

इंटरनेट

मानक

Disclosure to Promote the Right To Information

Whereas the Parliament of India has set out to provide a practical regime of right to information for citizens to secure access to information under the control of public authorities, in order to promote transparency and accountability in the working of every public authority, and whereas the attached publication of the Bureau of Indian Standards is of particular interest to the public, particularly disadvantaged communities and those engaged in the pursuit of education and knowledge, the attached public safety standard is made available to promote the timely dissemination of this information in an accurate manner to the public.

“जानने का अधिकार, जीने का अधिकार”

Mazdoor Kisan Shakti Sangathan

“The Right to Information, The Right to Live”

“पुराने को छोड़ नये के तरफ”

Jawaharlal Nehru

“Step Out From the Old to the New”

IS 11768 (1986): Recommendations for disposal of asbestos waste material [CED 53: Cement Matrix Products]



“ज्ञान से एक नये भारत का निर्माण”

Satyanarayan Gangaram Pitroda

“Invent a New India Using Knowledge”



“ज्ञान एक ऐसा खजाना है जो कभी चुराया नहीं जा सकता है”

Bhartrhari—Nitiśatakam

“Knowledge is such a treasure which cannot be stolen”

BLANK PAGE



Indian Standard

RECOMMENDATIONS FOR DISPOSAL OF ASBESTOS WASTE MATERIAL

UDC 677.511 : 628.511 : 658.382.1/.3



© Copyright 1986

INDIAN STANDARDS INSTITUTION
MANAK BHAVAN, 9 BAHADUR SHAH ZAFAR MARG
NEW DELHI 110002

Indian Standard

RECOMMENDATIONS FOR DISPOSAL OF ASBESTOS WASTE MATERIAL

Cement and Concrete Sectional Committee, BDC 2

Chairman

DR H. C. VISVESVARAYA

Representing

National Council for Cement and Building Materials,
New Delhi

Members

ADDITIONAL DIRECTOR STANDARDS (B & S)	Research, Designs & Standards Organization (Ministry of Railways), Lucknow
DEPUTY DIRECTOR STANDARDS (B & S) (<i>Alternate</i>)	
SHRI K. P. BANERJEE	Larsen and Toubro Limited, Bombay
SHRI HARISH N. MALANI (<i>Alternate</i>)	
SHRI S. K. BANERJEE	National Test House, Calcutta
CHIEF ENGINEER (BD)	Bhakra Beas Management Board, Nangal Township
SHRI J. C. BASUR (<i>Alternate</i>)	
CHIEF ENGINEER (DESIGNS)	Central Public Works Department, New Delhi
EXECUTIVE ENGINEER (D)-III (<i>Alternate</i>)	
CHIEF ENGINEER (RESEARCH-CUM-DIRECTOR)	Irrigation Department, Government of Punjab
RESEARCH OFFICER (CONCRETE TECHNOLOGY) (<i>Alternate</i>)	
DIRECTOR	A.P. Engineering Research Laboratories, Hyderabad
JOINT DIRECTOR (<i>Alternate</i>)	
DIRECTOR	Central Soil and Materials Research Station, New Delhi
CHIEF RESEARCH OFFICER (<i>Alternate</i>)	
DIRECTOR (C & MDD-I)	Central Water Commission, New Delhi
DEPUTY DIRECTOR (C & MDD-I) (<i>Alternate</i>)	
SHRI V. K. GHANSEKAR	Structural Engineering Research Centre (CSIR), Roorkee
SHRI S. GOPINATH	The India Cements Limited, Madras
SHRI T. TAMILAKARAN (<i>Alternate</i>)	

(Continued on page 2)

© Copyright 1986

INDIAN STANDARDS INSTITUTION

This publication is protected under the *Indian Copyright Act* (XIV of 1957) and reproduction in whole or in part by any means except with written permission of the publisher shall be deemed to be an infringement of copyright under the said Act.

(Continued from page 1)

<i>Members</i>	<i>Representing</i>
SHRI A. K. GUPTA	Hyderabad Industries Limited, Hyderabad
SHRI P. J. JAGUS	The Associated Cement Companies Ltd, Bombay
DR A. K. CHATTERJEE (Alternate)	
SHRI N. G. JOSHI	Indian Hume Pipes Co Limited, Bombay
SHRI R. L. KAPOOR	Roads Wing (Ministry of Transport), Department of Surface Transport, New Delhi
SHRI R. K. SAXENA (Alternate)	
SHRI S. K. LAHA	The Institution of Engineers (India), Calcutta
SHRI B. T. UNWALLA (Alternate)	
DR A. K. MULLICK	National Council for Cement and Building Materials, New Delhi
SHRI S. N. PAL	M.N. Dastur and Company Private Limited, Calcutta
SHRI BIMAN DASGUPTA (Alternate)	
SHRI H. S. PASRICHA	Hindustan Prefab Limited, New Delhi
SHRI Y. R. PHULL	Indian Roads Congress, New Delhi; and Central Road Research Institute (CSIR), New Delhi
SHRI M. R. CHATTERJEE (Alternate)	Central Road Research Institute (CSIR), New Delhi
DR MOHAN RAI	Central Building Research Institute (CSIR), Roorkee
DR S. S. REHSI (Alternate)	
DR M. RAMAIAH	Structural Engineering Research Centre (CSIR), Madras
DR A. G. MADHAVA RAO (Alternate)	
SHRI A. V. RAMANA	Dalmia Cement (Bharat) Limited, New Delhi
DR K. C. NARANG (Alternate)	
SHRI G. RAMDAS	Directorate General of Supplies and Disposals, New Delhi
DR A. V. R. RAO	National Buildings Organization, New Delhi
SHRI J. SEN GUPTA (Alternate)	
SHRI R. V. CHALAPATHI RAO	Geological Survey of India, Calcutta
SHRI S. ROY (Alternate)	
SHRI T. N. SUBBA RAO	Gammon India Limited, Bombay
SHRI S. A. REDDI (Alternate)	
SHRI A. U. RIJHSINGHANI	Cement Corporation of India, New Delhi
SHRI C. S. SHARMA (Alternate)	
SHRI H. S. SATYANARAYANA	Engineer-in-Chief's Branch, Army Headquarters
SHRI V. R. KOTNIS (Alternate)	
SECRETARY	Central Board of Irrigation and Power, New Delhi
SHRI K. R. SAXENA (Alternate)	
SHRI R. K. SINHA	Development Commissioner for Cement Industry, Ministry of Industry
SHRI S. S. MIGLANI (Alternate)	
SUPERINTENDING ENGINEER (DESIGNS)	Public Works Department, Government of Tamil Nadu
EXECUTIVE ENGINEER (SMD) (DIVISION) (Alternate)	
SHRI L. SWAROOP	Orissa Cement Limited, New Delhi
SHRI H. BHATTACHARYYA (Alternate)	
SHRI S. K. GUHA THAKURTA	Gannon Dunkerley & Co Ltd, Bombay
SHRI S. P. SANKARNARAYANAN (Alternate)	
SHRI G. RAMAN, Director (Civ Engg)	Director General, ISI (Ex-officio Member)

Secretary

SHRI N. C. BANDYOPADHYAY
Deputy Director (Civ Engg), ISI

(Continued on page 10)

Indian Standard

RECOMMENDATIONS FOR DISPOSAL OF ASBESTOS WASTE MATERIAL

0. FOREWORD

0.1 This Indian Standard was adopted by the Indian Standards Institution on 28 November 1986, after the draft finalized by the Cement and Concrete Sectional Committee had been approved by the Civil Engineering Division Council.

0.2 In recent years, there has been a growing awareness that exposure to asbestos dust can have harmful effects on the health of workers. In order to give guidance on how the risk of exposure to asbestos dust can be prevented, controlled or minimized, it was felt necessary to lay down some standards regarding safe use of different products containing asbestos, improving conditions in workplaces, preventive measures, protection and supervision of the health of workers, packaging, transport and disposal of asbestos waste, etc. This standard lays down the recommendations for disposal of asbestos waste material.

0.3 In the formulation of this standard, due weightage has been given to international co-ordination among the standards and practices prevailing in different countries in addition to relating it to the practices in the field in this country. This has been met by deriving assistance from 'ILO Codes of Practice: Safety in the use of asbestos', 1984 published by International Labour Office, Geneva and Schedule XIV on 'Handling and processing of asbestos', framed under Section 87 of *Factories Act*.

1. SCOPE

1.1 This standard lays down the recommendations for disposal of asbestos waste materials without significant generation of airborne asbestos dust.

2. OBJECT

2.1 The objects of this standard are as follows:

- a) To prevent the risk of exposure to airborne asbestos fibre dust during collection, transportation and disposal of wastes arising out of mining and milling of asbestos, manufacturing and usage of asbestos products.

- b) To eliminate the probability of release of airborne asbestos fibres into general environment out of the wastes disposed of.

3. APPLICATION

3.1 The provisions of this standard shall apply to any place where any form of asbestos waste is generated, stored, transported and finally disposed of.

4. TERMINOLOGY

4.1 For the purpose of this standard, the definitions given in IS : 11451-1986* shall apply.

5. GENERAL REQUIREMENTS

5.1 Every employer who undertakes work which is liable to generate asbestos containing waste, shall take adequate steps to prevent and/or reduce the generation of airborne asbestos dust during handling, storing, transportation and final disposal of asbestos and asbestos containing products.

5.2 Waste Avoidance — The most desirable method of controlling waste is to minimize the amount of waste that is generated. This is generally done by recycling the waste and choosing a process or operation that reduces generation of waste.

5.3 Waste Collecting Containers — Collecting containers for asbestos waste shall be air-tight and capable of being effectively closed.

5.3.1 Care shall be taken to ensure that the exterior of the container is not contaminated with asbestos dust.

5.3.2 For bulk handling, any suitable method which does not permit emission of asbestos dust, may be used. Before disposal, asbestos waste containers shall be securely closed and stored in a separate storage area where they are unlikely to be damaged by trucks, etc. They shall not be mixed with containers of other materials including waste materials.

6. WASTE COLLECTION

6.1 Dust

6.1.1 Collection of dust from dust collectors/cyclones shall be done by a suitable and effective method without releasing any dust to atmosphere. Bagging of outlets from dust collection hoppers shall be designed to make bag-changing easy and to minimize dust leakage.

*Recommendations for safety and health requirements relating to occupational exposure to asbestos.

6.1.2 Bags of translucent material, such as polyethylene, should be used wherever practicable so that level of dust in the bags may be seen from outside and overfilling avoided. Paper bags shall not be used.

6.1.3 Filled bags shall be twisted tightly and folded over and the neck shall be secured in the folded position by a wire tie, adhesive tape or some other effective method so as to prevent the escape of dust during subsequent handling.

6.1.4 All the operations mentioned in **6.1.1** to **6.1.3** shall be carried out by properly trained persons.

6.1.5 Suitable protective clothing and respirators shall be worn when filter bags on a dust collector are changed.

6.1.6 Water soluble bags shall never be employed to avoid risk of deterioration by wetting before disposal.

6.1.7 If a bag meant for disposal had ruptured during use or spilled, it should be vacuum cleaned immediately. If vacuum cleaning is not possible, wet cleaning shall be carried out. Ruptured bag shall be put into another bag and shall be effectively sealed.

6.2 Loose Fibre, Swarf, Floor Sweepings

6.2.1 Loose fibre handled by fixed extraction systems should, wherever practicable, be returned to the production process.

6.2.2 Swarf accumulating around and under machinery shall be cleaned by suitable vacuum cleaners.

6.2.3 Loose materials collected by other means shall be placed in impermeable bags and the bags shall be effectively sealed.

6.3 Off-cuts, Broken Pieces and Rejects of High Density Materials

6.3.1 Hard waste, such as bonded asbestos, asbestos cement, jointings and bitumastic rubber residues, etc, shall be stored in such a manner as to ensure that it will not be abraded or crushed while awaiting disposal.

Whenever possible, all the hard wastes should be recycled back into the process after suitable processing.

6.4 Sacks or Bags Which Have Contained Asbestos

6.4.1 Sacks or bags which have contained loose asbestos fibres shall be disposed of by grinding, melting or bagging.

6.4.2 Grinding shall be carried out under closed conditions adjacent to the bag-opening station.

6.4.3 If used bags have to be transported for melting, they shall be put in impermeable plastic bags or air-tight containers and sealed.

6.4.4 Where bagging is employed, the used sacks or bags shall be collected under strict dust control conditions in impermeable containers, such as unused plastic bags, and such containers shall be closed and sealed.

6.4.5 Bags which have contained asbestos fibres shall not be reused for this purpose but such bags may be recycled.

6.5 Wet Waste

6.5.1 *Asbestos Sludge or Slurry* — Asbestos waste in the form of sludge or slurry should preferably be recycled or loaded into specially designed carriers or other containers in such a way as to ensure that no spillage which may subsequently dry out occurs.

7. IDENTIFICATION AND ISOLATION OF WASTE

7.1 All asbestos waste awaiting disposal shall be adequately identified by markings on the receptacles or by other means.

7.2 Asbestos waste awaiting disposal shall be stored in such a way that it is not liable to damage, likely to cause spillage.

7.3 Asbestos waste shall not be mixed with other waste for which there are no special disposal requirements. Where practicable, a special area should be set aside for its storage.

8. TRANSPORT OF WASTE

8.1 Asbestos waste, whether loose or in sealed containers, shall be transported to the disposal point in such a way that no asbestos dust is emitted into air during transport.

8.2 In the event of accidental spillage during transport to the disposal site, action appropriate to the extent of spillage as given in **8.3** to **8.5** shall be taken immediately.

8.3 Where the amount of spilled material is small, the spillage shall be collected into its original receptacle and reloaded without delay.

8.4 If the spillage is substantial and the material is dusty, it shall be wetted, if practicable, and covered immediately. This material shall be subsequently removed at the earliest opportunity and during removal appropriate safety precautions, which may include the use of protective clothing and respiratory equipment, shall be taken.

8.5 Actions to be taken in the event of accidental spillage shall be made known to the drivers of vehicles carrying asbestos waste in writing and also carried in the vehicle so that in the event of accident making the driver incapable of action, the rescue or fire brigade team will know about the actions to be taken.

9. DISPOSAL OF WASTE

9.1 General

9.1.1 Before a site is used for the disposal of asbestos waste, care shall be taken to establish that the site is suitable and acceptable for the purpose.

9.1.2 The disposal site chosen shall have vehicular access to the working face or to a hole or trench dug to receive the asbestos waste.

9.1.3 The waste shall, wherever practicable, be deposited at the foot of the working face of the landfill site or at the bottom of an excavation dug for it.

9.1.4 Where the waste has to be deposited from above the working face, or into an excavation, care shall be taken to prevent spillage.

9.1.5 When deposited, all waste other than high density waste shall be covered to an acceptable depth, say 200 to 250 mm, as soon as possible. No asbestos waste other than high density waste shall be left uncovered at the end of a working day.

9.1.6 Final covering of asbestos waste, other than high density waste, shall be to a minimum depth of 2 m.

9.1.7 If wet waste is deposited, it shall be covered in the same way as dry waste to prevent the escape of asbestos dust on drying out.

9.1.8 Wet pits should not normally be used for the disposal of any asbestos waste other than high density material.

9.1.9 Where high density waste is deposited on a dry site, care shall be taken to ensure that it is not ground to dust by the passage of vehicles over it.

9.1.10 The disposal sites for asbestos waste shall be clearly demarcated and public entry shall be restricted.

9.2 Disposal of Tailings (only for Mining and Milling) — Before final disposal of tailings from mines and milling units as given in 9.1, the recommendations given in 9.2.1 to 9.2.5 shall be followed.

9.2.1 For the disposal of tailings, wider conveyor belts operating at slower speeds should be used in preference to high-speed belts.

9.2.2 Conveyors shall operate close to the dump to minimize wind-borne dust. This may be facilitated by the use of swing conveyors.

9.2.3 High-speed conveyor-fingers shall not be used.

9.2.4 Where practicable, tailings shall be wetted at or before the point of deposit.

9.2.5 Baghouse dust shall be adequately damped before it is deposited with the tailings.

9.3 Disposal of Waste from Asbestos-Cement Industry

9.3.1 Broken pieces and off-cuts of asbestos-cement material shall be collected and disposed of in a manner which does not generate dust.

9.3.2 Loose swarf and dust collected from fabrication processes shall be wetted, where practicable, and placed in sealed impermeable bags and disposed of as given in 9.1.

9.4 Disposal of Waste from Textile Industry

9.4.1 Waste material shall not be allowed to accumulate. It shall be placed in identified impermeable bags.

9.4.2 Controlled wetting of waste should also be employed, where practicable, to reduce asbestos dust emission during filling and sealing of the bags before final disposal as given in 9.1.

9.5 Disposal of Waste from Asbestos Friction Material — Loose swarf and dust from fabrication processes, and broken and worn linings, shall be collected in an impermeable container, such as a plastic bag, and the container shall then be effectively closed and disposed of as given in 9.1.

10. SUPERVISION AND CONTROL

10.1 Where an undertaking disposes of its own asbestos waste, clear instructions shall be given to the workers concerned regarding details of disposal.

10.2 Periodic supervision shall be undertaken to ensure that the necessary safety precautions are being followed.

10.3 If a contractor is employed for waste disposal, the relevant requirements of the standard shall be incorporated in the contract.

10.4 The contract shall state that the contractor is responsible for ensuring that safety measures are observed at various stages and at the disposal site.

10.5 Periodic checks shall also be made by the undertaking to ensure that the contractor is observing the safety clauses given in his contract.

10.6 Besides what has already been stated, appropriate measures shall be taken to prevent pollution of soil, sub-soil, air and water.

11. PERSONAL PROTECTION AND HYGIENE

11.1 Workers employed in collection, transport or disposal of asbestos waste who may be at risk of exposure to airborne asbestos, shall be provided with suitable protective clothing and respiratory equipment.

11.2 Where vehicles and reusable receptacles and covers have been in contact with asbestos waste, they shall be cleaned after use by means of a vacuum cleaner or by an alternative dustless method.

(Continued from page 2)

Asbestos Cement Products Subcommittee, BDC 2 : 3

Convener

DR S. K. CHOPRA
S-436 Greater Kailash,
New Delhi

Members

SHRI S. K. BANERJEE
SHRI N. G. BASAK

SHRI P. K. JAIN (Alternate)

SHRI S. N. BASU

SHRI T. N. OBOVEJA (Alternate)

SHRI S. R. BHANDARI

SHRI V. R. NATARAJAN (Alternate)

SHRI S. K. CHAKRABORTY

SHRI S. C. KUMAR (Alternate)

DEPUTY DIRECTOR STANDARDS
(B & S)

ASSISTANT DIRECTOR STANDARDS
(B & S)-II (Alternate)

DIRECTOR, ENGG GEOLOGY
DIVISION I

SHRI S. K. MATHUR (Alternate)

SHRI S. CANAPATHY

GENERAL MANAGER (CEMENT)

SHRI D. N. SINGH (Alternate)

SHRI S. S. GOENKA

SHRI I. P. GOENKA (Alternate)

SHRI SRINIVASAN N. IYER

DR V. G. UPADHYAYA (Alternate)

SHRI P. S. KALANI

DR KALYAN DAS

SHRI K. D. DHARIYAL (Alternate)

LT-COL KAMLESH PRAKASH

SHRI K. R. BHAMBANI (Alternate)

SHRI HARSHAD R. OZA

SHRI V. PATTABHI

SHRI A. K. GUPTA (Alternate)

DR N. RAGHAVENDRA

DR A. V. R. RAO

SHRI J. SEN GUPTA (Alternate)

SUPERINTENDING SURVEYOR OF
WORKS (CZ)

SURVEYOR OF WORKS (CZ) (Alternate)

SHRI S. A. SWAMY

Representing

National Test House, Calcutta
Directorate General of Technical Development,
New Delhi

Directorate General of Supplies & Disposals,
New Delhi

Shree Digvijay Cement Co Ltd, Bombay

Small Scale Industries (Ministry of Industry),
New Delhi

Research, Designs & Standards Organization
(Ministry of Railways), Lucknow

Geological Survey of India, Calcutta

Southern Asbestos Cement Ltd, Madras

Rohtas Industries Ltd, Dalmianagar

Sarbamangala Manufacturing Co, Calcutta

Everest Building Products Ltd, Bombay

Saurabh Construction Co, Indore
Central Building Research Institute (CSIR),
Roorkee

Engineering-in-Chief's Branch, Army Headquarters

Flowel Asbestos Products, Ahmadabad

Hyderabad Industries Ltd, Hyderabad

National Council for Cement and Building
Materials, New Delhi

National Buildings Organization, New Delhi

Central Public Works Department, New Delhi

Municipal Corporation of Delhi, Delhi

(Continued on page 11)

(Continued from page 10)

Panel for Safety in Handling and Use of Asbestos, BDC 2 : 3/P2

Convener

SHRI D. K. BISWAS

Representing

Department of Environment (Ministry of Environment and Forests), New Delhi

Members

SHEI B. K. BANERJEE

Sundaram-Abex Ltd, Madras

SHRI K. PANDARINATH (*Alternate*)

SHRI N. G. BASAK

Directorate General of Technical Development, New Delhi

SHRI P. K. JAIN (*Alternate*)

SHRI S. K. CHAKRABORTY

Small Scale Industries (Ministry of Industry), New Delhi

SHRI S. C. KUMAR (*Alternate*)

DR G. G. DAVAY

In personal capacity (7/72, Varma Nagar, Old Nagardas Road, Andheri East, Bombay 400069)

DIRECTOR

National Institute of Occupational Health, Ahmadabad

DR S. K. DAVE (*Alternate*)

SHRI S. GANAPATHY

Southern Asbestos Cement Ltd, Madras

DR H. N. GUPTA

Directorate General of Factory Advice Service and Labour Institute, Bombay

SHRI SRINIVASAN N. IYER

Everest Building Products Ltd, Bombay

BRIG D. B. KAPOOR (RETD)

Asbestos Information Centre (India), New Delhi

DR J. L. KAW

Industrial Toxicology Research Centre (CSIR), Lucknow

DR M. V. NANOTHI

National Environment Engineering Research Institute (CSIR), Nagpur

DR D. M. DHARMADHIKARI (*Alternate*)

SHRI G. K. PANDEY

Department of Environment, New Delhi

SHRI V. PATTABHI

Hyderabad Industries Ltd, Hyderabad

DR N. RAGHAVENDRA

National Council for Cement and Building Materials, New Delhi

SHRI S. RAMASWAMY

Hindustan Ferodo Ltd, Bombay

DR A. V. R. RAO

National Buildings Organization, New Delhi

SHRI D. N. MATHUR (*Alternate*)

SHRI B. K. SARAN

Directorate General of Mines Safety (Ministry of Labour), Dhanbad

DR D. K. SRIVASTAVA (*Alternate*)

SHRI NAVNIT TALWAR

Reinz Tal-Broz (Pvt) Ltd, New Delhi

SHRI A. K. SHARMA (*Alternate*)

INTERNATIONAL SYSTEM OF UNITS (SI UNITS)

Base Units

QUANTITY	UNIT	SYMBOL
Length	metre	m
Mass	kilogram	kg
Time	second	s
Electric current	ampere	A
Thermodynamic temperature	kelvin	K
Luminous intensity	candela	cd
Amount of substance	mole	mol

Supplementary Units

QUANTITY	UNIT	SYMBOL
Plane angle	radian	rad
Solid angle	steradian	sr

Derived Units

QUANTITY	UNIT	SYMBOL	DEFINITION
Force	newton	N	$1 \text{ N} = 1 \text{ kg.m/s}^2$
Energy	joule	J	$1 \text{ J} = 1 \text{ N.m}$
Power	watt	W	$1 \text{ W} = 1 \text{ J/s}$
Flux	weber	Wb	$1 \text{ Wb} = 1 \text{ V.s}$
Flux density	tesla	T	$1 \text{ T} = 1 \text{ Wb/m}^2$
Frequency	hertz	Hz	$1 \text{ Hz} = 1 \text{ c/s (s}^{-1}\text{)}$
Electric conductance	siemens	S	$1 \text{ S} = 1 \text{ A/V}$
Electromotive force	volt	V	$1 \text{ V} = 1 \text{ W/A}$
Pressure, stress	pascal	Pa	$1 \text{ Pa} = 1 \text{ N/m}^2$

AMENDMENT NO. 1 SEPTEMBER 2005
TO
IS 11768 : 1986 RECOMMENDATIONS FOR DISPOSAL
OF ASBESTOS WASTE MATERIAL

(*Page 3, clause 2.1, first line*) — Substitute 'objects' with 'objectives'.

(*Page 5, clause 6.4.1*) — Substitute the following for the existing:

'Sacks or bags which contain loose asbestos fibres shall be recycled where practical or be disposed off by melting or bagging.'

(*Page 5, clause 6.4.2*) — Delete the clause and renumber subsequent clauses.

(*Page 6, clause 6.4.3*) — Substitute the following for the existing:

'6.4.2 Where it is not practicable to recycle, and used bags have to be transported for melting, these should be put in impermeable plastic bags or air-tight containers and sealed.'

(*Page 6, clause 8.1*) — Substitute the following for the existing:

'All asbestos waste must be kept in closed containers before its transportation to the disposal point so that no asbestos dust is emitted into the environment during transportation.'

(*Page 7, clause 9.1.1*) — Substitute the following for the existing:

'The disposal of waste should be carried out at sites approved by the Competent Authority as per their stipulated guidelines. In the absence of such guidelines the provisions in clauses 9.1.2 to 9.1.10 shall apply.'

(*Page 7, clause 9.1.5, first sentence*) — Substitute the following for the existing:

'When deposited, all waste other than high density waste shall be covered with earth to an acceptable depth of 250 mm minimum as soon as possible.'

(*Page 8, clause 9.3.1*) — Substitute the following for the existing:

‘9.3.1 Broken pieces and off-cuts of asbestos-cement material shall be recycled where practical or collected and disposed off in a manner which does not generate dust.’

(*Page 8, clause 9.3.2*) — Substitute the following for the existing:

‘9.3.2 Loose swarf and dust collected from fabrication process shall be recycled or wetted. The wetted waste shall be placed in sealed impermeable bags and disposed off as given in 9.1.’