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SRDC Research Project final report
Farm health and safety tools for the Sugar FMS framework

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SRDC Research Project Final Report

Title of the Project: Farm Health and Safety tools for the Sugar FMS framework

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Executive Summary:

The main issue being addressed by this project was a practical need for workplace health and safety (WHS) information specific to the sugar industry, a complex issue only lightly addressed within the environmentally focussed Sugar FMS program. Regional CANEGROWERS from Bundaberg and Burdekin in particular recognised this issue and had been accumulating relevant material for some time. This project enabled them to compile this information into a format compatible with the broader FMS materials, incorporation of the material by Agrecon, with testing and feedback provided by growers.

Agrecon, the developers of the Sugar FMS Tools web site, coordinated CANEGROWERS Burdekin and Bundaberg the draft WHS materials. This included improved information for WHS across the range of FMS components. The new draft material was reviewed by the Australian Centre for Agricultural Health and Safety (ACAHS), who were independently contracted by Rural Industries Research and Development Corporation (RIRDC) to add similar material in a different format to the Farmsafe Australia web site. Agrecon then edited the resulting material for consistency with the broader FMS Tools web site, including modifications resulting from the independent review of the Sugar FMS program.

The draft materials within the Sugar FMS Tools were then evaluated and feedback provided by Farmsafe Queensland, along with growers organised by CANEGROWERS Burdekin and Bundaberg and other representatives across the industry. The final set of agreed materials are now available within the Sugar FMS Tools web site, accessible via www.srdc.gov.au or www.sugarcane.net.au.

The following outputs were developed from this project:

- New/enhanced records and fact sheets for WH&S-related legislation, best management practices, risks, indicators and guides
- New WH&S-related questions added to the Review Questionnaire
- New templates and instructions for WH&S-related forms, reports, farm policies and other documents
- Sugar FMS Tools upgraded to include new materials
- Potentially improved cane grower knowledge and skills related to WH&S
- Potentially improved confidence in growers that WH&S issues are manageable
- Potentially improved access to local WH&S training courses and support services

The following outcomes are expected from this project:

- Greater levels of legal compliance by cane growers
- Greater adoption of FMS by cane growers due to broader content and potential benefits
- More efficient and economic cane production through reduced accidents and resultant down time
- Healthier communities through reduced farm accidents
- Improved accountability of the sugar industry through better coordinated information exchange
- A clear demonstration of grower and industry commitment to the sustainability of cane farming
- Greater assurances for banks and insurance companies, potentially reducing premiums

The major impact of this project is that a complex issue has been simplified and incorporated within a broader farm management framework which is more likely to be promoted by industry representatives and hopefully more easily understood and adopted by growers. The adoption rate of the materials provided is difficult to estimate following the delay in the Sugar FMS training program, however it is assumed that with the Sugar FMS program now being enhanced and better supported across the industry that when the training program begins in 2007 there will be greater uptake by growers. It is expected that a large number of growers who undertake even the basic level of FMS assessment will soon discover that their operations are deficient in relation to WHS. This raised awareness, along with subsequent further training and systems implementation, should contribute to a reduction in WHS incidents that are a major social and economic problem across the industry.

**Background:**
As part of the FMS001 project a broad range of Farm Management System (FMS) information was developed for the new online FMS Tools web site. This included lists of legislation, codes of practice, risks, best management practices and guides, along with templates for a review questionnaire, farm policies, risk assessment, action plans and farm operations manual. There was some material related to farm health and safety, however the focus of the Sugar FMS program and the ongoing enhancement of fact sheets has been environmental due to community pressure and the funding being sourced from the NHT Pathways to EMS program.

At the simplest level of FMS compliance, that is compliance with legal obligations, it has been argued that while some cane growers may be in breach of environmental laws most will likely be in breach of workplace health and safety laws. Regional CANEGROWERS from Bundaberg and Burdekin in particular recognised this issue and had been accumulating relevant material for some time. Unfortunately they did not have the resources to compile the material into a useful form in the near future, especially in the timeframe of the upcoming FMS awareness and training program. It was recognised that there was excellent potential to enhance the safety-related material already developed and help balance the broader FMS approach desired.

SRDC was also involved in the Farm Health and Safety Joint Research Venture coordinated by RIRDC. The program outputs available through the Farmsafe Australia web site included industry-specific material for many rural industries, but not the sugar industry. The materials developed through a suspended SRDC/RIRDC project was identified for use in this project, and outcomes from this project were contributed to a reinitiated RIRDC project that commenced after this project had started.

**Objectives:**
1. Provide cane growers with the relevant information and tools required to undertake a risk analysis related to WH&S and draft WH&S reports within a single package that is readily accessible.
This objective has been met with the addition of WH&S materials within the existing online Sugar FMS Tools framework. The risk analysis process has been simplified with a supplementary guideline added for the specific requirements of health and safety risks. Relevant information provided includes 11 key WH&S risks for sugarcane production farms determined by CANEGROWERS, plus associated lists and fact sheets for best management practices, guides and legislation. The list of standard FMS report templates, included under the “Forms” section of the FMS tools, has been greatly expanded through this project.

2. Minimise data entry and WH&S report preparation/maintenance time by integrating the information and tools required within the broader FMS program.

This objective has been met with the addition of WH&S materials within the existing online Sugar FMS Tools framework. Whilst the format of the risk assessment approach is different to that provided through the Farmsafe web sites (e.g. www.farmsafe.org.au, www.farmsafe.com.au), where risks, controls, assessments and actions are squeezed onto the same page, it is consistent with the existing FMS structure that applies across a range of management issues. A new management issue category, “Health & Safety”, has been added to the FMS Tools to help organise the risks, best management practices, etc.

**Methodology:**

Agrecon was contracted by SRDC to incorporate enhanced WHS material within the Sugar FMS Tools web site. Agrecon specified the material that needed to be developed and the formats to be compatible with existing FMS materials. Investigators from Bundaberg and Burdekin CANEGROWERS were then sub-contracted to combine and enhanced their draft WH&S materials to develop a set of sugar-specific resources compatible with the Sugar FMS program. This included both generic and regionally-specific material, although the latter will be modified or supplemented for other regions as appropriate beyond the scope of this project.

After commencement of this project ACAHS was independently contracted by RIRDC to complete a previously suspended SRDC/RIRDC project to develop sugarcane material for the Farmsafe Australia web site. The new draft material developed by CANEGROWERS was reviewed and edited by ACAHS and has contributed to the material provided to Farmsafe. Agrecon then edited the resulting material for consistency with the broader FMS Tools web site, including related modifications resulting from the independent review of the Sugar FMS program.

Where possible the materials are applicable across the industry, however it is recognised that there is some material specific to the state of Queensland. The addition of regional material relevant to NSW and WA was not possible within the scope of this project but will hopefully be addressed as part of the ongoing maintenance of the Sugar FMS program.

After the draft materials were incorporated within the Sugar FMS Tools they were then evaluated and approved in principal by Farmsafe Queensland. CANEGROWERS Burdekin and Bundaberg organised growers in those regions to evaluate the new materials and Agrecon similarly coordinated evaluation by other interested industry representatives.
The final set of agreed materials are now available within the Sugar FMS Tools web site, accessible via www.srdc.gov.au or www.sugarcane.net.au.

**Outputs:**
The work carried out by Bundaberg and Burdekin Canegrowers was received by Agrecon and incorporated into the online tools within the Sugar FMS web site.

The following outputs were developed from this project:

- New/enhanced records and fact sheets for WH&S-related legislation, best management practices, risks, indicators and guides
- New WH&S-related questions added to the Review Questionnaire (not yet implemented due to ongoing editing as part of FMS003)
- New templates and instructions for WH&S-related forms, reports, farm policies and other documents
- Sugar FMS Tools upgraded to include new materials
- Potentially improved cane grower knowledge and skills related to WH&S
- Potentially improved confidence in growers that WH&S issues are manageable
- Potentially improved access to local WH&S training courses and support services

**Intellectual Property:**
A wide range of material from various sources have been used to develop the project outcomes, and these have been referenced as appropriate. SRDC holds the IP rights to the material produced for the Sugar FMS Tools and the three collaborating research organisations have an unrestricted licence to use this IP. Agrecon will retain all other IP rights associated with the AgrePRECISE system.

**Environmental and Social Impacts:**

The following impacts are expected from grower awareness and adoption of the outputs of this project:

- Greater levels of legal compliance by cane growers
- Healthier communities through reduced farm accidents
- Improved accountability of the sugar industry through better coordinated information exchange
- A clear demonstration of grower and industry commitment to the sustainability of cane farming

**Expected Outcomes:**

The following outcomes are expected from this project:
Greater levels of legal compliance by cane growers

Greater adoption of FMS by cane growers due to broader content and potential benefits

More efficient and economic cane production through reduced accidents and resultant down time

Healthier communities through reduced farm accidents

Improved accountability of the sugar industry through better coordinated information exchange

A clear demonstration of grower and industry commitment to the sustainability of cane farming

Greater assurances for banks and insurance companies, potentially reducing premiums

The costs of implementing some of the outcomes of this project, such as the business management forms, are relatively minor considering their accessibility and simple format. The process of reading the best management practices, or having them presented in a training course, is also low cost. However, there is good potential for benefits to well outweigh costs from accidents or being fined even from adopting some of the simpler outcomes.

Due to the short nature of this project it is difficult to demonstrate any changes as an outcome of the project. This could perhaps be reviewed as part of the FMS005 project that is more broadly assessing the impact of the Sugar FMS program.

Future Research Needs:

The main deficiency in the outputs from this project were that it did not incorporate regional information from NSW and WA, even though these areas together make up only a small fraction of the Australian sugar industry. There may be some input provided through ongoing regional reviews as part of the FMS003 project.

There will also need to be some maintenance of this material, although close liaison with ACAHS, Farmsafe Australia and Farmsafe Queensland should alert SRDC to major changes that need to be addressed (such as new or revised legislation).

Recommendations:

The following actions are recommended:

- An ongoing budget be allocated for maintenance of the material, probably as part of a broader Sugar FMS Tools maintenance program
- Input from NSW and WA be sought to ensure that the material is relevant to sugarcane production in these
states

- WHS be actively promoted as a component of the broader Sugar FMS program, which should enhance the training and adoption of outcomes by growers

Appendices:

Material produced by this project is published online in the Sugar FMS Tools database within the
www.sugarcane.net.au and SRDC web sites.

Appendix 1
Feedback from Growers through Canegrowers Burdekin

A review of the FMS Website grower trials showed the grower participants believe the web site to be user friendly. It was easy to navigate the areas they wished to access. Some of the self assessment questions were a little ambiguous and need clarification. I believe you took note of these on the day.

A positive point was the selection of a district based data set. The growers wanted to be compared to other growers in their district and are able to compare their levels of compliance on the day. All commented on their newly discovered non-compliance (“thought I’d rate better than that.”)

The growers commented that the guidance notes were easy to understand (plain English) and if they required more information there were links to other information sources. With reference to the legislation guide notes I believe that a few relevant Acts were omitted.

The Business section should contain the following Acts:

- Workers’ Compensation and Rehabilitation Act 2003 / Regulations 2003
- Weapons Act 1990      (Maybe this could be included in the Pest & Disease Section as well)
- Dangerous Goods Safety Management Act 201 / Regulations 2001

The Health and Safety section:


Appendix 2
Feedback from Growers through Canegrowers Bundaberg