

Rubber Hot Water Bottles
Investigation into the Need for a
Product Safety Standard

A Discussion Document

October 2005

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Contents

SUBMISSIONS	3
CONTENTS	4
PURPOSE	5
UNSAFE GOODS (RUBBER HOT WATER BOTTLES) NOTICE 2004	6
Background.....	6
THE PROBLEM	8
International	8
Australia	9
OPTIONS.....	10
Maintaining the Existing Requirements - Unsafe Goods Notice.....	10
Costs	10
Removing the Unsafe Goods Notice (self regulation)	10
Mandatory Product Safety Standard	11
Costs	11
Contents of a mandatory standard	12
Product Recalls	12
DISCUSSION POINTS.....	13
Submissions Requested.....	14
APPENDIX A: UNSAFE GOODS (RUBBER HOT WATER BOTTLES) NOTICE 2004.....	15
Gazette Notice	15

Purpose

1 The Ministry of Consumer Affairs has a role under the Fair Trading Act 1986 to protect consumers from goods that will or may cause injury to any person. Product safety standards are regulations made under section 29 of the Fair Trading Act 1986. They can declare a national standard or parts and variations thereof to be a product safety standard.

2 Many issues have arisen relating to the safety of rubber hot water bottles and this discussion document examines options for addressing rubber hot water bottle safety. In particular the discussion document considers the need for the declaration of a product safety standard as a means of ensuring the safety of rubber hot water bottles.

3 Under section 29(3) of the Fair Trading Act 1986, the Minister of Consumer Affairs is required to consult with parties considered to be substantially affected by a proposed product safety standard, to provide an opportunity for those parties to make any comment and to consider such comment.

4 This paper forms the first step in that consultation process. It is intended to assist anyone who may wish to make a submission on the merits or otherwise of declaring the British Standard BS 1970:2001 Hot water bottles manufactured from rubber and PVC. Specification to be a product safety standard.

5 The discussion paper has been issued to encourage consumers, traders and other interested parties to consider the issues relating to the safety of rubber hot water bottles and to put forward their views. This will enable the Minister to receive sound advice on all the issues relating to rubber hot water bottles and to take into account the views of those substantially affected.

Unsafe Goods (Rubber Hot Water Bottles) Notice 2004

6 On the 25 November 2004 the Minister of Consumer Affairs declared, rubber hot water bottles that do not meet the British national standard to be goods that will or may cause injury to a person by way of an unsafe goods notice under Section 31 of the Fair Trading Act 1986 (a copy of the Unsafe Goods Notice is attached in Appendix A). In effect this removed rubber hot water bottles which do not meet BS 1970:2001 from the New Zealand market and thereby reducing and preventing the potential for injury.

7 An unsafe goods notice stays in force for a period of 18 months and has the effect of prohibiting the supply of the goods to which it applies. The 18 month period is an interim period which allows the Minister of Consumer Affairs to consider the need for either an indefinite ban or a product safety standard.

Background

8 The Ministry of Consumer Affairs received a cluster of 10 complaints between May and July 2004 that rubber hot water bottles were splitting at the neck and causing injury. This resulted in some of the complainants receiving hospitalisation with significant burns. Many of these rubber hot water bottles were marked with the British Standard, BS1970:1984 or BS 1970:2001. The Ministry purchased a number of bottles from various sources and many upon closer visual inspection did not appear to meet the standard.

9 The Ministry of Consumer Affairs issued a media alert on the 31 August 2004 to ascertain the magnitude of any problem with hot water bottles. A further 150 complaints were received in 24 hours, including some relating to hospitalisations, doctors visits and time off work were received. The bottles had been purchased from a number of sources across a range of retailers.

10 Problems identified with the rubber hot water bottles were splitting at the neck, splitting of side seams or leaking stoppers. The main problem found is that the rubber can be less than the minimum required thickness of 1.4 mm (under BS 1970:2001) for a bottle of up to 2 litres, at various points on the bottle.

11 A foreseeable danger and misuse of a hot water bottle is consumers filling the bottle with boiling water directly from the kettle. However many complainants indicated that the rubber hot water bottles were splitting with only hot water from the tap or from filling cooled boiled water from the kettle.

12 In September 2004, the Ministry undertook consultation with various stakeholders. The Ministry consulted with the Retailers Association, Commerce Commission, NZ Customs Service, and known importers, suppliers, and retailers, of the proposed course of action at the time.

13 Maintaining the status quo was not considered a desirable option as rubber hot water bottles are a low cost item and the potential injury risk remained present for the community and an unsafe goods notice was issued on the 25 November 2004. A product recall was also not considered a viable option due to the extent of availability of the product and number of suppliers and retailers who trade in hot water bottles.

The Problem

14 Early in the investigation the Ministry obtained test reports from suppliers to ensure compliance with BS 1970. Test reports were received from suppliers that were approximately 3 years old. Discussions with testing facilities advised they would no longer stand by a test report that was more than 12 months from the issue date due to the variables in rubber production and the manufacture of hot water bottles.

15 The internationally recognised standard for hot water bottles is BS 1970:2001 Hot water bottles manufactured from rubber and PVC. Specification. The 2001 version is the current version which superseded the 1984 edition and BS 6728-1:1986 Thermoplastics hot water bottles. Specification for hot water bottles manufactured from PVC compounds.

16 The rubber hot water bottles sighted by the Ministry were marked with various markings:

- Unmarked;
- Marked as complying to BS1970:1984;
- Marked as complying to BS1970: 2001;
- Marked as complying to BS 1999. (BS 1999:1964 Specification for tritoyl phosphate does not apply to hot water bottles.)

17 Hot water bottles are made from either rubber or PVC. The problem with hot water bottles splitting has only occurred with those made from rubber. The PVC hot water bottles that have been sighted by the Ministry are in the top end of the market with a retail price starting at approximately \$15.00.

18 Consultation with the Australasian Rubber and Plastics Association, based in Australia, established that the rubber compound most rubber bottles were made of can vary. They advised that rubber is a combination of many ingredients, selected to perform a specific function. This is known as a rubber compound. A rubber compound can be designed to withstand the effects of boiling water for very long periods of time, as is required for hot water bottles. If the right ingredients are not selected then the product will not perform as expected. The Australasian Rubber and Plastics Association also advised that boiling water can lead to deterioration in the rubber that would lead to a product splitting. They also added that a manufacturing fault could also have the same outcome.

International

19 In assessing the options available for addressing the safety issues, the Ministry is expected to take into account the wider perspective of government and the global environment in which trade takes place.

20 Interventions that act as trade barriers have to be avoided. Nevertheless, a commitment to free trade has to be balanced by the need to ensure that consumer safety is not compromised.

Australia

21 Australian authorities are also receiving complaints about rubber hot water bottles, and are awaiting the New Zealand outcome and considering a product ban. South Australia in particular has had a fatality from a burst rubber hot water bottle.

22 New South Wales has conducted tests on 18 bottles in accordance with the minimum thicknesses as stated in BS 1970:2001. Out of the 18 rubber hot water bottles, 15 failed, 5 marginally passed the minimum thickness, leaving only 2 bottles tested with a margin for error.

Options

Maintaining the Existing Requirements - Unsafe Goods Notice

23 Maintaining the status quo is an option although not a desirable option. Section 31 of the Fair Trading Act 1986 gives the Minister of Consumer Affairs the power to declare goods to be unsafe by a further notice in the Gazette, indefinitely or for a specified period.

24 A ban on the supply of a product is a severe regulatory option. It is seen as a measure of last resort and must satisfy the elements of natural justice. Where this measure is adopted it must be clearly established that the product itself is the primary cause of injury and that any other mitigating circumstances have only a minor impact.

25 On the 25 November 2004 the Minister declared rubber hot water bottles that did not meet BS 1970:2001 to be unsafe, and show compliance from an accredited laboratory to ISO 17025, of less than 12 months (refer Appendix A). The Unsafe Goods (Rubber Hot Water Bottles) Notice 2004 currently has very strict requirements on importers of rubber hot water bottles.

26 There is currently only one laboratory in the United Kingdom that is certified to test to BS 1970:2001 under the ISO 17025 accreditation requirements. Specific comment is sought in regard to the Unsafe Goods Notices' current effectiveness and any possible weaknesses.

Costs

27 The introduction of the Unsafe Goods Notice for rubber hot water bottles has increased the cost to importers/suppliers to meet the requirements of the notice, in particular a significant increase in cost to suppliers with the testing of the product from an accredited laboratory. Specific comment is sought on the stringent requirement in the Unsafe Goods Notice that the test report must be less than 12 months old.

28 The Unsafe Goods Notice has also imposed an additional burden on the Commerce Commission's and New Zealand Customs Service's resources that may require additional funding or lead to a reduction in enforcement activity in other areas, if an indefinite notice were to be declared. These costs would be borne by taxpayers generally, rather than the purchaser of the product.

Removing the Unsafe Goods Notice (self regulation)

29 The Unsafe Goods Notice was brought into force to address unsafe design and poor construction of rubber hot water bottles entering the market. The potential injury risk remains present for the community.

30 If the Unsafe Goods Notice was removed the relevant legislative framework would rest with broad guarantees under the Consumer Guarantees Act 1993 that products sold in trade be safe. Consumers and retailers would have to rely on suppliers to provide adequate information.

31 Major suppliers have a long term commitment to the market and reputations to maintain. Small and often transient market participants however are a feature of this market sector. These suppliers appear largely unaware of some of the regulatory requirements and the prospect of gaining their voluntary compliance is not good.

Mandatory Product Safety Standard

32 This is the preferred option.

33 Product safety standards are designed to address generic safety issues that apply to an entire class of goods. By adopting national standards that have been drawn up by industry and consumer representatives, they attempt to provide achievable safety outcomes. This option is intended as a preventive measure against identified safety concerns and provides a benchmark of safety in terms of design, construction, performance, and information as to use. Product safety standards are mandatory and are enforced by the Commerce Commission in the market, and the NZ Customs Services at the border.

34 The obligation of a mandatory product safety standard could provide the necessary benchmark to ensure that rubber hot water bottles within the market meet minimum safety requirements. The mandatory standard would specify certain safety requirements for rubber hot water bottles, such as minimum thickness of the rubber and marking of the bottles, as cited in BS 1970:2001.

Costs

35 Prices in the market have increased for the product from 50 cents-\$5.00, to \$3.00-\$7.00. Although this is a large percentage increase, it is not large in actual dollar terms. The Ministry considers this a cost that consumers are prepared to pay for a gain in safety.

36 Enforcement procedures and complementary trader education programmes are already well established by the Commerce Commission for current product safety standards and could be extended to cover additional products. This would impose an additional burden on the Commerce Commission's resources that may need to be met either with additional funding or with a reduction in enforcement activity in some other area. These costs would be borne by taxpayers generally, rather than the purchaser of the product.

37 Additional burden would be imposed on the New Zealand Customs Service's resources that may need to be met either with additional funding or with a reduction in enforcement activity in some other area. These costs would also be borne by taxpayers generally, rather than the purchaser of the product.

Contents of a mandatory standard

38 Should a product safety standard be declared, the national standard BS 1970:2001 is likely to be used as the basis or specified parts thereof, this is the internationally recognised standard for rubber hot water bottles. There are, however, a range of options that need to be considered. The final shape of any standard must take account of the following:

- the major safety risks associated with rubber hot water bottles
- information for safe use
- testability of compliance with safety requirements
- international trends, including other internationally recognised standards, and
- international commitments.

39 National standards are standards reached by consensus creating the technical benchmarks for a safe product. Adopting the British Standard BS 1970: 2001 Hot water bottles manufactured from rubber and PVC. Specification as a mandatory product safety standard will ensure that rubber hot water bottles entering the market are designed to a national standard and will enhance the level of protection.

40 The product manufactured for distribution in Australasia uses BS 1970:2001 as the technical benchmark, although internationally there is an American Standard ASTM D4316-95 (2001) Standard Specification for Elastomeric Water Bottles available for rubber hot water bottles.

41 Comment is sought on the effectiveness and possible inadequacies associated with BS 1970:2001 Hot water bottles manufactured from rubber and PVC Specification.

Product Recalls

42 Section 32 of the Fair Trading Act 1986 gives the Minister powers to require the recall of goods which, are of a kind which will or may cause injury. A product recall is not considered a viable option.

43 Mandatory recalls are warranted on a case by case basis and while the well established stores have reputations to maintain, the low discount sector, where these products are sold, are difficult to identify and hold to a recall notice.

Discussion Points

44 The Ministry regards mandatory product safety standards as being appropriate when other options have been considered and it has been concluded that these options would be inappropriate or are likely to be ineffectual.

45 Thus the Ministry will recommend a mandatory standard if the following criteria are met:

- there is a proven problem with the safety of a product
- voluntary action by suppliers of the product is not possible or would not be effective
- an unsafe goods notice or a compulsory product recall would not be sufficient to eliminate a safety problem or would be inappropriate
- a cost/benefit analysis demonstrates that the benefit in making a mandatory standard outweighs the cost
- a mandatory standard would solve the problem.

46 Some specific issues have been raised in this paper. To assist those wishing to make submissions they are repeated here below.

- What has been a success or weakness associated with the current Unsafe Goods Notice? In particular the stringent requirement placed on suppliers to have a current test certificate from an accredited laboratory of less than 12 months old.
- The effectiveness and possible inadequacies associated with the national standard BS 1970:2001?
- Will compliance with a mandatory standard impose additional costs on the supplier? If so, what is the nature of these costs and what monetary value do they have? Submissions should identify the range of costs involved, eg. overheads, testing, etc.
- What are the costs associated with rubber hot water bottle injuries? Submissions should identify the range of costs involved, eg. hospitalisation, general practice costs, home care costs (includes loss of earnings), loss of capabilities, etc.
- If you are an organisation that undertakes community-based education programmes, what are the costs involved? Submissions should identify the range of costs involved, eg. overheads, editing, resources, artwork, publishing, distribution or dissemination etc.
- Would consumer choice be affected by a mandatory standard?

47 Comment on the criteria listed above has been made throughout this paper. However, this paper does not presume to have covered every issue relevant to rubber hot water bottle safety. The Ministry seeks the input of all interested parties to assist it in expanding the debate. To aid the Ministry's evaluation where possible, submissions should address the issues outlined above and raise any others that are considered relevant. Any information relating to costings or other commercial matters will be treated in the utmost confidence.

Submissions Requested

48 Your comments are sought on any matters raised in this paper or on any other matter that you may consider relevant to assist the Minister in her decision to develop a mandatory product safety standard for rubber hot water bottles.

49 Comments should be with the Ministry of Consumer Affairs by 9 December 2005, and directed to:

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Appendix A: Unsafe Goods (Rubber Hot Water Bottles) Notice 2004

Gazette Notice

Unsafe Goods (Rubber Hot Water Bottles) Notice 2004

Pursuant to section 31 of the Fair Trading Act 1986, the Minister of Consumer Affairs gives the following notice.

Notice

- 1 Title – This notice may be cited as the Unsafe Goods (Rubber Hot Water Bottles) Notice 2004.
- 2 Certain hot water bottles declared to be unsafe goods – The goods described in the Schedule to this notice are declared to be unsafe goods.
- 3 Certain hot water bottles exempt - This notice does not apply to rubber hot water bottles that are carried in the baggage or effects of a person arriving in New Zealand where the number of hot water bottles carried is four (4) or less.
- 4 New Zealand Customs Service requirements – All persons importing rubber hot water bottles into New Zealand must produce to a New Zealand Customs Officer:
 - a) documentation showing that the rubber hot water bottles comply with clauses (1) and (2) of the schedule; and
 - b) a statutory declaration that the documents produced relate to those rubber hot water bottles being imported.

Schedule

Rubber hot water bottles which do not:

- a) meet BS1970:2001 Hot water bottles manufactured from rubber and PVC specification; and
- b) show compliance of less than 12 months old with BS1970:2001 from a laboratory accredited to ISO17025.

Dated at Wellington this 17th day of November 2004.

JUDITH TIZARD, Minister of Consumer Affairs.

Explanatory Note

This note is not part of the notice but is intended to indicate its general effect.

Under s 31(2) of the Act, unless it is sooner revoked, the notice remains in force for a period of 18 months after the date of publication in the Gazette.

It is an offence under the Fair Trading Act 1986 to supply, or offer to supply, or advertise to supply, goods which are declared to be unsafe goods.

Section 33 of that Act prohibits the importation of such goods into New Zealand.

Please note that all persons bringing rubber hot water bottles into New Zealand must comply with the requirements of New Zealand Customs Service.