Introduction

As in other industries, all branches of agriculture are becoming increasingly pressurised to ensure greater environmental protection and safety with regards to agricultural chemicals. Government legislation now shifts responsibility to the user, and sugarcane growers should be aware of the heavy fines that can be incurred from the misuse of pesticides. This information sheet was compiled using guidelines set by the Agricultural and Veterinary Chemicals Association of South Africa (AVCAS), and is intended to provide basic instruction on the storage of pesticides. It in no way replaces the need for complying fully with label instructions.

Where to locate the store

Ideally, the chemical store should be a separate building, or at least a room that is sealed off from other rooms in the building. Some products may be volatile, so make sure the store is not located near animals or animal feed, or in an area that children are likely to frequent.

Locate the store near a water source, but where the danger of flooding is unlikely. If water has to be used to extinguish a fire, take note of the direction of water flow, as it is likely to be highly contaminated with chemical. The store should not be in the vicinity of a stormwater grid.

How to construct the store

The store should preferably have walls, and a screed concrete floor with a slope to a low point with a valve. Spillages or fire fighting water would then be directed to the low point, and should be collected in a sump with constructional dimensions of at least 1 m³ per 20 m² of floor space. To ensure minimal loss of spillage or contaminated water, the door should be raised (bunded) to a height of 15 cm and the floor-to-wall joint made watertight with an epoxy paint.

Stores should be able to contain spillage, and should have provision for the collection of fire fighting water.

Windows should be weatherproof and large enough to provide adequate lighting for accurate reading of labels.

Roofing should be completely leak free, and asbestos or IBR sheets are suggested for this purpose.

Sufficient ventilation should be provided by locating air vents about 20 cm above the floor and also near the roof.

Stores should be adequately ventilated.
Washing facilities with running water should be available close by, and a shower is highly recommended. Supply soap and towels.

Ensure the security of the store with heavy duty locks and burglar bars. If the store is a separate building, fence it off. Use pictograms (skull and crossbones) to warn others of the danger of hazardous chemicals.

**Equipment**

Equip the store with a suitable table. Measuring equipment such as a scale, flasks, beakers, funnels and buckets should be kept in the store.

A quantity of sand, a scoop and waste receptacles for spillage should be part of the equipment. Fire fighting equipment such as dry powder extinguishers and a water hose should be supplied.

*Fire extinguishers, water and sand or earth must be available in all stores.*

**Storage**

Do not store containers on the floor. Drums, etc should be stacked on pallets so that they are above the level of the base of the door (15 cm).

Do not stack plastic containers more than two tiers high.

Remember to always use the oldest products first and to keep each chemical in its original container. Labels should be kept legible.

*Avoid damage caused by crushing.*

Segregate chemicals into four sections. Herbicides should be in a separate section, with the more volatile products specially sealed off.

Highly toxic products such as Temik should be in a separate section, as should flammable substances. Insecticides and fungicides should also be separated from other chemicals.

*Always keep dangerous chemicals in a safe place.*

*Read all product labels carefully!*

Pesticides should be stored on pallets.

December 2003

Some of the illustrations in this Information Sheet have been reproduced from Agricultural Chemicals and Stock Remedies published by the Agricultural and Veterinary Chemicals Association of South Africa.