

Operations and Maintenance Manual



THIS CHECKLIST

This is a minimum list of components which constitute an effective Operations and Maintenance Manual for any particular irrigation system. A number of points should be remembered when putting the manual together, these include:

- **The manual must be user friendly**
 - The operations and maintenance manual must be kept in a place which is accessible to the people who are involved with the irrigation system, places to consider include the farm office, pump shed or smoko room.
 - There must be clearly marked sections which should include but is not limited to: Safety, The Irrigation System and Equipment.
 - Thought must be given to the format of the manual.
- **The manual is a living document**
 - It is everyone who is involved with the irrigation system to contribute to the operations and maintenance manual. All aspects from hazard identification to completing maintenance schedules is the responsibility of all staff.
 - The manual not only has value in the present season but trends are usually illustrated by looking at historical information and can give the operator an idea of maintenance needs and potential problems to be addressed ahead of time. This ensures the system is operational at critical times.
 - A regular review of the document must be scheduled to check the information for relevancy, update any procedures and review any trends which become obvious.
- **Each manual is unique**
 - The contents of the operations and maintenance manual is not only unique to each farm and system but also to the people who put it together, use it and review it. This is to ensure that the manual is used by the people who need it.

The checklist overleaf has some items which may be included in an operations and maintenance manual. This is a guideline and can be used to populate each unique document.

OTHER RESOURCES

Manufactures' Information

Every component within the system should be supplied with a manual or other supporting information. Read it and follow instructions. This information will be specific to the equipment installed in your scheme and will include additional information such as troubleshooting guidelines.

Irrigation New Zealand Checklists

Irrigation New Zealand has checklists for the water supply system (intakes, pumps and mainlines) and for different irrigation types. See www.irrigationnz.co.nz. These checklists are for irrigators to use pre-season to check the state of their irrigation systems

Calibration Guidelines

IRRIG8Lite software and IRRIG8Quick System Calibration Guidelines and Worksheets for Drip Micro irrigation systems can be downloaded from www.pagebloomer.co.nz/resources.

RECOMMENDATIONS AND CHECKLIST

Checks completed by: _____

Signature: _____

Date: _____



CONTENT

Section

Documents

Safety

- ☐ Hazard Identification
- ☐ Procedure
- ☐ Hazard Identification Record
- ☐ Incident Report Procedure
- ☐ Incident Report Records
- ☐ Emergency Shut Down Procedures for pumps and machinery
- ☐ Other

Irrigation System

- ☐ Design Specification Sheet (What the system is designed to do)
- ☐ Commissioning Report (What the system actually does)
- ☐ Annual Evaluation Reports (What the system continues to do)
- ☐ Annual Pump Evaluation Reports.
- ☐ IrrigationNZ Checklists Water Supply to Irrigator
- ☐ Other

Equipment

- ☐ Manufacturers' Information for all Components
- ☐ Pumps: Operation Manual, Performance Curve, troubleshooting guide
- ☐ Electric motor information
- ☐ Irrigator manual including operating procedures, shutdown and troubleshooting guide
- ☐ Control unit, all relevant information
- ☐ Other