

BEST MANAGEMENT PRACTICES MANUAL

REVISED SECOND EDITION

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Introduction

Revisions to the second edition of the cotton industry's Best Management Practices Manual ("Manual") have been made with an emphasis on improving the useability of the document. A general release to cotton growers is planned in October 2000. A short summary of the changes made to the original Manual follows, including the proposed further new modules and developments.

Changes

General

Each individual topic (eg application of pesticides) is now dealt with in the one location in the Manual, rather than being separated between the self-assessment worksheets and the best practice booklets. The page layout of each section is also now consistent throughout the manual. The best practice booklets and self-assessment worksheets have also been modified so that they are more tightly integrated, for example:

- The self-assessment worksheets now include more details about the issue under consideration, as well as including the relevant objective for that issue.
- Colour coding is used to identify individual sections, with each module (eg application of pesticides, storage and handling of pesticides) each having a separate colour.
- Highlighted, coloured text is used to link the information contained in the self-assessment worksheets with the information in the best practice booklets.

The introductory comments and guidelines for using the Manual have been placed in a separate, small booklet that can be referred to while using the Manual. This booklet also includes information to assist the transition from edition 1 to edition 2.

Application

The application booklet from the first edition, and the “Guide to developing a spray and drift management plan¹” booklet developed last year in response to the new endosulfan label have been integrated into the one booklet for application management.

Storage & Handling

The storage and handling section now includes a best practices booklet. It is based on:

- the relevant state Codes of Practice for the storage and use of farm chemicals
- the relevant state legislation;
- the relevant Australian standards; and
- general advisory information available for the storage and handling of farm chemicals.

The self-assessment worksheets have been updated to reflect this new best practice booklet.

Integrated Pest Management

The only substantial changes to this section have been the addition of the area-wide management concept, and detailed referencing to the IPM guidelines developed by Lewis Wilson and Robert Mensah.

Farm Design & Management

Dryland-specific management issues have been added to this section to complement the irrigation specific issues contained in the first edition.

Farm Hygiene

This is a new module, developed to help address the Fusarium wilt issue in particular, but also to address general farm hygiene. It is based on the information pamphlets published over the last few years by the various relevant research organisations.

¹ Note that the second edition refers to a “pesticide application management plan” instead of a “spray and drift management plan”.

Risk Assessment (Hazard Analysis)

In order to better match the terminology used in other related areas (occupational health and safety for example), the hazard analysis section is now called “risk assessment”. The focus of this section has been changed from listing the activities on a cotton farm, to looking at the various potential hazards present on a cotton farm, and listing some of the controls available to manage those hazards.

A number of difficult issues are presented in the risk assessment section. On the one hand, it is important that the process of risk assessment be easy to “use”. On the other hand, it needs to be a rigorous process. However, as the ease of use is increased, the rigour of the process tends to decrease, and a balance between the two needs to be struck. One solution that will be investigated is the development of a specific ‘risk assessment’ training course. Such a course would have a number of potential benefits, including

- addressing the ease of use versus rigour dichotomy
- accessing farmer training funding for growers who undertake the course
- enhancing the consistency of the Manual with other similar schemes and programs potentially applicable on a cotton farm
- providing the basis for any progression towards environmental management systems

Other Issues

Electronic version

There are two distinct drivers for an electronic version of the Manual:

1. To provide access to reproducible copies of the various blank forms (eg the self-assessment worksheets), as well the general information contained in the Manual
2. To provide an interactive method of using and completing the Manual

These two drivers however have quite different resource requirements. The former issue could also be addressed by developed ‘tear-off pads’ of blank sheets, whilst the second issue has substantial development costs associated with it.

While no firm commitment has been made to the development of an electronic version of the Manual, it is highly likely that the new second edition of the Manual will be available in 'portable document format', either from a central location or on a CD-ROM, thus providing the benefits noted in 1. above.

New Modules

The following new modules are planned over the next 1—2 years.

Occupational Health & Safety

This module will be developed by the Australian Centre for Agricultural Health & Safety in Moree, and will be based on the "Managing Farm Safety" program currently in place. It is due for completion in June 2001.

Petrochemical Storage & Handling

This module is due for release in draft form by the end of 2000.

Water management

This module will seek to consolidate the information being generated by the various research efforts currently underway in the cotton industry, and other irrigation industries. Involvement of the relevant State agencies is also being sought to help ensure that the water management/planning processes being developed in New South Wales and Queensland can be addressed through the BMP program.

Environmental Management System

A feasibility study on the development of the Manual into a more broadly based environmental management system ("EMS") is currently being undertaken by the author with funding from the Murray-Darling Basin Commission and the Cotton Research & Development Corporation. This feasibility study is seeking to ascertain the practical issues involved in enhancing the Manual into a more broadly focussed environmental management system² (ie addressing issues other than pesticides).

The study is looking at both the theoretical requirements and the practical and feasibility requirements of developing the Manual into a broader environmental management system. In particular, a detailed survey (largely face-to-face) is being conducted with cotton farmers, in order to gain a better understanding of the current on-farm situation as it relates to the various requirements of an EMS. The survey is being conducted on a broad range of farms, and the study is due for completion in October. Once the study is finalised there will be a process of consultation with cotton growers to discuss the recommendations of the study before any final decision is made.

Acknowledgments

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² The current structure of the Manual is consistent with a simple environmental management system.

