonciation relative à une infraction prévue par la présente loi peut être entendue, instruite ou jugée par un magistrat ou un juge de paix si l'accusé réside ou fait des affaires dans le ressort de sa juridiction, même si l'objet de la plainte ou dénonciation n'a pas pris naissance dans ce ressort. 1968-69, c. 42, art. 13.

OTHER OFFENCES

Other offences

14. Every person who contravenes any provision of this Act, other than section 3, or of the regulations is guilty of an offence and liable on summary conviction to a fine of five hundred dollars or to imprisonment for three months, or to both. 1968-69, c. 42, s. 14.

AUTRES INFRACTIONS

Autres infractions

14. Quiconque contrevient à une disposition de la présente loi, autre que l'article 3, ou des règlements est coupable d'une infraction et passible, sur déclaration sommaire de culpabilité, d'une amende de cinq cents dollars ou d'un emprisonnement de trois mois ou à la fois de l'amende et de l'emprisonnement. 1968-69, c. 42, art. 14.

APPLICATION OF ACT

Application of Act

15. This Act does not apply to any product or substance that is

(*a*) an explosive within the meaning of the *Explosives Act*;

(*b*) a cosmetic, device, drug or food within the meaning of the *Food and Drugs Act*;

(*c*) a control product within the meaning of the *Pest Control Products Act*; or

(*d*) a prescribed substance within the meaning of the *Atomic Energy Control Act*. 1968-69, c. 42, s. 15.

APPLICATION DE LA LOI

Application de la loi

15. La présente loi ne s'applique pas à un produit ou à une substance qui est

a) un explosif, au sens où l'entend la *Loi sur les explosifs*;

b) un cosmétique, un instrument, une drogue ou une substance alimentaire, au sens où l'entend la *Loi des aliments et drogues*;

c) un produit antiparasitaire au sens où l'entend la *Loi sur les produits antiparasitaires*; ou

d) une substance prescrite, au sens où l'entend la *Loi sur le contrôle de l'énergie atomique*. 1968-69, c. 42, art. 15.

SCHEDULE

PART I

1. Jequirity beans (*abrus precatorius*) or any substance or article made from or including jequirity beans in whole or in part.

2. Furniture and other articles, intended for children, painted with a liquid coating material containing lead compounds of which the lead content is in excess of 0.50 per cent of the total weight of the contained solids, including pigments, film solids and driers.

3. Liquid coating materials and paint and varnish removers for household use having a flashpoint of less than 0°F as determined by method 3.1 of Specification 1-GP-71 of the Canadian Government Specifications Board.

4. Products made in whole or in part of textile fibres, other than products included in items 5 and 13 of this Part and items 13, 28 and 29 of Part II, that, when tested in accordance with method D1230-61, the Standard Method of Test for Flammability of Clothing Textiles, a standard of the American Society for Testing and Materials, have a time of flame spread of

(*a*) 3.5 seconds or less, where the products do not have a raised fibre surface; or

(*b*) 4 seconds or less, where the products have a raised fibre surface and exhibit ignition or fusion of their base fibres.

5. Children's sleepwear, dressing gowns and robes in sizes up to and including size 6X that, when tested in accordance with the method prescribed in the Standard Method of Test for Flammability of Clothing Textiles ASTM D 1230-61, a standard of the American Society for Testing and Materials, have a time of flame spread of 7 seconds or less.

6. Spectacle frames that, in whole or in part, are made of or contain cellulose nitrate.

7. Toys, equipment and other products for use by a child in learning or play that are, in whole or in part, made of or impregnated with celluloid or cellulose nitrate, other than Ping Pong balls.

8. Toys, equipment and other products for use by a child in learning or play that contain any of the following substances:

(*a*) carbon tetrachloride or any substance containing carbon tetrachloride;

(*b*) methyl alcohol or any substance containing more than one per cent weight to volume of methyl alcohol;

(*c*) petroleum distillates or any substance containing more than ten per cent weight to volume of petroleum distillates;

ANNEXE

PARTIE I

1. Graines de jequirity (*abrus precatorius*) ou toute substance ou article provenant de ces graines ou contenant de telles graines, entières ou partielles.

2. Meubles et autres articles destinés aux enfants, enduits d'un revêtement protecteur liquide contenant des composés du plomb dont la teneur en plomb dépasse 0.50 p. 100 du poids total des corps solides y contenus, y compris les pigments, les corps solides de la pellicule et les siccatifs.

3. Revêtements protecteurs liquides et décapants pour peintures et vernis, à usage domestique, ayant un point d'inflammation de moins de 0°F déterminé par la méthode 3.1 de la norme 1-GP-71 de l'Office des normes du gouvernement canadien.

4. Produits composés entièrement ou partiellement de fibres textiles, à l'exception des produits en fibres textiles visés par les articles 5 et 13 de la présente partie et les articles 13, 28 et 29 de la partie II, qui, lors d'un essai effectué conformément à la norme D1230-61 (*Standard Method of Test for Flammability of Clothing Textiles*) de l'*American Society for Testing and Materials*, permettent un temps de propagation de la flamme de

a) 3.5 secondes ou moins, dans le cas de produits sans surface en fibres grattées; ou

b) 4 secondes ou moins, dans le cas de produits ayant une surface en fibres grattées, lorsque la fusion ou l'inflammation des fibres de fond est apparente.

5. Les vêtements de nuit pour enfants et les robes de chambre des tailles allant jusqu'à 6X, inclusivement, qui lorsqu'ils sont éprouvés conformément à la méthode normalisée d'épreuve d'inflammabilité des textiles pour vêtements ASTM D1239-61 (*Standard Method of Test for Flammability of Clothing Textiles*), norme de l'*American Society for Testing and Materials*, permettent un temps de propagation de la flamme de 7 secondes ou moins.

6. Montures de lunettes entièrement ou partiellement constituées de nitrate de cellulose.

7. Jouets, matériel et autres produits destinés à l'éducation ou à la récréation des enfants et qui sont entièrement ou partiellement constitués ou imprégnés de celluloïd ou de nitrate de cellulose, à l'exclusion des balles de tennis de table (ping pong).

8. Jouets, matériel et autres produits destinés à l'éducation ou à la récréation des enfants et qui contiennent l'une quelconque des substances suivantes:

a) du tétrachlorure de carbone ou une substance contenant du tétrachlorure de carbone,

b) de l'alcool méthylique ou une substance contenant plus de 1 p. 100 poids/volume d'alcool méthylique,

(*d*) benzene;

(*e*) turpentine or any substance containing more than ten per cent weight to volume turpentine;

(*f*) boric acid or salts of boric acid; or

(*g*) ethyl ether;

where the substance can, under reasonably foreseeable circumstances, become accessible to a child or where the substance is a filling that may be released upon breakage or leakage.

9. Toys, equipment and other products for use by a child in learning or play that have applied to them a decorative or protective coating that contains any of the following substances:

(*a*) lead pigments;

(*b*) more than 0.5 per cent weight to weight of lead in the total solids contained in such coating;

(*c*) any compound of antimony, arsenic, cadmium, selenium or barium introduced as such if more than one-tenth of one per cent of such compound dissolves in five per cent hydrochloric acid after stirring for ten minutes at twenty degrees Centigrade; or

(*d*) any compound of mercury introduced as such.

10. Toys, equipment and other products for use by a child in learning or play that

(*a*) make or emit noise exceeding one hundred decibels measured at the distance that the product ordinarily would be from the ear of the child using it;

(*b*) contain plant seeds as pellets for making noise, where the product is intended for use by a child of less than three years of age; or

(*c*) contains plant seeds as stuffing material.

11. Kite strings made of a material that is conductor of electricity.

12. Products that consist of or contain

(*a*) carbon tetrachloride, or

(*b*) 1,1,2,2-tetrachloroethane,

where such products are packaged as consumer products.

13. Products made in whole or in part of textile fibres and designed for use on a pillow or on a bed, cot, crib or other furniture designed to be used for sleeping that, when tested in accordance with method D1230-61, the Standard Method of Test for Flammability of Clothing Textiles, a standard of the American Society for Testing and Materials, have a time of flame spread of

c) des distillats de pétrole ou une substance contenant plus de 10 p. 100 poids/volume de distillats de pétrole,

d) du benzène,

e) de la térébenthine ou une substance contenant plus de 10 p. 100 poids/volume de térébenthine,

f) de l'acide borique ou des sels d'acide borique, ou

g) de l'éther éthylique,

lorsque la substance peut devenir, dans des circonstance raisonnablement prévisibles à un enfant ou lorsque la substance est une matière de remplissage qui peut être libérée à la suite d'une cassure ou d'une fuite.

9. Jouets, matériel et autres produits destinés à l'éducation ou à la récréation des enfants et qui sont recouverts d'un enduit décoratif ou protecteur contenant l'une des substances suivantes:

a) des pigments plombifères,

b) plus de 0.5 p. 100 poids/poids de plomb dans l'ensemble des solides que contient cet enduit,

c) un composé d'antimoine, d'arsenic, de cadmium de sélénium ou de baryum introduit tel quel, si plus de 1/10 p. 100 de ce composé se dissout dans de l'acide chlorhydrique à 5 p. 100 de concentration après avoir été remué pendant dix minutes à vingt degrés centigrades ou

d) un composé de mercure introduit tel quel.

10. Jouets, matériel et autres produits destinés à l'éducation ou à la récréation des enfants et qui

a) font ou émettent un bruit dont le niveau dépasse cent décibels lorsqu'on le mesure à la distance qu'il y aurait ordinairement entre le produit et l'oreille de l'enfant qui l'utilise;

b) contiennent des graines de plantes servant à faire du bruit lorsque le produit est destiné à être utilisé par un enfant de moins de trois ans; ou

c) contiennent des graines de plantes servant de matériau de rembourrage.

11. Les cordes de cerf-volant qui sont en matériaux conducteurs de l'électricité.

12. Produits

a) qui consistent en tétrachlorure de carbone ou en contiennent, ou

b) qui consistent en 1,1,2,2-tétrachloroéthane ou en contiennent,

lorsque ces produits sont emballés comme produits de consommation.

13. Articles de literie composés entièrement ou partiellement de fibres textiles qui, lors d'un essai effectué conformément à la norme D1230-61 (*Standard Method of Test for Flammability of Clothing Textiles*) de l'*American Society for Testing and Materials*, permettent un temps de propagation de la flamme de

a) 7 secondes ou moins, dans le cas de produits sans surface en fibres grattées; ou

(*a*) 7 seconds or less, where the products do not have a raised fibre surface; or

(*b*) 7 seconds or less, where the products have a raised fibre surface and exhibit ignition or fusion of their base fibres.

14. Products for babies, including teethers, soothers and pacifiers, that are put in the mouth when used and that contain a filling that has in it a viable micro-organism.

14.1 Structural devices that position feeding bottles to enable babies to feed themselves therefrom while unattended.

15. Textile fibre products that are to be worn on the person and that contain asbestos fibres, other than products that are

(*a*) designed for the purpose of affording protection from fire or heat hazards; and

(*b*) constructed in a way that ensures that the asbestos fibres will not, upon reasonably foreseeable use, become separated from the products.

16. (1) Bathtub enclosures, shower doors and storm doors for household use that are made of glass or contain a pane of glass which glass is not safety glass within the meaning of the *Safety Glass Regulations*.

(2) Exterior doors for household use, other than storm doors, that

(*a*) are made of glass that is not safety glass within the meaning of the *Safety Glass Regulations*; or

(*b*) contain a pane of glass exceeding five square feet in area that is not safety glass within the meaning of the *Safety Glass Regulations* and the lowest edge of which is less than three feet from the bottom edge of the door.

17. Pencils and artists brushes that have applied to them a decorative or protective coating that, when dry, contains more than 0.5 per cent w/w of lead, as determined in accordance with test method I-GP-500.1 of the Canadian Government Specifications Board, published in December, 1973.

18. Hockey helmets that do not meet the requirements of sections 3, 4 and 6 of Hockey Helmets, No. Z262.1-1975, a Standard of the Canadian Standards Association, published in May, 1975.

19. Toys, equipment and other products for use in blowing balloons by a child that contain any aromatic, aliphatic or any other organic solvent, which solvent or any vapour therefrom may, during or as a result of the normal use of the product, be released directly into the mouth.

20. Consumer products containing 5 parts per million or more ethyl bromoacetate.

21. Disposable metal containers that contain a pressurizing fluid composed in whole or in part of vinyl chloride and that are designed to release pressurized contents by the use of a manually operated valve that forms an integral part of the container.

b) 7 secondes ou moins, dans le cas de produits ayant une surface en fibres grattées, lorsque la fusion ou l'inflammation des fibres de fond est apparente.

14. Produits pour bébés, y compris jouets de dentition, sucettes et tétines, qu'on introduit dans la bouche et dont le remplissage renferme un micro-organisme viable.

14.1 Dispositifs d'appui des biberons permettant aux bébés de se nourrir sans surveillance.

15. Produits de fibres textiles qui doivent être portés sur la personne et qui contiennent des fibres d'amiante, sauf les produits qui sont

a) conçus pour offrir une protection contre le feu et la chaleur; et

b) fabriqués de manière à garantir que les fibres d'amiante ne seront pas détachées des produits lorsqu'on en fait un usage normalement prévisible.

16. (1) Portes de baignoires et de douches et contre-portes à usage domestique fabriquées de verre ou munies d'une vitre qui n'est pas du verre de sécurité au sens du *Règlement sur le verre de sécurité*.

(2) Portes extérieures à usage domestique, sauf les contre-portes,

a) fabriquées avec du verre qui n'est pas du verre de sécurité au sens du *Règlement sur le verre de sécurité*; ou

b) comportant une vitre qui mesure plus de cinq pieds carrés, qui n'est pas du verre de sécurité au sens du *Règlement sur le verre de sécurité* et dont le bord inférieur se trouve à moins de trois pieds du bas de la porte.

17. Crayons et pinceaux d'artistes auxquels il a été appliqué un revêtement décoratif ou protecteur qui, une fois sec, a une teneur supérieure à 0.5 pour 100 p/p en plomb, conformément à la méthode d'essai I-GP-500.1 de l'Office des normes du gouvernement canadien, publiée en décembre 1973.

18. Casques de hockey qui ne répondent pas aux prescriptions des articles 3, 4 et 6 de la norme n° Z262.1-1975, de l'Association canadienne de normalisation portant sur les casques de hockey, publiée en mai 1975.

19. Jouets, matériel et autres produits que les enfants utilisent pour gonfler des ballons et qui contiennent un solvant aromatique, aliphatique ou tout autre solvant organique, lorsque tel solvant ou une vapeur dudit solvant peut se dégager directement dans la bouche au cours de ou par suite de l'utilisation normale du produit.

20. Produits de consommation contenant 5 parties par million ou plus de bromoacétate d'éthyle.

21. Contenants métalliques jetables qui contiennent un liquide sous pression, composé en tout ou en partie de chlorure de vinyle, et qui sont conçus pour permettre de libérer le contenu

22. Automotive engine coolant antifreeze preparations that contain 5 per cent w/w or more of aliphatic or aromatic hydrocarbons or combinations thereof.

23. Consumer products containing 5 parts per million w/w or more nitrobenzene.

24. Liquids containing polychlorinated biphenyls for use in microscopy, including immersion oils but not including refractive index oils.

25. Kites that are, or contain any decorative or functional part or component that is made of uninsulated metal that

(*a*) has a maximum linear dimension in excess of 150 mm (6 inches), or

(*b*) is plated or otherwise coated with a conductive film whose maximun linear dimension exceeds 150 mm (6 inches)

and that is separated from adjacent conductive areas by a non-conductive area of less that 50 mm (2 inches).

26. Products that are composed of or contain actinolite, amosite, anthophyllite, chrysolite, crocidolite, cummingtonite, tremolite or other type of asbestos and that

(*a*) are for use by a child in learning or play, if they are made in such a way that asbestos may become separated from the products; or

(*b*) are for use in modelling or sculpture.

27. Candles that are designed in such a manner that, when lighted and subsequently extinguished by any means, re-ignite spontaneously.

28. Products made in whole or in part of textile fibres, intended for use as wearing apparel, that are treated with or contain tris (2,3 dibromopropyl) phosphate as a single substance or as part of a chemical compound.

29. Any substance used to induce sneezing, whether or not called "sneezing powder", that contains 3,3'-dimethoxybenzidine (4,4'-diamino-3,3'-dimethoxybiphenyl) or any of its salts.

R.S., c. H-3, Sch. part I; SOR/70-73, 480, 482; SOR/71-183, (347), 576, 577; SOR/72-50; SOR/73-402, 407, 477, 619, 699; SOR/74-16, 308, 351 367, 416, 427, 646; SOR/75-269; SOR/76-294, 319, 342; SOR/77-75, 511, 669; SOR/78-394, 433, 622.

sous pression au moyen d'une valve actionnée à la main et faisant partie intégrante du contenant.

22. Préparations d'antigel pour radiateurs de véhicules qui contiennent 5 pour 100 p/p ou plus d'hydrocarbures aliphatiques ou aromatiques ou d'un mélange des deux hydrocarbures.

23. Les produits de consommation contenant 5 parties par million p/p ou plus de nitrobenzène.

24. Des liquides pour usage en microscopie qui contiennent des polychlorobiphényles, y compris des huiles à immersion mais à l'exclusion des huiles à indice de réfraction.

25. Les cerfs-volants qui sont construits, ou qui contiennent une pièce ou un élément décoratif ou fonctionnel, de métal non isolé

a) dont la dimension linéaire maximale est de plus de 150 mm (6 pouces), ou

b) qui est plaqué ou enduit d'une pellicule conductrice dont la dimension linéaire maximale est de plus de 150 mm (6 pouces)

et qui est séparé des surfaces conductrices adjacentes par une surface non conductrice de moins de 50 mm (2 pouces).

26. Produits qui sont composés d'actinolite, d'amosite, d'anthophyllite, de chrysotile, de crocidolite, de cummingtonite, de trémolite ou d'un autre genre d'amiante, ou qui en contiennent, et qui

a) sont destinés à l'éducation ou à la récréation des enfants, s'ils sont fabriqués de telle façon que de l'amiante peut s'en dégager; ou

b) sont destinés au modelage ou à la sculpture.

27. Bougies conçues de telle sorte que lorsqu'elles sont allumées, et sont ensuite éteintes de quelque façon que ce soit, elles se rallument automatiquement.

28. Produits qui sont entièrement ou partiellement fabriqués de fibres textiles, qui doivent servir de vêtements et qui sont traités au tris (2,3 dibromopropyle) phosphate, à l'état pur ou compris dans un composé chimique, ou qui en contiennent.

29. Toute substance contenant du 3,3'-diméthoxybenzidine (4,4'-diamino-3,3'-diméthoxybiphényl) ou l'un de ses sels, et qui est utilisée pour faire éternuer, qu'elle soit ou non dénommée «poudre à éternuer».

S.R., c. H-3, annexe Partie I; DORS/70-73, 480, 482; DORS/71-183, (347), 576, 577; DORS/72-50; DORS/73-402, 407, 477, 619, 699; DORS/74-16, 308, 351, 367, 416, 427, 646; DORS/75-269; DORS/76-294, 319, 342, 390; DORS/77-75, 511, 669; DORS/78-394, 433, 622.

PART II

1. A bleach or cleanser that

(*a*) contains chlorine, or

(*b*) is a source of available chlorine

packaged as a consumer product.

2. A product packaged as a consumer product that is

(*a*) a corrosive chemical, including hydrochloric acid, sulphuric acid, sodium hydrogen sulphate, nitric acid, phosphoric acid, acetic acid, trichloracetic acid, formic acid, lactic acid, oxalic acid and its salts, sodium hydroxide, potassium hydroxide, ammonia and ammonium hydroxide, phenol, o-cresol, m-cresol and p-cresol, silver nitrate, zinc chloride and iodine; or

(*b*) a corrosive product that contains a corrosive chemical and has a pH of 2.5 or less or 11.5 or more

(i) before it is prepared for use, in the case of an aqueous solution, or

(ii) when it is prepared for use according to the directions on the label of the product or in the manner that is customary or usual, in any other case.

3. Petroleum distillates or products containing petroleum distillates including naphtha, mineral spirits, Stoddard solvent, kerosene, gasoline, mineral seal oil and other related distillates of petroleum, when such distillates or products are packaged as consumer products.

4. Adhesives, cleaning solvents, thinning agents and dyes containing toluene or acetone, when such products or substances are packaged as consumer products.

5. Polishes, cleaning agents, liquid coating materials, paint and varnish removers containing 1,1,2-trichloroethane, 1,2-dichloroethane or chloroform where such products or substances are packaged as consumer products.

6. Fire extinguishing fluids composed of or containing any halogenated aliphatic hydrocarbons.

7. Antifreeze preparations containing ethylene glycol or diethylene glycol, when such preparations are packaged as consumer products.

8. Turpentine or products containing turpentine including gum turpentine, steam distilled wood turpentine, sulphate wood turpentine and destructively distilled wood turpentine, when the turpentine or such products are packaged as consumer products.

PARTIE II

1. Agent de blanchiment ou de nettoiement qui

a) contient du chlore, ou

b) est une source de chlore pouvant être facilement libéré,

emballé comme un produit de consommation.

2. Produits emballés comme produits de consommation et qui sont

a) des produits chimiques corrosifs, y compris l'acide chlorhydrique, l'acide sulfurique, le sulphate monosodique, l'acide nitrique, l'acide phosphorique, l'acide acétique, l'acide trichloracétique, l'acide formique, l'acide lactique, l'acide oxalique et ses sels, l'hydroxyde de sodium, l'hydroxyde de potassium, l'ammoniac et l'hydroxyde d'ammonium, le phénol, l'orthocrésol, le méta-crésol et le paracrésol, le nitrate d'argent, le chlorure de zinc et l'iode; ou

b) des produits corrosifs qui contiennent des produits chimiques corrosifs et dont le pH est de 2.5 ou moins, ou de 11.5 ou plus

(i) avant qu'ils ne soient préparés pour utilisation dans le cas des solutions aqueuses, ou

(ii) lorsqu'ils sont préparés pour utilisation, soit selon le mode d'emploi indiqué sur l'étiquette du produit, soit de la façon habituelle ou ordinaire, dans les autres cas.

3. Distillats de pétrole ou produits contenant des distillats de pétrole, y compris le naphte, les essences minérales, le solvant Stoddard, le kérosène, l'essence, le pétrole lampant et autres distillats de pétrole similaires, lorsque ces produits sont emballés comme produits de consommation.

4. Substances adhésives, solvants de nettoyage, agents de dilution et teintures contenant du toluène ou de l'acétone, lorsque ces produits ou substances sont emballés comme produits de consommation.

5. Encaustiques, agents de nettoyage, revêtements protecteurs liquides, décapants pour peintures et vernis contenant du 1,1,2-trichloroéthane, du 1,2-dichloroéthane ou du chloroforme, lorsque ces substances ou produits sont emballés comme produits de consommation.

6. Liquides extincteurs composés de dérivés halogénés d'hydrocarbures aliphatiques ou en contenant.

7. Préparations anti-gel contenant de l'éthylène-glycol ou du diéthylène-glycol, lorsque ces préparations sont emballées comme produits de consommation.

8. Térébenthine ou produits contenant de la térébenthine, notamment, térébenthine de la gomme et térébenthines du bois obtenues par distillation à la vapeur, par le procédé au sulfate et par distillation sèche, lorsque la térébenthine ou les produits en contenant sont emballés comme produits de consommation.

9. Methyl alcohol or products containing methyl alcohol when the alcohol or such products are packaged as consumer products.

10. Disposable metal containers of consumer products designed to release pressurized contents by the use of a manually operated valve that forms an integral part of the container.

10.1 Alkyl cyanoacrylate adhesives.

11. Products used in polishing, cleaning or plating metal that contain hydrocyanic acid or salts of hydrocyanic acid and are packaged as consumer products.

12. Toys, equipment and other products for use by a child in learning or play that

(*a*) are packaged in flexible film bags;

(*b*) are operated electrically;

(*c*) are or are likely to be used by a child of less than three years of age and have a component that is separable;

(*d*) have exposed metal edges;

(*e*) have embedded in them a wire frame or structure;

(*f*) are made, in whole or in part, of plastic that would, upon breaking, expose sharp edges;

(*g*) have exposed wooden surfaces, edges or corners;

(*h*) are made, in whole or in part, of glass;

(*i*) have fasteners used in their construction;

(*j*) have a folding mechanism, bracket or bracing;

(*k*) contain, as an integral part, a spring-wound driving mechanism capable of injuring a child's finger, other than construction toys;

(*l*) contain a projectile component, other than a rocketry component, capable of causing a puncture wound;

(*m*) are designed and constructed so that they

(i) are large enough for a child to enter or be placed therein; and

(ii) can be closed by a lid or door;

(*n*) are stationary and intended to bear the weight of a child;

(*o*) contain a surface, part or substance that during reasonably foreseeable use, will or may become heated;

(*p*) contain a toxic substance other than a toxic substance named in item 8 of Part I of the Schedule to the Act;

(*q*) contain a corrosive substance, irritant or sensitizer; or

(*r*) are or are likely to be used by a child of less than three years of age and are made of or contain any plastic material.

9. Alcool méthylique ou produits contenant de l'alcool méthylique lorsque l'alcool ou les produits en contenant sont emballés comme produits de consommation.

10. Contenants métalliques non réutilisables de produits de consommation conçus pour laisser s'échapper un contenu sous pression lorsqu'on se sert d'une valve actionnée à la main qui fait partie intégrante du contenant.

10.1 Produits adhésifs au cyanoacrylate d'alkyle.

11. Produits utilisés pour le polissage, le nettoyage ou le placage du métal qui contiennent de l'acide cyanhydrique ou des cyanures et sont emballés comme produits de consommation.

12. jouets, matériel et autres produits destinés à l'éducation ou la récréation des enfants et qui

a) sont emballés dans des sacs de plastique souple;

b) fonctionnent à l'électricité;

c) sont destinés à être utilisés éventuellement par un enfant de moins de trois ans, et qui comportent une pièce détachable;

d) ont des rebords métalliques à découvert;

e) contiennent un cadre ou une structure de fil métallique à l'intérieur;

f) sont entièrement ou partiellement en plastique qui, après cassure, auraient des bords acérés à découvert;

g) ont des surfaces, des arêtes ou des coins de bois à découvert;

h) sont entièrement ou partiellement en verre;

i) ont été munis d'attaches lors de leur construction;

j) comportent un mécanisme, une armature ou un support pliants;

k) contiennent un mécanisme à ressort qui en fait partie intégrante et peut causer des blessures aux doigts d'un enfant, et ne sont pas des jeux de construction;

l) comportent un élément de projectile, autre qu'un élément de fusée, pouvant causer une blessure par perforation;

m) sont conçus et construits de telle sorte

(i) qu'ils soient assez grands pour qu'un enfant puisse y entrer ou y être placé à l'intérieur; et

(ii) que toute ouverture puisse en être close par un couvercle ou une porte;

n) sont statiques et destinés à supporter le poids d'un enfant;

o) contiennent une surface, partie ou substance qui, à la suite d'un usage raisonnablement prévisible, deviendra ou pourra devenir chaude;

p) contiennent une substance toxique autre qu'une substance toxique nommée à l'article 8 de la partie I de l'annexe de la Loi;

q) contiennent une substance corrosive, irritante ou sensibilisatrice; ou

r) sont destinés à être utilisés ou le seront vraisemblablement par un enfant de moins de trois ans et sont fabriqués de matière plastique ou en contiennent.

13. Dolls, plush (raised fibre) toys and soft toys that have

(*a*) a fastening in them to attach parts, clothing or ornamentation;

(*b*) any stuffing in them;

(*c*) eyes or a nose the greatest dimension of which is 1¼ inches or less;

(*d*) an outer covering consisting in whole or in part of a flat or raised fibre textile material or natural fur;

(*e*) exposed surfaces consisting in whole or in part of yarn of spun staple or bulked continuous filament form;

(*f*) hair, mane, or simulated hair or simulated mane consisting of material other than yarn described in paragraph (*e*); or

(*g*) a squeaker, reed, valve or similar device.

14. Pull and push toys that have shaft-like handles three-eighths of an inch (10 mm) in diameter or less.

15. Toy steam engines.

16. Finger paints.

17. Rattles.

18. Elastics intended for attaching toys, equipment or other products for use by a child in learning or play across a baby carriage, crib or playpen.

19. Batteries for use in or with any toy, equipment or other product for use by a child in learning or play.

20. Products that are

(*a*) for use or that may be used in storing, preparing or serving any food as defined in the *Food and Drugs Act*; and

(*b*) made in whole or in part of ceramics having a glaze that contains lead or cadmium.

21. (1) Science education sets that contain any chemical for use in a chemical or pyrotechnic reaction or to preserve a biological specimen.

(2) Chemicals packaged for restocking science education sets described in subitem (1).

22. Matches.

23. Devices for use in motor vehicles for the purpose of seating children or restraining children when seated in such vehicles, other than seat belt assemblies for children that are sold, imported or advertised with motor vehicles as components thereof and replacements for such seat belt assemblies.

13. Poupées, jouets en peluche (fibres grattées) et jouets mous ayant

a) une attache servant à la fixation de parties, vêtements ou décorations;

b) du rembourrage;

c) des yeux ou un nez dont la dimension la plus importante est de 1¼ pouce ou moins;

d) un revêtement constitué en tout ou en partie de fourrure naturelle ou d'une matière textile à fibres plates ou grattées;

e) des surfaces découvertes constituées, en tout ou en partie, de filés de fibres discontinues ou de filés de filaments continus à effet gonflé;

f) du poil ou du crin, ou de l'imitation de poil ou de crin constituée d'une manière autre que les filés mentionnés à l'alinéa *e*); ou

g) un dispositif produisant un cri, un chalumeau, une soupape ou un dispositif assimilé.

14. Jouets à tirer et à pousser qui ont des poignées en forme de tige dont le diamètre est de trois huitièmes de pouce (10 mm) ou moins.

15. Jouets comportant de petites machines à vapeur.

16. Peintures conçues pour être appliquées avec les doigts.

17. Hochets.

18. Élastiques servant à attacher les jouets, le matériel ou d'autres produits destinés à l'éducation ou à la récréation des enfants, au travers d'une voiture d'enfant, d'un berceau ou d'un parc pour enfants.

19. Piles électriques devant être utilisées dans ou avec tout jouet, matériel ou autre produit et destinées à l'éducation ou à la récréation des enfants.

20. Produits

a) devant ou pouvant être utilisés pour emmagasiner, préparer ou servir un aliment tel qu'il est défini dans la *Loi des aliments et drogues*; et

b) entièrement ou partiellement constitués de produits céramiques dont l'émail renferme du plomb ou du cadmium.

21. (1) Les nécessaires d'expérience scientifique contenant une substance chimique utilisée pour produire une réaction chimique ou pyrotechnique, ou pour conserver un spécimen biologique.

(2) Les produits chimiques de rechange pour les nécessaires d'expérience scientifique décrits au sous-article (1).

22. Allumettes.

23. Dispositifs devant sevir, dans des véhicules automobiles, à asseoir des enfants ou à les retenir lorsqu'ils sont assis, autres que des ceintures de sécurité pour enfants qui sont vendues, importées ou annoncées en même temps que les véhicules automobiles, à titre de composants de ceux-ci, et des pièces de rechange pour ces ceintures de sécurité.

24. Charcoal for use in domestic cooking or heating.

25. Cradles, cribs and crib extension rails.

25.1 Playpens (play yards) for children.

26. Pacifiers and similar products for babies that are put in the mouth when used, except pacifiers described in item 14 of Part I of the schedule.

27. Kettles for household use that release lead into water boiled therein.

28. Carpets, carpeting (including carpet tiles), mats, matting and rugs, (other than those that are one-of-a-kind, or Oriental rugs), that are made in whole or in part of textile fibres, that have not been treated with a fire retardant, and that when any sample thereof, consisting of 48 specimens measuring not less than 23 cm by 23 cm (approximately 9 inches by 9 inches) each, is tested in accordance with

(*a*) the normal sequential sampling plan set out in the Standard for Flammability of Soft Floor Coverings—Sampling Plans, being standard 4-GP-155 established by the Canadian Government Specifications Board, published in January 1974, and

(*b*) method 27.6 of the Canadian Standard Textile Test Methods, being standard 4-GP-2 established by the Canadian Government Specifications Board, published in November 1971,

the sample has a rate of flammability failure in excess of the rate permitted by standard 4-GP-155 for that sampling plan.

29. Carpets, carpeting (including carpet tiles), mats, matting and rugs, (other than those that are one-of-a-kind, or Oriental rugs), that are made in whole or in part of textile fibres, that have been treated with a fire retardant, and that when any sample thereof, consisting of 48 specimens measuring not less than 23 cm by 23 cm (approximately 9 inches by 9 inches) each is

(*a*) subjected to method 30.2 of the Canadian Standard Textile Test Methods, being standard 4-GP-2 established by the Canadian Government Specifications Board, published in November 1971,

(*b*) tested in accordance with the normal sequential sampling plan set out in the Standard For Flammability of Soft Floor Coverings—Sampling Plans, being standard 4-GP-155 established by the Canadian Government Specifications Board, published in January 1974, and

(*c*) tested in accordance with method 27.6 of the Canadian Standard Textile Test Methods, being standard 4-GP-2, established by the Canadian Government Specifications Board, published in November 1971,

the sample has a rate of flammability failure in excess of the rate permitted by standard 4-GP-155 for that sampling plan.

24. Le charbon de bois utilisé pour la cuisson ou le chauffage domestiques.

25. Berceaux, lits d'enfant et gardes superposables pour lits d'enfant.

25.1 Parcs pour enfants.

26. Sucettes et produits semblables pour bébés qu'on introduit dans la bouche, à l'exception des sucettes décrites à l'article 14 de la partie I de l'annexe.

27. Les bouilloires à usage domestique qui libèrent du plomb dans l'eau qu'on y fait bouillir.

28. Moquettes, carpettes, tapis en carreaux, paillassons et tapis de tous genres, autre que ceux qui sont uniques ou les tapis d'Orient, composés entièrement ou partiellement de fibres textiles qui n'ont subi aucun traitement d'ignifugation et qui, après essai d'un échantillon, constitué de 48 spécimens mesurant au moins 23 cm sur 23 cm (environ 9 pouces sur 9 pouces), effectué conformément

a) au plan d'échantillonnage progressif normal prescrit par la norme (F) 4-GP-155. Résistance à l'inflammabilité des revêtements de sol mous—Plans d'échantillonnage, établie par l'Office des normes du gouvernement canadien et publiée en janvier 1974, et

b) à la méthode 27.6 de la norme (F) 4-GP-2, Méthodes standards canadiennes pour épreuves textiles, établie par l'Office des normes du gouvernement canadien et publiée en novembre 1971,

ont un taux de résistance à l'inflammabilité inférieur au taux prescrit par ledit plan d'échantillonnage de la norme (F) 4-GP-155.

29. Moquettes, carpettes, tapis en carreaux, paillassons et tapis de tous genres, autres que ceux qui sont uniques ou les tapis d'Orient, composés entièrement ou partiellement de fibres textiles qui ont subi un traitement d'ignifugation et qui, après essai d'un échantillon, constitué de 48 spécimens mesurant au moins 23 cm sur 23 cm (environ 9 pouces sur 9 pouces), effectué conformément

a) au procédé 30.2 de la norme (F) 4-GP-2, Méthodes standards canadiennes pour épreuves textiles, établie par l'Office des normes du gouvernement canadien et publiée en novembre 1971,

b) au plan d'échantillonnage progressif normal prescrit par la norme (F) 4-GP-155, Résistance à l'inflammabilité des revêtements de sol mous—Plans d'échantillonnage, établie par l'Office des normes du gouvernement canadien et publiée en janvier 1974, et

c) à la méthode 27.6 de la norme (F) 4-GP-2, Méthodes standards canadiennes pour épreuves textiles, établie par l'Office des normes du gouvernement canadien et publié en novembre 1971,

ont un taux de résistance à l'inflammabilité inférieur au taux prescrit par ledit plan d'échantillonnage de la norme (F) 4-GP-155.

30. Paints, enamels and other liquid coating materials

(*a*) for use on the interior or exterior surfaces of buildings, funiture or household products; and

(*b*) that contain more than 0.5 per cent w/w of lead as determined in accordance with test method 1 GP-500.1 of the Canadian Government Specifications Board, published December, 1973.

33. Pine oils, including

(*a*) synthetic pine oils;

(*b*) pine wood extracts containing alpha terpineol or other terpene alcohols or a mixture of these substances with ethers and hydrocarbons; and

(*c*) products containing pine oils.

R.S., c. H-3, Sch. part II; SOR/70-94, 480, 482; SOR/71-183, 199, (347), 574; SI/72-46, 48, 84; SOR/73-629, 636; SOR/74-309, 352, 355, 417; SOR/75-270, 651; SOR/76-97, 174, 489, 491; SOR/77-610; SOR/78-394.

30. Peintures, émaux et autres revêtements liquides

a) pour les surfaces intérieures ou extérieures d'édifices, de meubles ou de produits à usage domestique; et

b) dont la teneur en plomb est supérieure à 0.5 p. 100 p/p déterminée conformément à la méthode d'essai 1 GP-500.1 de l'Office des normes du gouvernement canadien publiée en décembre 1973.

33. Les essences de pin, y compris

a) les essences de pin synthétiques;

b) les extraits de bois de pin contenant du terpinéol alpha ou autres alcools de terpène, ou un mélange de ces substances avec des éthers et des hydrocarbures; et

c) les produits contenant des essences de pin.

S.R., c. H-3, annexe Partie II; DORS/70-94, 480, 482; DORS/71-183, 199, (347), 574; TR/72-46, 48, 84; DORS/73-629, 636; DORS/74-309, 352, 355, 417; DORS/75-270, 651; DORS/76-97, 174, 489, 491; DORS/77-610; DORS/78-394.

CHAPTER 921

HAZARDOUS PRODUCTS ACT

Children's Car Seats and Harnesses Regulations

REGULATIONS RESPECTING THE ADVERTISING, SALE AND IMPORTATION OF CHILDREN'S CAR SEATS AND HARNESSES

Short Title

1. These Regulations may be cited as the *Children's Car Seats and Harnesses Regulations*.

Interpretation

2. In these Regulations,

"Act" means the *Hazardous Products Act*; (*Loi*)

"facing direction" means the direction toward which an occupant is faced or to be faced in an installed product; (*direction face*)

"hardware" means any metal or rigid plastic part of an occupant restraint assembly or product restraint assembly; (*pièce*)

"head restraint" means a device that limits the angular displacement of the head of an occupant in the opposing direction relative to his torso line; (*appuie-tête*)

"impact simulation" means a test to simulate a motor vehicle impact, carried out in accordance with the procedure described in Schedule III using

(*a*) test device B, or

(*b*) where a product is designed for a child whose maximum weight is not more than 40 pounds, test device A; (*simulation de choc*)

"installed" means, with respect to a product, positioned and secured in accordance with the installation information required by these Regulations to accompany the product or to be printed on or permanently affixed to the product; (*installé*)

"occupant" means a child who is

(*a*) within the size range of children for whom a product is designed, and

(*b*) positioned and secured in the product in accordance with the information required by these Regulations to accompany the product or to be printed on or permanently affixed to the product; (*occupant*)

"occupant restraint assembly" means any harness, including webbing, buckles and hardware, that is used or to be used to secure or restrain an occupant in a product; (*ensemble de retenue de l'occupant*)

"opposing direction" means the direction that is displaced from the facing direction by 180 angular degrees; (*direction opposée*)

CHAPITRE 921

LOI SUR LES PRODUITS DANGEREUX

Règlement sur les sièges et harnais d'auto pour enfants

RÈGLEMENT CONCERNANT L'ANNONCE, LA VENTE ET L'IMPORTATION DE SIÈGES ET DE HARNAIS D'AUTO POUR ENFANTS

Titre abrégé

1. Le présent règlement peut être cité sous le titre: *Règlement sur les sièges et harnais d'auto pour enfants*.

Interprétation

2. Dans le présent règlement,

«appuie-tête» désigne un dispositif qui restreint le déplacement angulaire de la tête de l'occupant dans la direction opposée par rapport à la ligne du torse; (*head restraint*)

«bloc-torse» désigne le bloc-torse qui figure au diagramme 3 de l'annexe IV; (*torso block*)

«direction face» désigne la direction dans laquelle l'occupant fait face ou doit faire face dans un produit installé; (*facing direction*)

«direction latérale» désigne une direction qui se situe à un angle de 90 degrés sur le plan horizontal par rapport à la direction face; (*sideward direction*)

«direction opposée» désigne la direction qui se situe à un angle de 180 degrés par rapport à la direction face; (*opposing direction*)

«dispositif d'essai A» désigne un dispositif d'essai anthropométrique Sierra entièrement articulé simulant un enfant de 34 livres; (*test device A*)

«dispositif d'essai B» désigne un dispositif d'essai anthropométrique Sierra entièrement articulé simulant un enfant de 48 livres; (*test device B*)

«ensemble de retenue de l'occupant» désigne tout harnais, y compris sangles, attaches et pièces, destinés à attacher ou retenir l'occupant d'un produit; (*occupant restraint assembly*)

«ensemble de retenue du produit» désigne toute sangle, attache ou pièce ou toute combinaison de ces éléments destinée à attacher ou retenir un produit dans un véhicule; (*product restraint assembly*)

«installé» signifie par rapport à un produit, placé et attaché conformément aux indications relatives à l'installation qui doivent, aux termes du présent règlement, accompagner le produit, être imprimées sur le produit ou y être attachées de façon permanente; (*installed*)

«Loi» désigne la *Loi sur les produits dangereux*; (*Act*)

"product" means a product included in item 23 of Part II of the schedule to the Act; (*produit*)

"product restraint assembly" means any webbing, buckle, hardware or combination thereof that is designed to secure or restrain a product in a vehicle; (*ensemble de retenue du produit*)

"sideward direction" means a direction that is displaced from the facing direction by 90 angular degrees in the horizontal plane; (*direction latérale*)

"Standard J4c" means *Standard J4c, "Motor Vehicle Seat Belt Assemblies", July 1965*, a standard of the Society of Automotive Engineers; (*Norme J4c*)

"test device A" means a fully articulated Sierra anthropometric test device simulating a child who weighs 34 pounds; (*dispositif d'essai A*)

"test device B" means a fully articulated Sierra anthropometric test device simulating a child who weighs 48 pounds; (*dispositif d'essai B*)

"torso block" means the torso block shown in figure 3 of Schedule IV; (*bloc-torse*)

"torso block reference Point A" means the point that is located on either side of the torso block 2.9 inches above the bottom surface of the block and 2.1 inches forward from the back surface of the block; (*point de référence A du bloc-torse*)

"vehicle impact simulator" means a device that simulates, in the manner described in Schedule III, motor vehicle-barrier impact at motor vehicle speeds of 20 and 30 miles per hour. (*simulateur de choc*)

«norme J4c» désigne la norme J4c, «*Motor Vehicle Seat Belt Assemblies*», juillet 1965, norme de l'Association des ingénieurs de l'automobile; (*Standard J4c*)

«occupant» désigne un enfant

a) dont la taille se situe dans la gamme des tailles pour lesquelles le produit est conçu, et

b) qui est placé et attaché dans le produit conformément aux indications qui doivent, aux termes du présent règlement, accompagner le produit, être imprimées sur le produit ou y être attachées de façon permanente; (*occupant*)

«pièce» désigne toute partie de métal ou de plastique rigide d'un ensemble de retenue de l'occupant ou du produit; (*hardware*)

«point de référence A du bloc-torse» désigne le point de chaque côté du bloc-torse qui se situe à 2.9 pouces au-dessus de la surface inférieure du bloc et à 2.1 pouces à l'avant de la surface arrière du bloc; (*torso block reference Point A*)

«produit» désigne un produit figurant au numéro 23 de la partie II de l'annexe de la Loi; (*product*)

«simulateur de choc» désigne un dispositif qui simule, de la manière décrite à l'annexe III, des chocs automobile-obstacle à des vitesses de 20 et 30 milles à l'heure; (*vehicle impact simulator*)

«simulation de choc» désigne un essai destiné à simuler le choc d'un véhicule automobile et effectué selon la méthode décrite à l'annexe III, au moyen

a) du dispositif d'essai B, ou

b) du dispositif d'essai A, lorsqu'il s'agit d'un produit conçu pour un enfant d'un poids maximal de 40 livres. (*impact simulation*)

Application

3. (1) A product may be advertised, sold or imported into Canada if it meets the applicable requirements of these Regulations.

(2) Any information or statement required by these Regulations to accompany a product or to be printed on or permanently affixed to a product shall be in both official languages.

Application

3. (1) Un produit peut être annoncé, vendu ou importé au Canada s'il remplit les conditions applicables du présent règlement.

(2) Tout renseignement ou toute déclaration qui doit, aux termes du présent règlement, accompagner un produit, être imprimé sur le produit ou y être attaché de façon permanente, doit être formulé dans les deux langues officielles.

Restraint Assemblies

4. Every product restraint assembly with which a product is equipped shall meet the requirements of clauses 3.4, 3.6, 3.9, 4.4, 4.5, 4.6, 5.1, 5.2, 5.3 and 5.5 of Standard J4c.

5. Every occupant restraint assembly shall meet the requirements for a Type 3 seat belt assembly set out in clauses 3, 4 and 5 of Standard J4c.

6. Every product shall be so designed and constructed that any restraint assembly that restrains both an occupant in the product and the product in a motor vehicle imposes no restraint loads on the occupant that result from the mass of the product.

Ensembles de retenue

4. Tout ensemble de retenue du produit dont un produit est équipé doit remplir les conditions des articles 3.4, 3.6, 3.9, 4.4, 4.5, 4.6, 5.1, 5.2, 5.3 et 5.5 de la norme J4c.

5. Tout ensemble de retenue de l'occupant doit remplir les conditions des articles 3, 4 et 5 de la norme J4c pour une ceinture de sécurité du type 3.

6. Tout produit doit être étudié et construit de façon que tout ensemble de retenue qui retient en même temps l'occupant dans le produit et le produit dans le véhicule automobile n'impose à l'occupant aucune charge de retenue à cause de la masse du produit.

Restraint Force Distribution

7. (1) Every product shall be so designed and constructed that, when it is installed, the restraining forces applied to an occupant during movement of the occupant in the facing direction are distributed, at least in part, on the torso and pelvis of the occupant.

(2) Every product shall be so designed and constructed that, when it is installed, the webbing of any occupant restraint assembly that applies the restraining forces described in subsection (1)

(*a*) is at least 1 1/2 inches in width when measured in accordance with the procedure described in clause 7.1 of Standard J4c;

(*b*) includes torso restraining belts passing over each shoulder of the occupant; and

(*c*) includes a pelvis restraining belt passing over the lap of the occupant in such manner that the forward angles on both sides of the occupant at the intersections of the belt and the surface on which the occupant is seated is not less than 45° and not more than 90°.

(3) Every product shall be so designed and constructed that, when it is installed, any surface, other than that of an occupant restraint assembly, that applies the restraining forces described in subsection (1) has a continuous surface area of not less than 48 square inches.

8. (1) Every product shall be so designed and constructed that, when it is installed,

(*a*) restraining forces applied to an occupant during movement of the occupant in a sideward direction are distributed, at least in part, on the torso of the occupant;

(*b*) the webbing of any occupant restraint assembly that applies the restraining forces described in paragraph (*a*) meets the requirements of subsection 7(2); and

(*c*) any surface, other than that of an occupant restraint assembly, that applies the restraining forces described in paragraph (*a*) meets the requirements of subsection 7(3).

9. (1) Every product shall be so designed and constructed that, when it is installed, restraining forces applied to an occupant during movement of the occupant in the opposing direction are distributed, at least in part, on the back of the torso of the occupant.

(2) Every product shall be so designed and constructed that, when it is installed, any surface that applies the restraining forces described in subsection (1) has a surface area of not less than 85 square inches.

10. Every product shall be so designed and constructed that, when it is installed,

(*a*) movement of the head of an occupant in the opposing direction is limited by a surface that acts as a head restraint; and

(*b*) any surface that acts as a head restraint

(i) has a lateral width of at least 6 inches measured 2 inches below the uppermost edge of the surface, and

Distribution des forces de retenue

7. (1) Un produit doit être étudié et construit de façon qu'une fois installé, les forces de retenue exercées sur l'occupant durant son déplacement dans la direction face soient distribuées au moins en partie sur le torse et le bassin.

(2) Un produit doit être étudié et construit de façon qu'une fois installé, la sangle d'un ensemble de retenue de l'occupant qui exerce la force de retenue mentionnée au paragraphe (1)

a) ait au moins 1 1/2 pouce de largeur, mesuré selon la méthode décrite à l'article 7.1 de la norme J4c;

b) comporte des ceintures de retenue du torse passant par-dessus les épaules de l'occupant; et

c) comporte une ceinture de retenue du bassin passant au niveau du bas de l'abdomen de l'occupant de manière que les angles avant des deux côtés de l'occupant aux intersections de la ceinture et de la surface sur laquelle l'occupant est assis soient d'au moins 45° et d'au plus 90°.

(3) Un produit doit être étudié et construit de façon qu'une fois installé, toute surface, sauf celle de l'ensemble de retenue de l'occupant, qui exerce les forces de retenue mentionnées au paragraphe (1) mesure au moins 48 pouces carrés.

8. (1) Un produit doit être étudié et construit de façon qu'une fois installé,

a) les forces de retenue exercées sur l'occupant durant son déplacement dans la direction latérale soient distribuées, au moins en partie, sur le torse de l'occupant;

b) la sangle de tout ensemble de retenue de l'occupant qui exerce les forces de retenue mentionnées à l'alinéa *a*), remplisse les conditions du paragraphe 7(2); et

c) toute surface, sauf celle de l'ensemble de retenue de l'occupant, qui exerce les forces de retenue mentionnées à l'alinéa *a*), remplisse les conditions du paragraphe 7(3).

9. (1) Un produit doit être étudié et construit de façon qu'une fois installé, les forces de retenue exercées sur l'occupant durant son déplacement dans la direction opposée soient distribuées, au moins en partie, sur l'arrière du torse de l'occupant.

(2) Un produit doit être étudié et construit de façon qu'une fois installé, toute surface qui exerce les forces de retenue mentionnées au paragraphe (1) mesure au moins 85 pouces carrés.

10. Un produit doit être étudié et construit de façon qu'une fois installé,

a) le déplacement de la tête de l'occupant dans la direction opposée soient limité par une surface faisant fonction d'appuie-tête; et

b) toute surface faisant fonction d'appuie-tête

(i) ait au moins 6 pouces de largeur, mesurée à 2 pouces au-dessous du point le plus élevé de la surface, et

(ii) is of such a height that the top of the head of the occupant is not more than 3 inches above the uppermost edge of the surface.

Impact Protection

11. (1) Every product shall be so designed and constructed that any surface, other than that of an occupant restraint assembly, that may be impacted by an occupant is free of any rigid corner or edge that has a radius of less than 1/4 inch.

(2) Every product shall be so designed and constructed that any surface, other than that of an occupant restraint assembly, that may be impacted by the torso of an occupant

(*a*) has a surface area of at least 48 square inches; or

(*b*) is covered with deformable non-recovery or slow recovery material having a thickness of at least 1/2 inch.

(3) Every product shall be so designed and constructed that any surface, other than that of an occupant restraint assembly, that may be impacted by the head of an occupant

(*a*) is covered with deformable non-recovery or slow recovery material that

(i) has a thickness of at least 1/2 inch, and

(ii) where impact occurs during movement of the occupant in the facing direction, requires a unit load of not less than 5 and not more than 13 pounds per square inch to be applied to it for a compression deflection of 25 per cent when tested in accordance with the procedure described in sections 14, 17, 18, 19 and 20 of the *Standard Specification for Sponge and Expanded Cellular Rubber Products, D1056-68* of the American Society for Testing and Materials; and

(*b*) has an area of at least 8 square inches.

Performance Requirements

12. (1) Every product, other than a product to which subsection (2) or section 15 applies, shall, when tested in accordance with the procedure described in Schedule I, restrict horizontal movement of the torso block reference point A in the direction of the applied force to 12 inches or less.

(2) Every product, other than a product to which section 15 applies shall, when tested in accordance with the procedure described in Schedule I, restrict horizontal movement of the torso block reference point A in the direction of the applied force to 6 inches or less.

13. Every product that is equipped with an occupant restraint assembly shall be so designed and constructed that, when tested in accordance with the procedure described in Schedule I, the buckle of the occupant restraint assembly releases freely.

14. Every product that is equipped with a head restraint, other than a product to which section 15 applies, shall, when tested in accordance with the procedure described in Schedule II, restrict horizontal movement of the cylindrical block in the direction of the applied force to 2 3/4 inches or less.

(ii) ait une hauteur telle que le dessus de la tête de l'occupant ne dépasse pas de plus de 3 pouces le point le plus élevé de la surface.

Protection contre le choc

11. (1) Un produit doit être étudié et construit de façon que toute surface, sauf celle de l'ensemble de retenue de l'occupant, contre laquelle l'occupant peut se heurter, soit dépourvue de tout coin ou bord rigide ayant un rayon de moins de 1/4 de pouce.

(2) Un produit doit être étudié et construit de façon que toute surface, sauf celle de l'ensemble de retenue de l'occupant, contre laquelle le torse de l'occupant peut se heurter

a) mesure au moins 48 pouces carrés; ou

b) soit revêtue d'une substance déformable d'au moins 1/2 pouce d'épais qui ne reprend pas sa forme ou la reprend lentement.

(3) Un produit doit être étudié et construit de façon que toute surface, sauf celle de l'ensemble de retenue de l'occupant contre laquelle la tête de l'occupant peut se heurter

a) soit revêtue d'une substance déformable qui ne reprend pas sa forme ou la reprend lentement et

(i) qui a au moins 1/2 pouce d'épaisseur, et,

(ii) lorsque le choc se produit durant le déplacement de l'occupant dans la direction face, à laquelle il faut appliquer une charge unitaire d'au moins 5 livres et d'au plus 13 livres par pouce carré pour lui imprimer une déformation à la compression de 25 pour cent lorsqu'elle est soumise à l'essai décrit aux articles 14, 17, 18, 19 et 20 de la *Standard Specification for Sponge and Expanded Cellular Rubber Products, D1056-68* de l'American Society for Testing and Materials; et

b) mesure au moins 8 pouces carrés.

Comportement

12. (1) Tout produit, sauf un produit visé par le paragraphe (2) ou l'article 15, doit, lorsqu'il est soumis à l'essai décrit à l'annexe I, restreindre à 12 pouces ou moins le mouvement horizontal du point de référence A du bloc-torse dans la direction de la force appliquée.

(2) Tout produit, sauf un produit visé par l'article 15, doit, lorsqu'il est soumis à l'essai décrit à l'annexe I, restreindre à 6 pouces ou moins le mouvement horizontal du point de référence A du bloc-torse dans la direction de la force appliquée.

13. Un produit équipé d'un ensemble de retenue de l'occupant doit être étudié et construit de façon que, lorsqu'il est soumis à l'essai décrit à l'annexe I, l'attache de l'ensemble de retenue de l'occupant se débloque librement.

14. Un produit équipé d'un appuie-tête, sauf un produit visé par l'article 15, doit, lorsqu'il est soumis à l'essai décrit à l'annexe II, restreindre à 2 3/4 pouces ou moins le mouvement horizontal du bloc cylindrique dans la direction de la force appliquée.

15. Every product shall be so designed and constructed that in an impact simulation carried out in accordance with the procedure described in Schedule III,

(*a*) no separation or fracture of any joint or component of the product occurs in such manner that a part of the test device is lacerated or penetrated by an edge or point;

(*b*) no collapse, folding or other position change of the product or any component thereof occurs in such manner that a part of the test device is compressed or entrapped between opposing parts of the product; and

(*c*) movement of the test device is so restricted that no point on the head of the test device passes

(i) through the vertical lateral plane that is located 18 inches forward from the foremost point on the backrest of the motor vehicle seat in which the product is installed,

(ii) through either of the vertical longitudinal planes that are located 15 inches sideward from the lateral midpoint of the position of the motor vehicle seat in which the product is installed,

(iii) through the horizontal plane that is located 27 inches above the highest point on the unloaded seat cushions of the motor vehicle seat in which the product is installed,

(iv) through the vertical lateral plane that is located 8 inches rearward from the rearmost point on the head of the test device when the test device is positioned and secured in the product as described in item 3 of Schedule III and the head of the test device is positioned against the surface that acts as a head restraint, or

(v) over or around the surface that acts as a head restraint.

Labelling and Instructions

16. (1) Every product shall have indelibly printed on it, or otherwise permanently affixed to it, the following information, clearly and prominently displayed in letters and numerals not less than 3/32 inch in height:

(*a*) the name and principal place of business of the person by or for whom the product is made;

(*b*) the model name or model number of the product;

(*c*) the month and year of manufacture of the product;

(*d*) the minimum weight of children for whom the product is designed;

(*e*) the maximum weight of children for whom the product is designed;

(*f*) the maximum height of children for whom the product is designed;

(*g*) the types of motor vehicles in which the product is or is not to be installed;

(*h*) the types of motor vehicle seats in which the product is or is not to be installed;

(*i*) the seating positions in which the product is or is not to be installed; and

(*j*) the facing direction.

(2) Every product shall have indelibly printed on it, or otherwise permanently affixed to it, immediately below the information referred to in subsection (1), the following state-

15. Un produit doit être étudié et construit de façon que, dans toute simulation de choc effectuée selon la méthode décrite à l'annexe III,

a) aucune séparation ou cassure d'un joint ou élément du produit ne se produise de manière qu'une partie du dispositif d'essai soit lacérée ou percée par un bord ou une pointe;

b) aucun affaissement, pliage ou autre changement de position du produit ou d'un élément du produit ne se produise de manière qu'une partie du dispositif d'essai soit comprimée ou prise entre des parties opposées du produit; et

c) le mouvement du dispositif d'essai soit assez restreint pour qu'aucun point de la tête du dispositif d'essai ne passe

(i) par le plan vertical latéral situé à 18 pouces à l'avant du point le plus avancé du dossier du siège d'automobile sur lequel le produit est installé,

(ii) par un des plans verticaux longitudinaux situés latéralement à 15 pouces du point central latéral de la position du produit sur le siège du véhicule automobile,

(iii) par le plan horizontal situé à 27 pouces au-dessus du point le plus élevé du coussin non chargé du siège du véhicule automobile sur lequel le produit est installé,

(iv) par le plan vertical latéral situé à 8 pouces à l'arrière du point le plus rapproché de la tête du dispositif d'essai lorsque celui-ci est installé et attaché dans le produit selon les indications de l'article 3 de l'annexe III et que la tête du dispositif est appuyée contre la surface faisant fonction d'appuie-tête, ou

(v) par-dessus ou à côté de la surface faisant fonction d'appuie-tête.

Étiquetage et instructions

16. (1) Tout produit doit porter, sous forme d'inscription indélébile ou permanente, bien visible et en caractères ayant au moins 3/32 de pouce de hauteur, les renseignements suivants:

a) le nom et l'établissement principal de la personne par ou pour qui le produit est fabriqué;

b) le nom ou numéro de modèle du produit;

c) le mois et l'année de fabrication du produit;

d) le poids minimal des enfants pour lesquels le produit est conçu;

e) le poids maximal des enfants pour lesquels le produit est conçu;

f) la hauteur maximale des enfants pour lesquels le produit est conçu;

g) les genres de véhicules automobiles dans lesquels le produit peut ou ne doit pas être installé;

h) les genres de sièges d'automobiles auxquels le produit peut ou ne doit pas être attaché;

i) les positions assises dans lesquelles le produit peut ou ne doit pas être installé; et

j) la direction face.

(2) Tout produit doit porter, sous forme d'inscription indélébile ou permanente, bien visible et en caractères ayant au moins 3/32 de pouce de hauteur, immédiatement au-dessous

ments clearly and prominently displayed in letters not less than 3/32 inch in height:

(*a*) "This product complies with applicable requirements of the Children's Car Seats and Harnesses Regulations" ("Ce produit est conforme aux prescriptions applicables du Règlement sur les sièges et harnais d'auto pour enfants.");

(*b*) "Use only in accordance with accompanying instructions and the restrictions stated above" ("N'utiliser que conformément aux instructions d'accompagnement et aux restrictions susmentionnées.");

(*c*) "For maximum safety use in a centre seating position (rear seat preferred) where the unobstructed distance forward from the foremost point on the vehicle seat backrest is not less than 18 inches" ("Pour le maximum de sécurité installer dans une position assiste centrée (siège arrière de préférence) où la distance libre devant le point le plus avancé du dossier du siège du véhicule est d'au moins 18 pouces").

(3) Any container in which a product is sold or to be sold shall have indelibly printed on it, or otherwise permanently affixed to it, the information and statements required by subsections (1) and (2) clearly and prominently displayed in letters and numerals not less than 3/32 inch in height.

17. Every product shall bear or be accompanied by instructions that clearly state or show information respecting

(*a*) the manner in which the product is to be installed in a motor vehicle; and

(*b*) the manner in which an occupant for whom it is designed is to be positioned and secured therein.

SCHEDULE I

(ss. 12 and 13)

OCCUPANT RESTRAINT AND BUCKLE RELEASE PERFORMANCE TESTS

1. The product shall be installed in a motor vehicle seat except that retractors shall not be included in the product restraint assembly.

2. The torso block shown in figure 3 of Schedule IV, shall be so configured that it does not contact any buckle of a product equipped with an occupant restraint assembly, and shall be positioned and secured in the product in accordance with the instructions referred to in section 17.

3. A force shall be applied to the torso block in the facing direction at an incline of 5 to 15 degrees above the horizontal until the load being applied to the block is 25 pounds at which time

(*a*) the point of intersection between the direction of the load application and the back surface of the torso block shall be at least 6 inches but not more than 8 inches above the bottom surface of the block; and

(*b*) the location of the torso block reference point A as shown in figure 3 of Schedule IV shall be determined.

des renseignements indiqués au paragraphe (1), les déclarations suivantes:

a) «Ce produit est conforme aux prescriptions applicables du Règlement sur les sièges et harnais d'auto pour enfants.» («This product complies with applicable requirements of the Children's Car Seats and Harnesses Regulations»);

b) «N'utiliser que conformément aux instructions d'accompagnement et aux restrictions susmentionnées.» («Use only in accordance with accompanying instructions and the restrictions stated above»);

c) «Pour le maximum de sécurité, installer dans une position assise centrée (siège arrière de préférence) où la distance libre devant le point le plus avancé du dossier du siège du véhicule est d'au moins 18 pouces» («For maximum safety use in a centre seating position (rear seat preferred) where the unobstructed distance forward from the foremost point on the vehicle seat backrest is not less than 18 inches»).

(3) Tout emballage dans lequel un produit est ou doit être vendu doit porter, sous forme d'inscription indélébile ou permanente, bien visible et en caractères ayant au moins 3/32 de pouce de hauteur, les renseignements et les déclarations indiqués aux paragraphes (1) et (2).

17. Tout produit doit comporter des instructions ou renseignements indiquant clairement

a) la manière dont le produit doit être installé dans le véhicule automobile; et

b) la manière dont tout enfant pour lequel il est conçu doit y être placé et attaché.

ANNEXE I

(art. 12 et 13)

ESSAI DE COMPORTEMENTS; ENSEMBLE DE RETENUE DE L'OCCUPANT ET DISPOSITIF DE DÉBLOCAGE DE L'ATTACHE

1. Le produit doit être installé sur le siège du véhicule, sauf que les rétracteurs ne doivent pas faire partie de l'ensemble de retenue du produit.

2. Le bloc-torse qui figure au diagramme 3 de l'annexe IV, doit être configuré de façon à ne pas entrer en contact avec l'attache d'aucun produit équipé d'un ensemble de retenue de l'occupant et doit être installé et attaché dans le produit conformément aux instructions dont il est fait mention à l'article 17.

3. Appliquer au bloc-torse une force dans la direction face à une inclinaison de 5 à 15 degrés au-dessus de l'horizontale jusqu'à ce que la charge appliquée atteigne 25 livres, auquel moment

a) le point d'intersection entre la direction d'application de la charge et la surface postérieure du bloc-torse doit être de 6 pouces au moins et de 8 pouces au plus au-dessus de la surface intérieure du bloc; et

b) la position du point de référence A du bloc-torse indiqué au diagramme 3 de l'annexe IV doit être déterminée.

4. The force applied to the torso block shall be increased at a rate of 200 to 500 pounds per minute until the force being applied is 1,000 pounds.

5. The maximum force specified in item 4 shall be maintained for 10 seconds.

6. Without removing the load, the distance that the torso block reference point A has moved horizontally as a result of increasing and maintaining the load as specified in items 4 and 5 shall be measured in inches.

7. Where a product is equipped with an occupant restraint assembly, the force shall be released at a rate of 200 to 500 pounds per minute until the load being applied is 45 pounds.

8. Without removing the force, the buckle of the occupant restraint assembly shall be operated in the normal manner.

SCHEDULE II

(s. 14)

HEAD RESTRAINT PERFORMANCE TESTS

1. The product shall be placed on a rigid fixture and its base securely attached to the fixture.

2. If adjustable, the head restraint shall be adjusted to its highest position.

3. A cylindrical block having a diameter of 6 inches and a height of 5 inches shall be placed next to the head restraint so that the curved surface of the block is tangent to the front surface of the head restraint at a point located at the lateral centre of the head restraint and 2 inches below the top surface of the head restraint.

4. The location of the rearmost point of tangency between the head restraint and the block shall be determined when the block is in place.

5. A 40 pound force shall be applied through the centre of the block in the opposing direction toward the plane or point of tangency.

6. Without removing the force, the distance that the rearmost point of tangency referred to in item 4 has moved horizontally as a result of the application of the force shall be measured in inches.

SCHEDULE III

(ss. 2 and 15)

IMPACT SIMULATION PERFORMANCE TESTS

1. A motor vehicle seat, selected in accordance with the information referred to in subsection 16(1) shall be installed in the vehicle impact simulator.

2. The product shall be installed and, where the product restraint assembly consists of or includes a seat belt, the tension in the seat belt shall be not less than 10 pounds.

3. Test device A or test device B as required for an impact simulation shall be positioned and secured in the product in accordance with the instructions referred to in section 17.

4. La force appliquée au bloc-torse doit être augmentée à raison du 200 à 500 livres par minute jusqu'à ce qu'elle atteigne 1,000 livres.

5. Maintenir pendant 10 secondes la force maximale indiquée à l'article 4.

6. Sans enlever la charge, mesurer en pouces la distance sur laquelle le point de référence A du bloc-torse s'est déplacé horizontalement par suite de l'augmentation et du maintien de la charge tel qu'il est indiqué aux articles 4 et 5.

7. Lorsque le produit est équipé d'un ensemble de retenue de l'occupant, réduire la force, à raison de 200 à 500 livres par minute, jusqu'à ce que la charge appliquée soit de 45 livres.

8. En maintenant cette force, faire fonctionner normalement l'attache de l'ensemble de retenue de l'occupant.

ANNEXE II

(art. 14)

ESSAI DE COMPORTEMENT: APPUIE-TÊTE

1. Placer le produit sur un appareil fixe et en assujettir la base à l'appareil.

2. Si l'appuie-tête est réglable, le placer dans sa position la plus haute.

3. Placer un bloc cylindre ayant un diamètre de 6 pouces et une hauteur de 5 pouces auprès de l'appuie-tête de façon que la surface courbe du bloc soit tangente à la surface antérieure de l'appuie-tête, à un point situé au centre latéral de ce dernier et à 2 pouces au-dessous de la surface supérieure de l'appuie-tête.

4. Lorsque le bloc est en place, déterminer le point de tangence le plus reculé entre l'appuie-tête et le bloc.

5. Appliquer une force de 40 livres dans la direction opposée, contre le centre du bloc et vers le plan ou point de tangence.

6. En maintenant cette force, mesurer en pouces la distance sur laquelle le point de tangence le plus reculé mentionné au paragraphe 4 s'est déplacé horizontalement par suite de l'application de la force.

ANNEXE III

(art. 2 et 15)

ESSAI DE COMPORTEMENT EN SIMULATION DE CHOC

1. Un siège d'automobile, choisi conformément aux indications du paragraphe 16(1), est installé dans le simulateur de choc.

2. Le produit est mis en place et, lorsque l'ensemble de retenue du produit comprend une ceinture de sécurité, de telle manière que la tension de la ceinture soit d'au moins 10 livres.

3. Le dispositif d'essai A ou B requis pour une simulation de choc doit être mis en place et attaché dans le produit conformément aux instructions de l'article 17.

4. In any vehicle front impact simulation, a force shall be applied in the rearward direction to the vehicle impact simulator such that its velocity changes

(*a*) by not less than 28 and not more than 30 miles per hour; and

(*b*) in such manner that its acceleration as a function of time can be described by a curve lying entirely within the hatched area shown in figure 1 of Schedule IV.

5. In any vehicle side impact simulation, a force shall be applied in a lateral direction to the vehicle impact simulator such that its velocity changes

(*a*) by not less than 19 and not more than 20 miles per hour; and

(*b*) in such manner that its acceleration as a function of time can be described by a curve lying entirely within the hatched area shown in figure 2 of Schedule IV.

6. In any vehicle rear impact simulation, a force shall be applied in the forward direction to the vehicle impact simulator such that its velocity changes

(*a*) by not less than 19 and not more than 20 miles per hour; and

(*b*) in such manner that its acceleration as a function of time can be described by a curve lying entirely within the hatched area shown in figure 2 of Schedule IV.

4. Dans toute simulation de choc frontal, une force est appliquée dans une direction arrière au simulateur de choc de façon que la vitesse de celui-ci varie

a) d'au moins 28 et d'au plus 30 milles à l'heure; et

b) de telle manière que l'accélération en fonction du temps puisse être exprimée par une courbe entièrement comprise dans la zone hachurée du diagramme 1 de l'annexe IV.

5. Dans toute simulation de choc latéral, une force est appliquée dans une direction latérale au simulateur de choc de façon que la vitesse de celui-ci varie

a) d'au moins 19 et d'au plus 20 milles à l'heure; et

b) de telle manière que l'accélération en fonction du temps puisse être exprimée par une courbe entièrement comprise dans la zone hachurée du diagramme 2 de l'annexe IV.

6. Dans toute simulation de choc arrière, une force est appliquée dans une direction avant au simulateur de choc de façon que la vitesse de celui-ci varie

a) d'au moins 19 et d'au plus 20 milles à l'heure; et

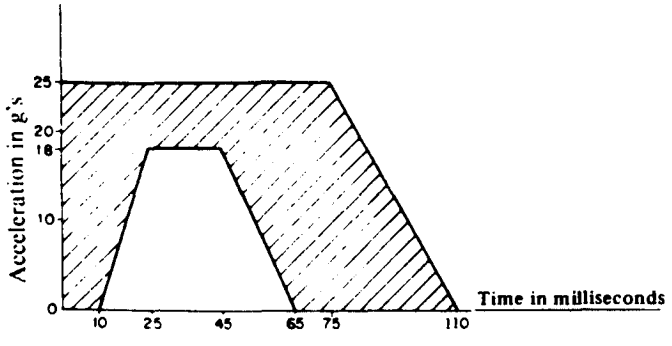
b) de telle manière que l'accélération en fonction du temps puisse être exprimée par une courbe entièrement comprise dans la zone hachurée du diagramme 2 de l'annexe IV.

SCHEDULE IV

(*s. 2 and Schs. I and III*)

FIGURE 1

Permissible Range of Accelleration Function for Frontal Impact Δ V = 30 MPH

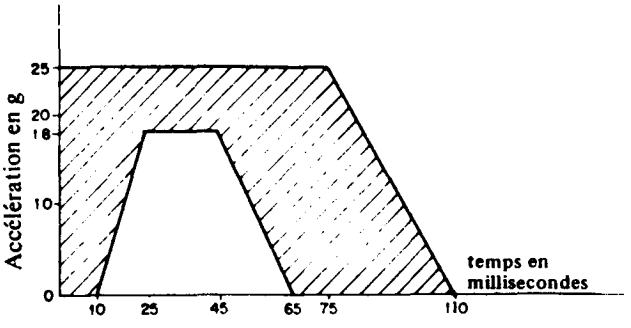


ANNEXE IV

(*art. 2 et ann. I et III*)

DIAGRAMME 1

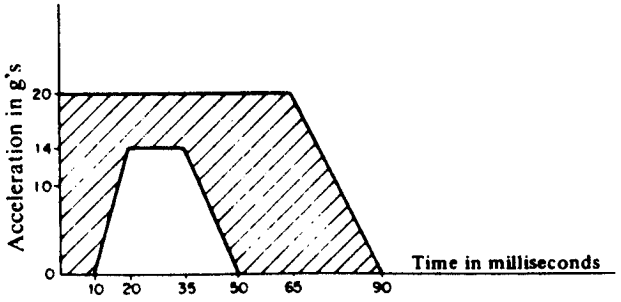
Étendue d'accélération admissible pour le choc frontal Δ V = 30 MPH



SCHEDULE IV—*Conc.*

FIGURE 2

Permissible Range of Acceleration Function for Side and Rear Impact Δ V = 20 MPH



ANNEXE IV—*Fin*

DIAGRAMME 2

Étendue d'accélération admissible pour le choc latéral et arrière Δ V = 20 MPH

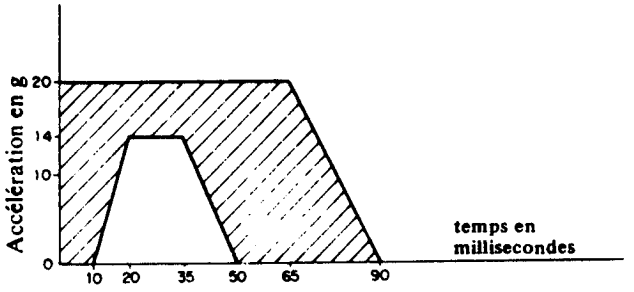


FIGURE 3

TORSO BLOCK

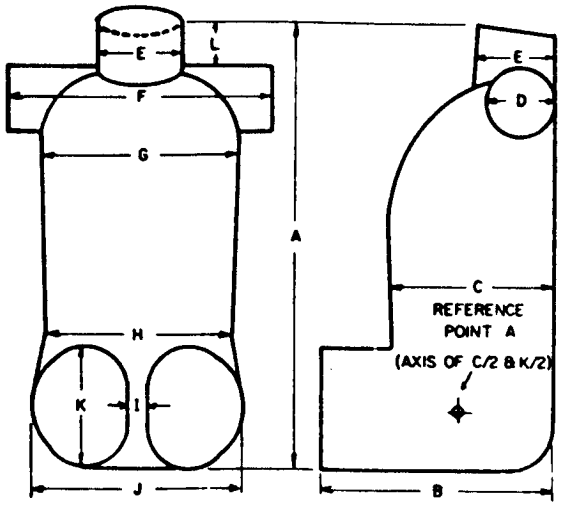
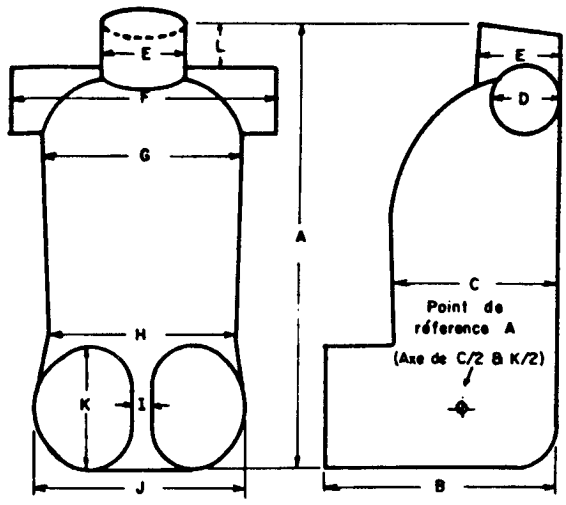


DIAGRAMME 3

BLOC—TORSE



NOTE—In this diagram,

A = 15 inches
B = 8 "
C = 5.8 "
D = 2.3 "
E = 2.9 "
F = 9 "
G = 6.8 "
H = 6.4 "
I = 0.6 "
J = 7.3 "
K = 4.2 "
L = 1.3 "

NOTA—Dans ce diagramme,

A = 15 pouces
B = 8 "
C = 5.8 "
D = 2.3 "
E = 2.9 "
F = 9 "
G = 6.8 "
H = 6.4 "
I = 0.6 "
J = 7.3 "
K = 4.2 "
L = 1.3 "

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OTTAWA, 1978

Minister | Ministre

Consumer and Corporate Affairs | Consommation et Corporations

APPENDIX "C"

December 8, 1978

Mr. G.B. Williams,
1895 Rideau Garden Drive,
Ottawa, Ontario.
K1S 1G5

Dear Mr. Williams:

Regulations administered by this department under the Hazardous Products Act include provisions to govern the marketing of products for restraining children in motor vehicles. Vehicle crash protection for child passengers is a rapidly evolving field and, to ensure that the regulations under the Hazardous Products Act remain fully consistent with current research and other information and with their overall objective, requires periodic review and revision. These regulations have had a very high media profile which is due in part to a differing position taken by the Consumers' Association of Canada with respect to regulations requirements. Accordingly, I am establishing a review Task Force to report to me directly on possible improvements to the existing regulatory provisions.

Your name has been proposed to chair the Task Force in view of your broad experience in the field of standards. To date, arrangements have been completed for a representative nominated by the Canadian Conference of Motor Transport Administrators (CCMTA), Mr. Pierre-Yves Dionne of the Quebec Department of Transport, and a member of the senior engineering staff of the Defence and Civil Institute of Environmental Medicine (DCIEM), Dr. James Riechert, to serve with you.

For your guidance, the following objective, scope of action and general procedure will apply.

OBJECTIVE -

Optimal crash protection for infant and child passengers in motor vehicles.

...2

House of Commons
Ottawa
K1A 0A6

Chambre des communes
Ottawa
K1A 0A6

SCOPE -

1. To conduct a public review and report on research studies and on general concerns and recommendations of all interested parties bearing on the objective.

2. To make specific recommendations for amendments to Item 23 of Part II of the Schedule to the Hazardous Products Act and the Children's Car Seats and Harnesses Regulations to address all legal, technical and general concerns insofar as such amendments can contribute to the objective through product marketing provisions of the act.

PROCEDURE -

1. The Task Force shall invite all interested parties, including the Consumers Association of Canada, infant and child crash protection device manufacturers, motor vehicle manufacturers, Transport Canada, CCAC Product Safety Branch, researchers and medical authorities, to submit written briefs to the Task Force.

2. The Task Force shall place all written submissions on the public record together with all pertinent research papers and other documentation included with the submissions.

3. The Task Force shall conduct hearings to permit oral presentations in support of the written submissions, to allow for discussion of related research papers and other documentation, and to provide for response by submittors to questions in specific areas of concern.

4. The Task Force shall arrange for all its hearings to be recorded verbatim and placed on the public record with the written submissions.

5. Within the above general guidelines, and subject to constraints imposed by available resources, the Task Force may consult freely with experts in all disciplines and may arrange testing and other research as necessary to assess comments and recommendations made to the Task Force.

6. The Task Force shall address its final report and recommendations directly to the Minister of Consumer and Corporate Affairs.

...3

I attach considerable urgency to completion of the review process and it is my strong wish that the report and recommendations be in my hands not later than June 1, 1979. Therefore, if you agree to accept the chair, will you kindly contact Mr. J.W. Black, Director of the Product Safety Branch (997-1670) to make immediate contractual and other arrangements to initiate proceedings.

I would appreciate receiving your reply at the earliest possible date.

Yours sincerely,

Warren Allmand.

APPENDIX "D"

Minister / Ministre

Consumer and Corporate Affairs / Consommation et Corporations

Review Task Force
Motor Vehicle Crash Protection
for Child Passengers
Place du Portage I
Hull, Quebec, K1A 0C9

December 18, 1978

COMMUNIQUE NO. 1

The Minister of Consumer and Corporate Affairs has determined that a process of review shall be carried out to provide advice on ways of achieving optimal crash protection for infant and child passengers in motor vehicles. Particular consideration is to be given to possible amendments to the Children's Car Seats and Harnesses Regulations established under the Hazardous Products Act insofar as such amendments can contribute to the foregoing objective.

This Task Force has been established by the Minister to review and consider submissions of all interested parties and to prepare a report and recommendations to him in accordance with the following procedural guidelines:

1. The Task Force shall invite all interested parties, including the Consumers' Association of Canada, infant and child restraint manufacturers, motor vehicle manufacturers, Transport Canada, CCAC Product Safety Branch, researchers and medical authorities, to submit written briefs to the Task Force.

2. The Task Force shall place all written submissions on the public record together with all pertinent research papers and other documentation included with the submissions.

3. The Task Force shall conduct hearings to permit oral presentations in support of the written submissions, to allow for discussion of related research papers and other documentation, and to provide for response by submittors to questions in specific areas of concern.

4. The Task Force shall arrange for all its hearings to be recorded verbatim and placed on the public record with the written submissions.

...../2

5. Within the above general guidelines, and subject to constraints imposed by available resources, the Task Force may consult freely with experts in all disciplines and may arrange testing and other research as necessary to assess comments and recommendations made to the Task Force.

6. The Task Force shall address its final report and recommendations directly to the Minister of Consumer and Corporate Affairs.

In accordance with the above procedural guidelines, this first communiqué is to invite written briefs and supporting documentation to be sent to the Task Force. At this time, no deadline is being specified for the submission of written briefs. However, you are requested to advise immediately of your intentions in this regard and, if you intend to make a submission, to specify a date that you would consider reasonable to be established as the closing date for receipt of all documents in your case.

Please note that this initial invitation is intended to provide for the presentation of written positions and supporting documentation by each submittor. When all individual submissions are received, they will then be put on the public record and arrangements will be made for subsequent discussions before the Task Force. Those discussions will also be made public.

G.B. Williams, B.Sc.,F.E.I.C.,P.Eng.
Chairman

TASK FORCE ACTIVITY

Established by the Minister of Consumer and Corporate Affairs in December, 1978, the Task Force consists of three members:

Chairman: G.B. Williams, B.Sc.C.E.,F.E.I.C.,P.Eng.
Consultant

Members: J.K. Reichert, Ph.D.,P.Eng.
Defence & Civil Institute of Environmental Medicine

Pierre-Yves Dionne, B.A.Sc.,P.Eng.
Department of Transport
Province of Quebec

Legal Advisor to Task Force: Allan Rosenzveig, B.C.L.
Department of Justice
Government of Canada

The Task Force informed the public of its mandate and plans and invited all interested persons to make written submissions. This was done by communiqué in December, 1978, and in February, 1979, by press release and public notice in the Canada Gazette.

The Task Force also directly invited written submissions from those considered to have a particular interest in the subject matter. These include consumer advocates, vehicle manufacturers, CRS manufacturers and importers, trade associations, transportation authorities, standards agencies, laboratories and consultants, universities, safety associations and medical authorities.

Twenty-eight written submissions were received. These were put on the public record along with supporting documents and other pertinent material.

Public hearings were held in Ottawa on July 23 and 24, 1979. Those who had made written submissions were given an opportunity to make oral presentations. The proceedings were recorded verbatim and the transcript placed on the public record.

In response to requests made at the hearing, interested persons were given an opportunity to make further written comments. The Task Force consulted with various persons to clarify and assess comments and recommendations, and has kept abreast of developments in the United States.

	SUBMITTOR	LOCATION
1.	Action for Child Transportation Safety	Washington, D.C., U.S.A.
2.	Bobby Mac Company Inc.	Scarsdale, New York, U.S.A.
3.	Canadian Automobile Association	Ottawa, Ontario
4.	Canadian Pediatric Society	Sherbrooke, Quebec
5.	Consumers Association of Canada	Ottawa, Ontario
6.	Consumer & Corporate Affairs - Product Safety Branch	Hull, Quebec
7.	Dorel Co. Ltd.	Montreal, Quebec
8.	Ford Motor Co. of Canada	Oakville, Ontario
9.	General Motors of Canada	Oshawa, Ontario
10.	Calspan Corporation	Buffalo, New York, U.S.A.
11.	H. Corley Leitch Laboratory Inc.	Ottawa, Ontario
12.	Les Importations Rolger Inc.	Ville D'Anjou, Quebec
13.	Multi-Disciplinary Accident Investigation Team, University of Toronto	Toronto, Ontario
14.	Road and Motor Vehicle Traffic Safety Branch, Transport Canada	Ottawa, Ontario
15.	W.D. Orr (Kiddy Keeper)	Winnipeg, Manitoba
16.	Physicians for Automotive Safety	Rye, New York, U.S.A.
17.	Traffic Safety Programs Transportation Agency of Saskatchewan	Regina, Saskatchewan
18.	Motor Vehicle Branch, Province of Manitoba	Winnipeg, Manitoba
19.	Highway Safety Division, Department of Provincial Secretary, Province of Prince Edward Island	Charlottetown, P.E.I.
20.	Stork Craft Ltd. (M. Feldstein)	Vancouver, British Columbia
21.	Calgary Accident Research Unit, University of Calgary	Calgary, Alberta

SUBMITTOR	LOCATION
22. Gendron Inc.	Toronto, Ontario
23. Mrs. Margaret Landstrom	Merlin, Ontario
24. Strolee of California	California, U.S.A.
25. Ministry of Transportation and Communications, Province of Ontario	Downsview, Ontario
26. Cosco Home Products	Columbus, Indiana, U.S.A.
27. Compagnie de la Baie d'Hudson	Montreal, Quebec
28. Defence and Civil Institute of Environmental Medicine	Downsview, Ontario
29. Automobile Importers of Canada (received too late for distribution prior to hearing)	Toronto, Ontario
30. Biokinetics and Associates Ltd. (was included in submission of Consumer and Corporate Affairs Canada, Product Safety Branch)	Ottawa, Ontario

APPENDIX "G"

SUMMARY OF REPRESENTATIONS RECEIVED BY THE TASK FORCE

SOURCES	ISSUES	SAFETY	Limitation of body movement	Survival space	Head excursion	Knee excursion	Submarining	Restraint stress	Structural integrity	USAGE	Scope	Infant	Larger child	Availability	Convenience	Comfort (child)	Cost (taxes)	Improper use	Top tether	Cosmetic armrest	LABELLING	TEST CRITERIA & METHODOLOGY	Test repeatability	Frontal dynamic test	Lateral dynamic test	Oblique dynamic test	Rear dynamic test	Sled pulse	Velocity	Head impact	Peak G load	Head injury criteria	Cold weather test	Sun resistance test	Heavy clothing	Buckle release force	Dummies	Test fixtures	RESPONSIBILITY (child protection)	Jurisdiction	Certification	Test results	Mandatory use	International compatibility	Education	Manufacturers	Parents	Pediatricians & Hospitals
1	Action for Child Transportation		•								•				•				•																													
2	Bobby Mac Co. Inc.				•						•		•		•				•						•																							
3	Canadian Automobile Association										•		•		•		•																															
4	Canadian Pediatric Society		•		•						•		•		•				•																													
5	Consumers Association of Canada		•		•		•				•		•		•		•		•						•																							
6	Product Safety Branch C.C.A.C.		•		•		•				•		•		•		•		•						•																							
7	Dorel Co. Ltd.		•				•												•																													
8	Ford Motor Co. of Canada		•		•		•		•						•				•						•						•																
9	General Motors of Canada						•				•		•		•		•		•						•				•																			
10	Calspan Corporation		•				•				•		•				•																														
11	H. Corley Leitch Laboratory Inc.						•				•		•																																		
12	Les Importations Rolger Inc.										•																																				
13	M.D.A.I.T. University of Toronto																		•																													
14	Road Safety, Transports Canada		•		•										•		•		•						•																							
15	W.D. Orr		•			•									•				•										•																	
16	Physicians for Automotive Safety		•												•		•		•																													
17	Transportation Agency, Saskatchewan										•		•		•		•		•																													
18	Motor Vehicle Branch, Manitoba		•								•		•		•		•		•			•					•																				
19	Highway Safety Division, P.E.I.										•		•																																			
20	Stork Craft Ltd.		•		•						•		•														•																				
21	C.A.R.U. University of Calgary										•		•				•										•																				
22	Gendron Inc.										•			•																																	
23	Mrs Margaret Landstrom										•		•			•																															
24	Strolee of California										•					•																															
25	Transport. & Communic. Ontario		•		•	•		•			•		•	•		•			•	•		•		•																							
26	Cosco Home Products		•		•	•					•		•	•		•								•							•																
27	La Cie de la Baie d'Hudson										•			•	•									•																							
28	D.I.E.I.M.															•																															
29	Automobile Importers of Canada		•		•											•								•																							
30	Biokinetics & Associates Ltd		•			•			•		•				•	•			•	•		•		•																							