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## GENERAL NOTICES ALGEMENE KENNISGEWINGS

### NOTICE 1169 OF 1997

#### DEPARTMENT OF TRADE AND INDUSTRY

#### HARMFUL BUSINESS PRACTICES ACT, 1988

I, Alexander Erwin, Minister of Trade and Industry, do hereby, in terms of section 10 (3) of the Harmful Business Practices Act, 1988 (Act No. 71 of 1988), publish the report of the Business Practices Committee on the result of an investigation made by the Committee pursuant to General Notice 496 of 1996 published in *Government Gazette* No. 17106 dated 19 April 1996, as set out in the Schedule.

Interested persons are invited to make written representations regarding this report within a period of **thirty (30) days** from the date of this notice to:

**The Secretary**

**Business Practices Committee**

**Private Bag X84**

**PRETORIA**

**0001**

**Tel.: (012) 310-9579/67**

**Fax: (012) 322-8489**

**A. ERWIN**

**Minister of Trade and Industry**

**KENNISGEWING 1169 VAN 1997****DEPARTEMENT VAN HANDEL EN NYWERHEID****WET OP SKADELIKE SAKEPRAKTYKE, 1988**

Ek, Alexander Erwin, Minister van Handel en Nywerheid, publiseer hiermee, kragtens artikel 10 (3) van die Wet op Skadelike Sakepraktyke, 1988 (Wet No. 71 van 1988), die verslag van die Sakepraktykekomitee oor die uitslag van die ondersoek deur die Komitee gedoen kragtens Algemene Kennisgewing 496 van 1996 soos gepubliseer in *Staatskoerkant* No. 17106, gedateer 19 April 1996, soos in die Bylae uiteengesit.

Belanghebbende persone word versoek om binne **dertig (30) dae** vanaf die datum van hierdie kennisgewing skriftelike verhoë rakende hierdie verslag te rig aan:

**Die Sekretaris**

**Sakepraktykekomitee**

**Privaatsak X84**

**PRETORIA**

**0001**

**Tel.: (012) 310-9579/67**

**Faks: (012) 322-8489**

**A. ERWIN**

**Minister van Handel en Nywerheid**

**SCHEDULE • BYLAE****BUSINESS PRACTICES COMMITTEE**

REPORT IN TERMS OF SECTION 10 (1) OF THE HARMFUL BUSINESS PRACTICES ACT, 1988  
(ACT No. 71 OF 1988)

**Report No. 51**

**PORTLAND TYPE CEMENTS AND BLENDS OF CEMENT  
THAT DO NOT CARRY A  
SABS PRODUCT CERTIFICATION MARK**

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## 1. INTRODUCTION

### 1.1 Portland cement

The Oxford Advanced Learner's Dictionary of Current English<sup>(1)</sup> describes "**cement**" as a: "1 grey powder (made by burning lime and clay) which, after being wetted becomes hard like stone and is used for building, etc . . . 2 any similar soft substance that sets firm, used for filling holes (eg in the teeth), or for joining things".

The cement and cement blends referred to in this report are those used for building and construction work and would fall under the first definition above.

Portland cement is by far the most commonly used cement in building and construction<sup>(2)</sup>. "Portland" is a generic term used to describe the type of cement that is commonly used for building and construction work. The material was originally named after the high-quality, grey-coloured building stone from Portland, England. The manufacture of portland cement is a highly capital intensive and sophisticated chemical engineering process. The principal raw materials are limestone and shale<sup>(3)</sup>.

The blended raw materials are heated in a rotary kiln at a temperature of about 1 450 °C. The output from the kiln is known as cement clinker. The ash from the coal used in the kiln is also taken up into the clinker. To produce portland cement the clinker is milled with a small quantity of gypsum. The gypsum is added to control the setting, or rate of hydration,<sup>(4)</sup> of the cement<sup>(5)</sup>.

In concrete, mortars and plasters<sup>(6)</sup>, the paste binds the other materials together, and will continue to harden as long as water is present. The process of maintaining the fresh mortar or concrete under moist conditions is called curing.

Different cement types are suited to different applications. Ordinary portland cement is a general purpose cement made to South African Bureau of Standards (SABS, see section 1.2) specifications and is suited to almost all mortars, plasters and concretes. Rapid hardening portland cement is also made to SABS specifications and is simply an ordinary portland cement that has been more finely ground. It therefore hydrates more quickly and develops strength more rapidly.

### 1.2 SABS standards<sup>(7)</sup>

#### 1.2.1 The setting of standards

An important objective of the SABS is to issue national standard specifications. The term standard is used generically by the SABS to refer to a specification, code of practice or standard method. A specification may be a description of a commodity or a description of the manner of manufacture, in which case the components, material or substance, characteristics and other relevant aspects are included.

The procedure followed by the SABS in the preparation of a standard and the declaration of a mark, is as follows:

On being approached with a request for the preparation of a standard, the SABS, if satisfied that it is in the national interest that such a standard be prepared, appoints a technical committee representative of manufacturers, distributors, purchasers, government departments, consumer organizations, independent bodies and experts. In collaboration with the standards officers of the SABS, the technical committee drafts

<sup>(1)</sup> Oxford University Press, 3rd Edition, 11th Impression, 1983.

<sup>(2)</sup> Cement and Concrete Institute (CCI) Publication "Cement Concrete and Mortar", 1995, p. 1.

<sup>(3)</sup> Laminated clay-rock. See Smith, A. H., and O'Loughlin, J. L. N., Odhams Dictionary of the English Language, Odhams Books Limited, London.

<sup>(4)</sup> When cement and water are mixed to form a paste, a chemical reaction takes place and the paste sets and slowly hardens. This reaction is called hydration.

<sup>(5)</sup> Fulton's Concrete Technology, 1994, pp 10 to 11.

<sup>(6)</sup> A mixture of cement and water is called a *paste*. If a fine aggregate, such as sand, most of which will pass through a 4,75 mm mesh sieve, is added to the paste, the resulting mix is called *mortar* or *plaster*. Should a coarse aggregate, that is, usually stones with particle sizes larger than the 4,75 mm mesh sieve, be added to the plaster or mortar, the resultant mix is called *concrete*. *Plaster* is applied over brickwork or concrete, to remove irregularities and to provide a smooth, plain surface to which paint may be subsequently applied. *Mortar* is applied to bind bricks in building structures.

<sup>(7)</sup> Based on SABS and Related Publications, Catalogue 1996, p. xiv.

a proposed standard for the commodity concerned. The draft is then circulated widely in South Africa and internationally for comment. After a lapse of about three months the committee reviews its proposed standard in the light of the comments received and then is only the standard submitted for approval and for the declaration of the applicable certification mark.

### 1.2.2 *Voluntary standards*

Entities wishing to use the certification mark must apply for a permit to do so. A permit holder usually applies a certification mark to a commodity as evidence to the purchaser that the producer has a quality system that meets the requirements of the mark specification. The SABS mark is thus an indication to consumers that the producer complies with certain minimum standards.

Tests and inspections have to be carried out regularly to administer the scheme. Permit holders clearly have to pay the SABS for these tests and inspections and for the right to display the mark on the product.

Since the introduction of the first South African cement standards in 1959<sup>(1)</sup> the major South African producers of cement and cement blends have complied with these standards despite the fact that they have been voluntary standards. These producers manufactured cements that were similar to those produced in the United Kingdom on which standard the original SABS standards was based. The performance of these cements exceeded the SABS and British Standard requirements by a substantial margin. This level of cement performance has remained consistent since the introduction of the standards in 1959. This has created a level of consumer expectations about the performance of cement generally. The major cement producers in South Africa are Alpha Limited, Blue Circle Ltd, Pretoria Portland Cement Company Limited and their subsidiaries.

### 1.2.3 *Compulsory standards*

In terms of section 22 (1) (a) of the Standard Act, No. 29 of 1993, the Minister of Trade and Industry may, on the recommendation of the SABS Council, declare a specification that has been set and issued as a standard to be a compulsory specification. The Minister may do so to promote and maintain standardization and quality if safety, health, consumer protection or the environment is concerned. The compulsory specification is administered for the Minister by the SABS. The administrative costs are recovered from levies paid in terms of the Regulations relating to the payment of levy and the issue of sales permits concerning compulsory specifications, published by Government Notice No. R. 999 of 3 May 1985.

### 1.2.4 *New specifications for cement<sup>(2)</sup>*

After extensive consultation between the SABS, manufacturers and consumers the suite of SABS cement standards was amended and revised in alignment with the European Cement Standard ENV 197. In 1996 South Africa adopted the European standards for cement. From July 1996, the South African standard for common cements will be SABS ENV 197-1:

"Cement—composition, specifications and conformity criteria. Part 1: Common cements".

The composition and strength<sup>(3)</sup> of the cement are required to be displayed by the manufacturer (permit holder) on the packaging of each cement produced. The strengths are to be determined according to SABS specification ENV 196-1:

"Methods of testing cement. Part 1: Determination of strength".

The conformance criteria in the new standard are considerably more stringent than the old standards and this should lead to a more consistent quality of product to the consumer, if producers are willing and able to meet these requirements. It must be reiterated and emphasized that the application of these cement standards is voluntary and not compulsory. The performance requirements of SABS ENV 197-1 are such that no significant change to the performance of existing products is expected.

<sup>(1)</sup> Leaflet of the Cement and Concrete Institute: "Overview of Changes in Cement and Specifications", 1966.

<sup>(2)</sup> This section is based on an undated leaflet of the CCI: "Cement: Standards and Selection".

<sup>(3)</sup> The strength of cement is determined by the "Compressive Strength" thereof. "Compressive Strength" is a numerical value expressed as N/mm<sup>2</sup>, or Newton per mm<sup>2</sup>. The compressive strength of concrete, mortar or plaster is usually determined at 7 days and at 28 days.



### 1.3 Blends of portland cement and cement extenders<sup>(1)</sup>

Cement extenders, such as ground granulated blastfurnace slag, fly ash and silica fume, have cementitious properties and "extend" the cement.

**Ground granulated blastfurnace slag**, sold in South Africa under the trade name of Slagment and covered by SABS 1491: Part I—1989, is made from the slag resulting from the production of iron in a blastfurnace. To be suitable for cementitious applications, the slag must be rapidly cooled by water quenching and ground to a fineness similar to that of cement.

Slagment hydrates to form strength-giving compounds similar to those formed by the hydration of portland cements. This hydration has to be started by the alkali, calcium hydroxide, produced during the hydration reaction of portland cement. Slagment must therefore not be used without portland cement. The hydration of blends of portland cement and Slagment is slower than that of portland cement. Ground granulated blastfurnace slag is cheaper than portland cement in areas within reasonable transport distance from a production plant.

**Fly ash** is collected by electrostatic precipitators from the exhaust gases of power stations and other facilities that burn pulverized coal. The finer fractions are used as a cement extender because the coarser particles are relatively unreactive. The coarse fractions are separated from the fine through air classification. Fly ash for cementitious applications are covered by SABS 1491: Part II—1989 (amended 1992). The hydration of fly ash is similar to that of ground granulated blastfurnace slag and must therefore not be used without portland cement. Unclassified ash, both coarse and fine fractions, collected from the precipitators is sold as a product called Pozz-Fill. Pozz-Fill is intended as an aggregate replacement although it does have some pozzolanic (cementitious) properties due to the presence of fine fly-ash fractions.

Pozz-Fill is not covered by a SABS standard. South Africa produces considerable quantities of fly ash. These quantities far exceed what can possibly be used in cementitious applications. For example, Eskom's Matla generates approximately 1½ million tons of fly ash annually. The corresponding figure for Lethabo is 3 million tons. The annual cement production in South Africa is approximately 8 million tons. Only fly ashes from Eskom's Matla and Lethabo power stations and Sasol's Secunda plants have any track record of use in cementitious applications. Fly ash is significantly cheaper than portland cement and Pozz-Fill is even more so.

An increase in the extender content of a blend obviously reduces the cost of the blend, compared to ordinary portland cement. Unfortunately an increase in extender content of the blend also adversely influences the rate of strength gain of cement and concrete made with such blends.

Blends of portland cement and extenders can, for purposes of this report, be divided into (a) factory blends of portland cement and a relatively small proportion of Slagment or fly ash and (b) factory or site blends of portland cement and a relatively high proportion of Slagment or fly ash.

#### 1.3.1 *Factory blends of portland cement and a small proportion of Slagment or fly ash*

These blends consist of portland cement and Slagment or fly ash in the ratio of about 85 per cent ordinary portland cement and 15 per cent extender and are covered by the previous SABS 831: 1971 (as amended 1985). An important characteristic of these blends is that their performance is dominated by the portland cement component. For all practical purposes they can be substituted for the type of portland cement used. For example, PC15FA (a portland cement blend that contains a maximum of 15 per cent fly ash) can be used instead of ordinary portland cement.

#### 1.3.2 *Factory blends of portland cement and a high proportion of Slagment or fly ash*

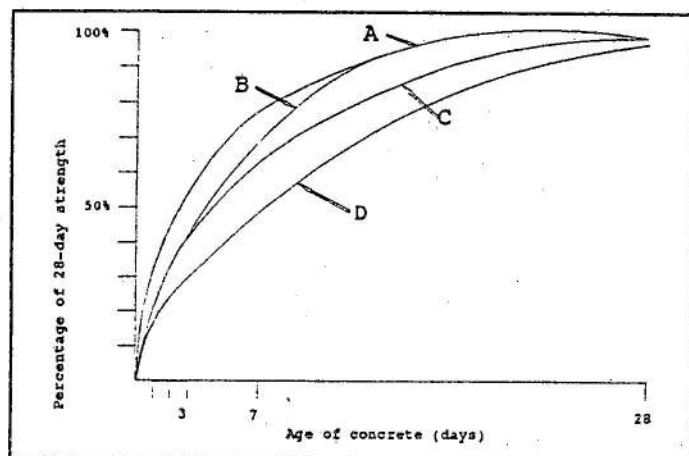
These blends are usually portland cement and Slagment in a ratio of about 50:50 (meeting the requirements of the previous SABS 626: 1971) or portland cement and fly ash in the ratios 70:30 or 75:25 (meeting the requirements of the previous SABS 1466: 1988). This blend of portland cement and Slagment is known as portland blastfurnace cement and that of portland cement and fly ash as portland fly ash cement.

<sup>(1)</sup> This section is based largely on PCI Publication: Cement, Concrete and Mortar, 1995, pp 8 to 14.

### 1.3.3 Characteristics of blends with a small and high proportion of Slagment or fly ash

The performance of blends of portland cement and good quality extenders is characterised by a slowing in the rate of reaction of the hydration process leading to reduced early compressive strength. The degree of reduction is roughly proportional to the extender content.

Long term durability<sup>(1)</sup> of mixes made with appropriately proportioned cement blends manufactured from good quality constituents is generally enhanced if adequate attention is paid to curing. The effects of the use of these good quality extenders on compressive strength development are illustrated in the figure below.



- A = Ordinary portland cement and rapid hardening portland cement.
- B = A 70:30 blend of ordinary portland cement:fly ash or a blend of 70:25 ordinary portland cement:fly ash.
- C = Portland blast furnace cement.
- D = A 50:50 blend of ordinary portland cement and ground granulated blastfurnace slag (Slagment).

### 1.4 Masonry cement

Masonry cement is manufactured for use in plasters and bedding mortars<sup>(2)</sup>. It may comprise a mixture of portland cement, cement extenders and/or finely ground limestone or lime. The new SABS standards for cement allow *inter alia* blends of portland cement and ground granulated blastfurnace slag or fly ash to be described as masonry cement. Before the recent introduction of SABS ENV 413, there was no SABS standard for masonry cements.

"Masonry cements have special properties that make them more suitable for mortar and plaster application, but they are not intended for use in concrete for foundation, floors, and other structural applications".<sup>(3)</sup>

It is possible to ensure that consumers get masonry cements of consistent and predictable performance, provided again that producers can be persuaded to meet these requirements.

### 1.5 Other blends

Some blenders in Gauteng, Mpumalanga and the Northern Province use extenders that do not carry the SABS mark, such as Pozz-Fill or slags not resulting from the production of iron in a blastfurnace. Little is known about the effects of the use of these extenders that do not carry the SABS mark. The Committee received several complaints about the quality of these blends. The majority of the blenders in Gauteng are situated close to residential areas traditionally inhabited by members of the Black community.

The problems experienced by consumers are believed to be because of the use of these unproven extenders and because of the high total extender contents used by some producers of these products.

## 2. NOTICE OF THE INVESTIGATION

A "harmful business practice" in terms of section 1 of the Harmful Business Practices Act, No. 71 of 1988 (the Act), is any business practice that, directly or indirectly, has or is likely to have the effect of (a) harming the relations between businesses and consumers; (b) unreasonably prejudicing any consumer; or (c) deceiving any consumer.

<sup>(1)</sup> Durability refers to the ability of cement to retain its strength, low permeability, dimensional stability and appearance for the period of service for which it was designed.

<sup>(2)</sup> Bedding mortar is mortar used in normal brick or wall construction.

<sup>(3)</sup> Bennie I, Director: Civil Engineering and Packaging, SABS, as quoted in SABS Bulletin, Vol 15 No 5 July 1995, p. 31.

The Committee could conduct three types of investigations into alleged harmful business practices. These are section 4 (1) (c) investigations (informal investigations) and section 8 (1) (a) or 8 (1) (b) investigations (formal investigations). Section 4 (1) (c) and 8 (1) (a) investigations focus on alleged harmful business practices involving a specific person or entity. Alleged harmful business practices in general or in relation to a particular commodity are subject to section 8 (1) (b) investigations. The procedures at all types of investigations are the same and are set out in section 5 of the Act.

An informal investigation enables the Committee to make such preliminary investigation as it may consider necessary into, or confer with any interested party about any harmful business practice that allegedly exists or may come into existence.

Notice of informal investigations is not published in the *Government Gazette*.

The purpose of informal investigations is to enable the Committee to make a more informed decision about whether a formal investigation is called for. Notice of section 8 (1) (a) and 8 (1) (b) investigations is published in the *Government Gazette*. The Chairman of the Committee also issues a press release about the intended investigation to coincide with the publication of the notice in the *Government Gazette*.

The Minister of Trade and Industry (the Minister) is not empowered to make any decisions on the strength of an informal investigation. He may do so in terms of a formal investigation. Section 12 of the Act sets out the powers of the Minister.

The Business Practices Committee published Notice 496 of 1996 that appeared in *Government Gazette* No. 17106 dated 19 April 1996. The notice read as follows:

"In terms of the provisions of section 8 (4) of the Harmful Business Practices Act, 1988 (Act No. 71 of 1988), notice is hereby given that the Business Practices Committee intends to undertake an investigation in terms of section 8 (1) (b) of the said Act into producers of Portland type cements and blends of cement which do not carry a South African Bureau of Standards (SABS) product certification mark. The purpose of the investigation is to ensure, in the interests of safety and health, that such products are fit for purpose, including long term durability.

Any person may within a period of 30 days from the date of this notice make written representations regarding the above-mentioned investigation to the Business Practices Committee. Representations must be addressed to: The Secretary, Business Practices Committee, Private Bag X84, PRETORIA, 0001 . . .".

The Committee informed the following blenders or potential blenders about the intended investigation: ABC Projects, Alpha Limited, AR Trading (Pty) Ltd, Blue Circle Ltd, Howberg Cement, Kwanda Cement, Megasuper Cement, NPC (Pty) Ltd, PeterMix (Pietersburg and Nelspruit), PPC Ltd, Star Cement (Pty) Ltd, Supreme Cement, Tantruss Timber & Hardware, Trojan Cement and Viking Cement.

### 3. THE INVESTIGATION

The investigation required several physical and chemical tests of the various cement blends. For this purpose the Committee, in terms of section 7 (1) of the Act, appointed several SABS personnel as *ad hoc* investigating officers. This report was made possible through the able assistance of these officials.

Officials of the Committee and *ad hoc* investigation officers of the SABS visited several blending plants. The purpose of these visits was to obtain samples for testing and to look into the quality control measures applied by the blenders.

The following are the alleged constituents of some blends encountered:

- 42 per cent ordinary portland cement and 58 per cent Slagment;
- 45 per cent rapid hardening portland cement, 30 per cent Slagment and 25 per cent Pozz-Fill;
- 66 per cent of a 60/40 rapid hardening portland cement/Slagment blend and 34 per cent Pozz-Fill;
- 27 per cent ordinary portland cement, 40 per cent Pozz-Fill and 33 per cent portland blast furnace cement;
- and
- 60 per cent ordinary portland cement, 20 per cent slag not resulting from the production of iron in a blastfurnace and 20 per cent Pozz-Fill.



The quality control at the plant visited ranged from excellent to the ridiculous. At one plant the "foreman" was asked how he could be sure that the bags filled with the blend contained the alleged proportion of constituents. He said that was no problem. All one had to do was to rub the mixture between one's thumb and index finger. One could then "feel" whether the blend contained the correct constituents. The poor or non-existent quality control at some plants is believed to result in highly variable product quality and performance.

#### 4. THE RESULTS OF THE SABS TESTS

The SABS used the previous SABS specifications to test the cement samples. The following are some of the requirements of test SABS ENV 413-1: 1994:

##### 4.1 Constituents

4.1.1 Portland cement clinker: SABS ENV 197-1.

4.1.2 Composition cement clinker:  $\geq 40\%$  portland.

##### 4.2 Compressive strength

At 7 days, N/mm<sup>2</sup>:

Class MC 5 Nil.

Class MC 12.5(x)  $\geq 7$

Class MC 22.5(x)  $\geq 10$

At 28 days, N/mm<sup>2</sup>:

Class MC5  $\geq 5 \leq 15$

Class MC 12.5(x)  $\geq 12.5 \leq 32.5$

Class MC 22.5(x)  $\geq 22.5 \leq 42.5$

Only 2 out of 13 samples of masonry cement as evaluated by the SABS complied with all the requirements of SABS ENV 413-1: 1994.

No sample was supported by objective evidence of compliance with the requirement of  $\geq 40$  per cent portland cement clinker. The alleged portland cement clinker content in one of the blends tested was 27 per cent only.

Only one sample did not comply with the compressive strength of  $\geq 7$  N/mm<sup>2</sup> at 7 days. In two cases the compressive strength at 28 days was less than the requirement of the specification. The producer of one of these non-complying cements was successfully sued for damages<sup>(1)</sup> resulting from the use of his material in a building project that had to be demolished. Unfortunately it is believed this remedy would be beyond the financial reach of the majority of effected consumers.

The compressive strength at 28 days of two successive samples taken from two different plants yielded the following results:

##### *Compressive strength at 28 days*

	<i>Plant A</i>	<i>Plant B</i>
First sample .....	17.4	31.0
Second sample .....	26.3	19.7

In plant A the compressive strength of the second sample was 51.1 per cent higher than that of the first sample and in plant B the compressive strength of the second sample was 36.5 per cent lower than that of the first sample. The results of these tests point to either a serious problem in the quality control system or the absence of quality control systems in the two plants. The consequence of these variations is that consumers procuring their requirements from either plant A or plant B obtain cements with divergent and highly variable characteristics. This is contrary to the expectations of the majority of consumers who have grown accustomed to cement being a reliable and consistent commodity.

<sup>(1)</sup> Case No. 92905 of 1994 in the Magistrate's Court of the District of Johannesburg: Leon van Heerden vs Martin Brauer.



In four cases the description of the masonry cement on the cement bags was misleading. In these cases the product was claimed to comply with the specifications of classes MC 5; MC 12.5(x); and MC 22.5(x). Simultaneous compliance with the requirements for three classes is impossible.

## 5. THE POSSIBLE CONSEQUENCES OF MANUFACTURING CEMENT TO NO STANDARD OR NOT COMPLYING WITH THE EXISTING STANDARDS

The possible consequences of manufacturing cement to no standard or not meeting the standards is as follows:

- (i) In the design of mixes for structural concrete, mortar and plasters, experienced users have become accustomed to the "rule of thumb" guidelines that allow them to produce concrete mixes to suit their purposes. These mixes are volumetrically determined and it is common practice to use known mix proportions such as contained in the specifications of the Department of Public Works and the Department of Education and Training. One such specification stipulates one part cement, four parts fine aggregate to eight parts coarse aggregate which would yield approximately 10 MPa at 28 days using an ordinary portland cement manufactured in accordance with the SABS 471.  
It must be emphasized that these proportions are applicable to concrete where ordinary portland cement is used. If a blended cement such as portland blast furnace cement is used, the proportions should be adjusted. The use of these standard proportions will only work for cements that meet the minimum requirements.
- (ii) Plasters and mortars have historically been mixed in ratios of cement:sand 1:4, 1:5 or 1:6 to achieve suitable end results. If, however, cements are manufactured to different standards or no standard at all these nominal mix ratios will no longer provide suitable end results. Furthermore, consumers have over the years become accustomed to using an ordinary portland cement that exceeded the minimum strength requirement of the SABS standards. Cement and cement blends not conforming to the SABS standards could have unfortunate consequences for the RDP programme of the Government.
- (iii) The possibility also exists that cements manufactured with relatively high percentages of extender may be susceptible to cold weather or to dry conditions and will likely have a slow strength development at early ages. This could have disastrous consequences if formwork and shuttering are removed too soon.
- (iv) The chemical characteristics of the cement could result in concrete that has self-destructive properties, such as higher  $M_2O$  or  $SO_3$ , due to lack of soundness<sup>(1)</sup>. A too high chloride content could attack reinforcing steel with its consequential destructive properties.
- (v) The setting time of plaster, mortar or concrete is tested to ensure that the mixes remain workable for a suitable period before initial hardening or that it sets in good time so that incrementally built structures can support the following phase without incident.
- (vi) The fineness of cement often determines its rate of strength development and therefore this property is included in a standard to ensure that the product performs similarly to what has become accepted.
- (vii) It is common knowledge that curing in South Africa has been haphazard in application at best, and serious consequences have been avoided mainly because high quality cements were used. With the emergence of blended cements of unknown quality on the South African market and the increased use by the less sophisticated user the possibility of grave consequences rises exponentially. The situation becomes more pertinent with the use of cements not complying with the standards and often containing high percentages of extenders of suspect origin, which is aggravated by the lack of and/or insufficient curing.

In summary, consumer protection will be enhanced and the safety of consumers will be strengthened should the manufacturers of cement and cement blends be compelled to meet the new South African standards on cement.

<sup>(1)</sup> Soundness refers to the freedom from undue volume changes, warping or cracking of cement paste.

## 6. CONCLUSION

Most final consumers are not aware that cement is a complex chemical product. This does not apply to the major construction companies. Final consumers regard cement as a generic product and to them the quality of a particular bag of cement is no different from that of another bag produced by another manufacturer or blender. Consumers have over the years also become accustomed to using an ordinary portland cement that exceeded the minimum strength requirement of the SABS standards. The advent of uncontrolled cement blends has introduced real and potential risks for consumers. The normal mix ratios may no longer necessarily provide suitable products.

The results of the investigation show that those blends not currently covered by SABS marks largely do not comply with either the SABS requirements for "common cements" or with the SABS requirements for masonry cements. Consumer protection will be served and the safety of consumers will be greater should the manufacturers of cement and cement blends be compelled to meet the new South African standards on cement.

## 7. RECOMMENDATION

In the light of the above-mentioned it is recommended by the Committee that the Minister in terms of section 12 (6) (a) of the Act, declares unlawful the marketing of cement and cement blends that do not comply with SABS/ENV 413/1: 1994 and which do not carry the SABS product certification mark.

It is further recommended that the Minister publish this report in the *Government Gazette* for comment by interested parties. The date of implementation will be determined by the Minister after the Committee consulted with interested parties.

**PROF. LOUISE A. TAGER**

CHAIRMAN: BUSINESS PRACTICES COMMITTEE

18 February 1997.

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### NOTICE 1170 OF 1997

#### DEPARTMENT OF TRADE AND INDUSTRY

#### HARMFUL BUSINESS PRACTICES ACT, 1988

I, Alexander Erwin, Minister of Trade and Industry, in terms of section 12 (6) (a) (iii) of the Harmful Business Practices Act, 1988 (Act No. 71 of 1988), hereby give notice that I intend to publish the following notice in the *Government Gazette*:

#### NOTICE IN TERMS OF SECTION 12 (6) (a) (iii) OF THE HARMFUL BUSINESS PRACTICES ACT, 1988

I, Alexander Erwin, Minister of Trade and Industry, by virtue of the powers vested in me by section 12 (6) of the Harmful Business Practices Act (Act No. 71 of 1988), and after having considered a report by the Business Practices Committee in relation to an investigation of which notice was given by General Notice 496 of 1996 in *Government Gazette* No. 17106 dated 19 April 1996, which report was published by Notice 1169 in *Government Gazette* No. 18191 of 8 August 1997, promulgate in the public interest the notice in the Schedule.

#### SCHEDULE

In this notice, unless the context indicates otherwise—

**"harmful business practice"** means the marketing of cement and cement blends that do not comply with the South African Bureau of Standards ENV 413/1:1994 specification and which do not carry the South African Bureau of Standards product certification mark.

The harmful business practice is hereby declared unlawful.

On the recommendation of the Business Practices Committee I may, in a particular case, in terms of section 12 (6) (c) of the Act in writing, grant exemption from a prohibition contemplated in this notice to such extent and for such period and subject to such conditions as may be specified in the exemption. Such applications for exemption must be directed to:

**The Secretary  
Business Practices Committee  
Private Bag X84  
PRETORIA  
0001  
(For attention: Ms Lana van Zyl)**

**A. ERWIN**

**Minister of Trade and Industry**

### **KENNISGEWING 1170 VAN 1997**

#### **DEPARTEMENT VAN HANDEL EN NYWERHEID**

#### **WET OP SKADELIKE SAKEPRAKTYKE, 1988**

Ek, Alexander Erwin, Minister van Handel en Nywerheid, gee hiermee, kragtens artikel 12 (6) (a) (iii) van die Wet op Skadelike Sakepraktyke, 1988 (Wet No. 71 van 1988), kennis dat ek van voorneme is om die volgende kennisgewing in die *Staatskoerant* te publiseer:

#### **KENNISGEWING KRAGTENS ARTIKEL 12 (6) (a) (iii) VAN DIE WET OP SKADELIKE SAKEPRAKTYKE, 1988**

Ek, Alexander Erwin, Minister van Handel en Nywerheid, kragtens die bevoegdheid my verleen by artikel 12 (6) van die Wet op Skadelike Sakepraktyke, 1988 (Wet No. 71 van 1988), en na my oorweging van 'n verslag deur die Sakepraktykekomitee met betrekking tot 'n ondersoek waarvan by Algemene Kennisgewing 496 van 1996 in *Staatskoerant* No. 17106 van 19 April 1996 kennis gegee is, welke verslag gepubliseer is by Kennisgewing 1169 in *Staatskoerant* No. 18191 van 8 Augustus 1997, vaardig hiermee in die openbare belang die kennisgewing in die Bylae uit.

#### **BYLAE**

In hierdie kennisgewing, tensy uit die samehang anders blyk, beteken—

**“die skadelike sakepraktyk”** die bemaking van sement en mengsels van sement wat nie aan die Suid-Afrikaanse Buro van Standaarde ENV 413/1: 1994-spesifikasie voldoen nie en wat nie die Suid-Afrikaanse Buro van Standaarde-produksertifiseringsmerk dra nie.

Die skadelike sakepraktyk word hiermee onwettig verklaar.

Op aanbeveling van die Sakepraktykekomitee kan ek, in 'n bepaalde geval, kragtens artikel 12 (6) (c) van die Wet skriftelik vrystelling verleen van 'n verbod bedoel in hierdie kennisgewing, in die mate en vir die tydperk en onderworpe aan die voorwaardes in die vrystelling vermeld. Sodanige aansoeke om vrystelling kan gerig word aan:

**Die Sekretaris  
Sakepraktykekomitee  
Privaatsak X84  
PRETORIA  
0001**

**(Vir aandag: Me. Lana van Zyl)**

**A. ERWIN**

**Minister van Handel en Nywerheid**

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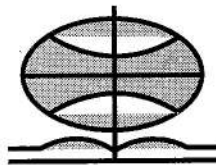
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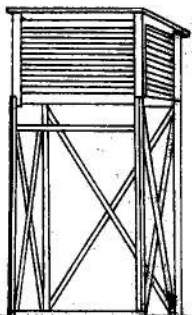
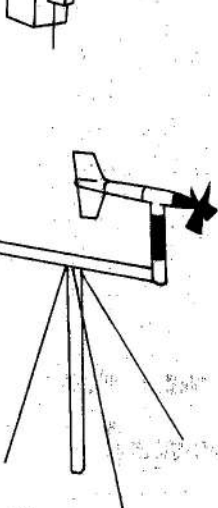
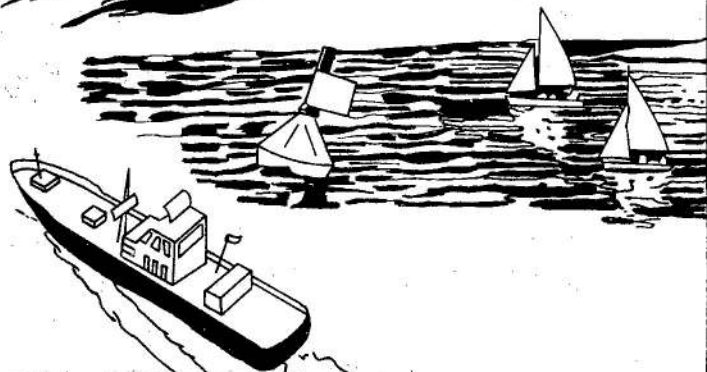
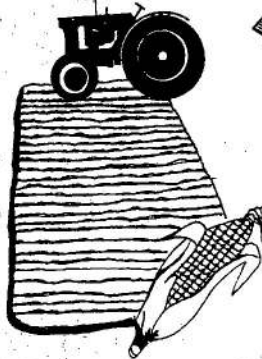
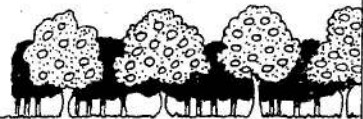
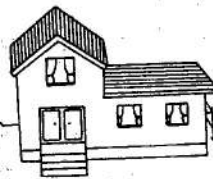
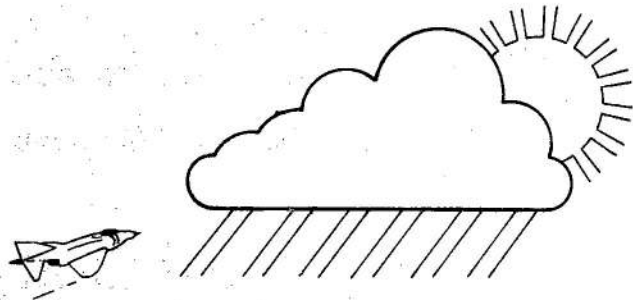
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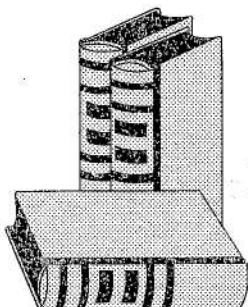
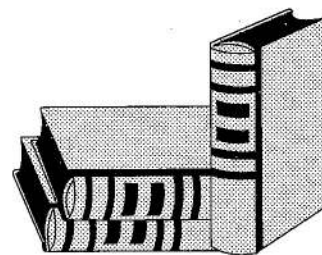
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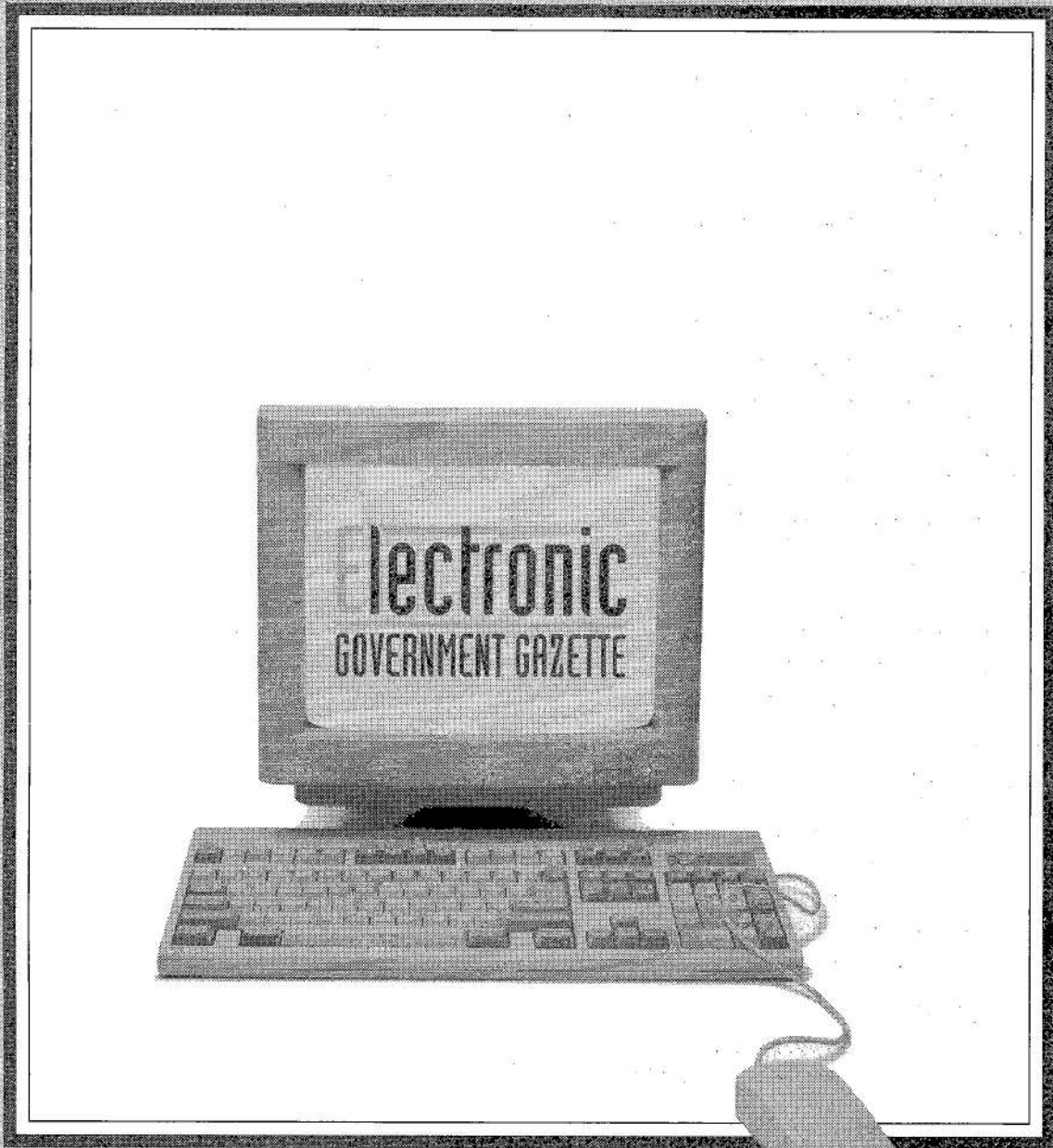
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