

ISBN 978-0-626-25722-4

SANS 310:2011

Edition 1

SOUTH AFRICAN NATIONAL STANDARD

Storage tank facilities for hazardous chemicals — Above-ground storage tank facilities for flammable, combustible and non-flammable chemicals

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Table of changes

Change No.	Date	Scope

Foreword

This South African standard was approved by National Committee SABS SC 1060D, *National committee for standards for dangerous goods including hazardous chemical substances and dangerous goods waste – Storage: Design and operation*, in accordance with procedures of the SABS Standards Division, in compliance with annex 3 of the WTO/TBT agreement.

This standard was published in February 2011.

Reference is made in 3.4, 4.4.2, 5.7.3, 7.1.2, 7.3.2 and 9.1.1 to the "relevant national legislation". In South Africa this means the Occupational Health and Safety Act, 1993 (Act No. 85 of 1993).

Reference is made in 4.1.1, 4.6.2.2.16 and 4.9.5.2 to the "relevant national legislation". In South Africa this means the Regulations under the National Environmental Management Act, 1998 (Act No. 107 of 1998), the National Water Act, 1998 (Act No. 36 of 1998), and the Environmental Conservation Act, 1998 (Act No. 73 of 1998).

Reference is made in 3.8 and 4.2.1.1 to the "relevant national legislation". In South Africa this means the Engineering Profession of South Africa Act, 2000 (Act No. 46 of 2000).

Reference is made in 4.2.1.1, 4.2.1.2, 4.6.2.2.1, 5.1, 5.3.3, 5.4.1, 5.4.3.1, 5.4.4, 5.5.9.1, 6.1, 7.4.3 and 8.10.1 to the "relevant national legislation". In South Africa this means the Occupational Health and Safety Act, 1993 (Act No. 85 of 1993), or the Mine Health and Safety Act, 1996 (Act No. 29 of 1996).

Reference is made in 4.8.3, 5.5.6.1 and 5.5.8.2 to the "relevant national legislation". In South Africa this means the Railway Safety Regulator Act, 2002 (Act No. 16 of 2002).

Reference is made in 4.9.1.3 and 4.9.3 to the "relevant national legislation". In South Africa this means the National Environmental Management Act, 1998 (Act No. 107 of 1998), and the National Water Act, 1998 (Act No. 36 of 1998).

Reference is made in 5.6 to the "relevant national port regulations". In South Africa this means the Instructions Governing the Lease of Sites for Reception, Storage, Handling and Distribution of Petroleum and Chemical Products, issued by the National Ports Authority.

Annexes A, B and C are for information only.

Contents

	Page
Foreword	
1 Scope	3
2 Normative references	3
3 Definitions.....	5
4 Planning and design of storage tank installations.....	6
4.1 Planning stage	6
4.2 Design and construction of storage tanks.....	7
4.3 Storage tank location	9
4.4 Storage tank facility layout (minimum safety distances).....	9
4.5 Venting of tanks	10
4.6 Tank farms and bunding	11
4.7 Roadways	14
4.8 Railway sidings	15
4.9 Drainage.....	16
5 Design and construction of plant, equipment, and buildings.....	17
5.1 General	17
5.2 Piping	17
5.3 Product hoses	19
5.4 Pumping and compressing plant (for product).....	19
5.5 Loading and offloading of bulk road vehicles and bulk rail vehicles	20
5.6 Ship loading and discharging equipment.....	22
5.7 Package filling facilities	22
6 Operations.....	22
6.1 General	22
6.2 Receiving bulk cargo from and delivering bulk cargo to ships.....	23
6.3 Loading and offloading of rail tank vehicles.....	23
6.4 Loading and offloading of road vehicles	23
6.5 Containers (transportable tanks).....	23
7 Hazard identification and risk management.....	23
7.1 General	23
7.2 Training	24
7.3 Emergency plan	24
7.4 Work permits.....	25
8 Emergency response and fire control in storage tank facilities.....	26
8.1 General	26
8.2 Tank and contents identification	26
8.3 Housekeeping and vegetation	26
8.4 Capacity of emergency response equipment	26
8.5 Emergency alarm	27
8.6 Location and marking of equipment.....	27
8.7 Emergency response drills.....	28
8.8 Co-operation with the local emergency response organizations	28
8.9 Warning notices and signs.....	28
8.10 Testing and records	28

SANS 310:2011

Edition 1

9	Protection and welfare of personnel.....	28
Annex A	(informative) Typical risk assessment methods	29
Annex B	(informative) Typical examples of vents, scrubbers and flashback arresters.....	35
Annex C	(informative) Typical examples of work permits	38
Bibliography	48

Storage tank facilities for hazardous chemicals — Above-ground storage tank facilities for flammable, combustible and non-flammable chemicals

1 Scope

1.1 This standard specifies the layout, design, installation, operation and maintenance of above-ground storage tanks and equipment used for the handling, storage and distribution of hazardous chemicals in liquid, solids and powder form, stored at atmospheric pressure.

1.2 This standard covers tanks that are intended for fixed or immovable installation of capacity greater than 1,5 m³.

1.3 This standard also covers refrigerated applications (as defined in this document) at atmospheric pressure.

1.4 This standard does not cover petroleum products and their derivatives (which are covered by the SANS 10089 series and SANS 10131), or compressed gases (including LPG and LNG).

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies. Information on currently valid national and international standards can be obtained from the SABS Standards Division.

2.1 Standards

AD 2000 – Merkblatt A1, *Safety devices against excessive pressure – Bursting safety devices.*

API RP 579-1/ASME FFS-1, *Fitness-for-service.*

API STD 620, *Design and construction of large, welded, low-pressure storage tanks.*

API STD 650, *Welded tanks for oil storage.*

ASME RTP-1, *Reinforced thermoset plastic corrosion-resistant equipment.*

ASTM D 1998, *Standard specification for polyethylene upright storage tanks.*

BS 2654, *Specification for manufacture of vertical steel welded non-refrigerated storage tanks with butt-welded shells for the petroleum industry.*