EMSFEP-001 – FEP Process

Contents

1 Introduction

A Farm Environment Plan is a farm-specific risk assessment tool used to identify activities which have the potential to cause environmental harm. Once these activities are identified, the plan sets out the actions and timeframes the farmer will undertake to minimise these risks and these actions are audited to ensure their implementation.

Farm Environment Plans are living documents and need to be updated regularly to ensure farm operators continually identify opportunities for improvement to reduce their environmental impact, improve their profitability and understand the future challenges coming their way to make strategic decisions to ensure their long-term sustainability.

This SOP outlines the processes undertaken to update and produce Farm Environment Plans for properties managed under the MHV Water Audited Self Management Programme (ASM).

2 Purpose

The purpose of this document is to ensure any person responsible for managing any aspect of on-farm practices which can impact on water quality are aware of the environmental risks on their property and what actions are needed to mitigate those risks.

The intent of a Farm Environment Plan and their updates is to:

- Promote continuous improvement of on-farm environmental management for all key personnel on a MHV Water shareholding property;
- Ensure MHV Water Shareholders and their staff and advisors are aware of their environmental requirements and responsibilities;
- Ensure MHV Water Shareholders and their staff are up to date with MHV Water's objectives and requirements;
- Capture accurate farm data to assist on-farm risk identification and scheme management of the ASM programme; and
- All Shareholders have a Farm Environment Plan to comply with the conditions of CRC185857.

As a minimum, a Farm Environment Plan is required to comply with the following conditions of MHV Water's resource consent CRC185857:

Condition 12:

b. *implement environmental objectives and targets for all Properties described in Condition 4(a) and (b) to ensure:*
   i. *this resource consent CRC185857 is complied with;*
   ii. *Properties provided for in Conditions 4(a) and (b) implement HPZ gmp, and in the case of Properties provided for in Condition 4(a), the specified further reductions to achieve nitrogen loss reduces over time; and*
   iii. *Properties required to hold a Farm Environment Plan are achieving or working towards the achievement of an 'A' Audit.*

c. *ensure the Consent Holder has robust audit and reporting procedures in place to ensure a high level of compliance with Farm Environment Plans, Schedule 24a Plans or Certified Freshwater Farm Plans (as might apply);*

d. *have appropriate procedures in place (through the EMS and each Farm Environment Plan, Schedule 24a Plan or Certified Freshwater Farm Plans) to ensure the identification of effects on neighbouring sensitive receptors are appropriately avoided, remedied or mitigated;*

Condition 13:

b. the management of nutrient losses on Properties (which are not Authorised Properties) through a Farm Environment Plan or Certified Freshwater Farm Plan (as might apply) and audit process in accordance with the conditions of this resource consent.

Condition 18:

For all Properties where farming activities are undertaken, and unless Condition 10(a) applies, the Consent Holder shall ensure that:

a. Properties provided for in Condition 4(a) and (b) maintain a Farm Environment Plan in the form set out in Schedule CRC185857C, as may be amended following agreement from the Regional Leader - Monitoring and Compliance, Canterbury Regional Council;

b. Properties provided for in Conditions 4(c) and 9(b) maintain a Schedule 24a Plan in the form set out in Schedule CRC185857D, as may be amended following agreement from the Regional Leader - Monitoring and Compliance, Canterbury Regional Council, provided that should the use of a Certified Freshwater Farm Plan be required or available on the basis it is certified and available for use then the Consent Holder may, as may be mutually agreed with the Regional Leader - Monitoring and Compliance, Canterbury Regional Council elect to use such a plan in place of the plans provided for in Conditions18(a) and (b).

Condition 21:

(e) as a part of the Farm Environment Plan, Schedule 24a Plan or Certified Freshwater Farm Plan (as might apply) for any Property located within the CDWPZ, there shall be additional requirements:

i. to include an objective that seeks to ensure land located within the CDWPZ is managed to prevent deterioration of drinking water from activities occurring on that land; and

ii. for the Property Owner to maintain records to demonstrate all agreed minimum actions are being implemented,

3 FEP Dashboard

Farm Environment Plans for MHV Shareholders are held in the FEP Dashboard which is an Online portal owned jointly by Ashburton Lyndhurst Irrigation Limited and MHV Water Limited. The FEP Dashboard can be accessed here;

https://onlinefep.co.nz/

Lincoln Agritech manages any development or required changes (contact Phil Dewar 021 104 2009 phil.dewar@lincolnagritech.co.nz).

4 New Farm Environment Plans

Any new Farm Environment Plan is prepared following the same process as detailed below, however will be completed prior to the delivery of MHV Water and then annually updated thereafter. Any FEP

Implementer for a new FEP is to attend the MHV Water New Manager's workshop within 12 months of joining MHV Water.

5 Communications

All face-to-face interactions must be in adherence with MHV Water health and safety or biosecurity policies and procedures.

All external group email communications or handouts to MHV Shareholders must be signed off by the CEO or their agreed delegate.

6 FEP Procedure

6.1 Promotion of Continuous Improvement

Farm Environment Plans are first and foremost a tool to assist farmers with implementing continuous improvement. Continuous improvement is the hunt for the next improvement they would make and is applicable to all farms (no matter how well they are already performing). Opportunities for continuous improvement could relate to labour management, genetics, productivity, profitability, resource use efficiency or greenhouse gas emissions. In many instances, an improvement one area can provide benefits or disadvantages to another, and it is important to coach the farmer to identify holistic solutions to deliver the best "bang for buck" for the property.

6.2 FEP Update Attendees

FEP Updates are a critical time to ensure everyone on a property is up to speed with the environmental expectations at a scheme, regional and national perspective. Attendees from the property should include all of the following, if possible, to ensure everyone with influence on-farm receives the same key messages during the update:

- Shareholder, property owner
- Leasee
- Property manager(s)
- Property FEP Implementer(s)[1]
- Advisor(s) to the property
- Other, as required

6.3 Update FEP Dashboard

The FEP Dashboard is has been approved by Environment Canterbury as meeting Schedule 7 requirements of the Land and Water Regional Plan and Schedule CRC185857C of resource consent CRC185857.

The FEP Dashboard covers the following management areas:

- Irrigation
- Nutrients
- Soils
- Point Source

[1] An FEP Implementer is any person on the property responsible for one or more of the key management areas, such as irrigation, effluent or fertiliser use.

- Effluent
- Waterbodies
- Water Use
- Sensitive Receptors
- Farm Activity Variation Applications

The Industry-agreed Good Management Practices relating to water quality is a useful resource that can help when updating the practices under each management area.

6.4 FEP Area

A farm environment plan is to be prepared, updated, and audited for each independently managed operating unit. Examples of an independently managed operating unit include:

1. One shareholding with two dairy sheds, with each dairy shed platform overseen by a sharemilker or manager who is primarily responsible for making day to day decisions for their platform = 2 FEPs
2. One shareholding with two dairy sheds, where stock are grazed and milked on both platforms and overseen by the same manager = 1 FEP
3. Two or more properties and/or shareholdings (under one or more ownership) managed by the same person and where stock are grazed over all properties, or crop rotations are managed over all properties = 1 FEP

The FEP can include multiple properties or parcels of land under different ownership which may or may not be contiguous but managed as a single farming entity within the Hekeao/Hinds catchment.

6.5 Risk Assessment

The environmental risk assessment identifies the key risks which are present on the property based on the farm system, infrastructure, and physical properties of the farm. For each management area, complete the risk assessment in accordance with EIPFEP – 002 Risk Assessment.

6.6 Authorised Land Use

An Authorised Land Use[2] details the farm system which can operate on the property without further approval from MHV Water through the Farm Activity Variation Application process.

All properties should have an Authorised Land Use (ALU) prepared for them by the start of the 2022 FEP Update season. During the FEP Update, the operator should be familiar with the ALU parameters, what they mean and what they need to do if they want to change higher risk activities.

6.7 Sensitive Receptors

Resource consent CRC185857 requires MHV Water to ensure effects on sensitive receptors are avoided, remedied, or mitigated. A sensitive receptor is defined as:

Areas of wetland, surface water bodies and riparian areas, sites of cultural significance (as may be further defined in consultation with Te Rūnanga o Arowhenua) and, in the case of any land located within a Community Drinking Water Protection Zone, the Community Drinking Water Supply.

Properties with a sensitive receptor need to be aware of the additional obligations which relate to their property and understand what they can and cannot do within the sensitive area.

[2] Or Permitted Land Use if applicable

6.7.1 Identification

During the FEP Update, ensure the following layers are visible on QGIS to identify if there are any sensitive receptors on or adjacent to the property.

- Sensitive Areas
- Hydrology
- Canterbury Springs

If there are no sensitive receptors on the property, no further action is required.

If there is a sensitive receptor on the property, ensure adequate actions are included in the FEP to avoid, remedy, or mitigate effects on the receptors as detailed in the following sections.

6.7.2 Farm Activity Variation Applications

If a property has a sensitive receptor, it is essential the operators understand that any Farm Activity Variation Application (FAVA) is considered "High Risk" as a minimum for them.

6.7.3 Sites of Cultural Significance

Properties with Sites of Cultural Significance[3] (SoCS) need to be aware of the site, understand why the site is significant and what it means for them. Sites of Cultural Significance differ from mahinga kai values target as they relate to a particular area of importance. Sites include:

- Traditional harvest locations
- Wāhi tapu sites (e.g. urupa)
- Waterways and their margins
- Common travel routes and camping sites

Where a SoSC is identified on a property, a risk assessment needs to be completed in accordance with EIPFEP – 002 FEP Risk Assessment, with the resulting actions to be incorporated into the Sensitive Receptors section of the Farm Environment Plan.

6.7.4 Waterways

All waterways, drains, springs, or wetlands are defined as a sensitive receptor. For existing activities. implementation of GMP is generally sufficient to achieve the requirements of the resource consent. Additional information will be required if they want to make a change to their farm system which requires a FAVA.

6.7.5 Community Drinking Water Protection Zones

Shareholder properties which include a Community Drinking Water Protection Zone have an additional objective to meet over and above that specified in Schedule CRC185857C of the consent, which requires:

i. to include an objective that seeks to ensure land located within the CDWPZ is managed to prevent deterioration of drinking water from activities occurring on that land; and

ii. for the Property Owner to maintain records to demonstrate all agreed minimum actions are being implemented,

[3] As identified by Te Rūnanga o Arowhenua in QGIS.

The actions required by the property to achieve this target were identified through the property's Community Drinking Water Protection Zone Risk Assessment, a copy of which is saved. The risk assessments are reviewed at least once every 3 years. The FEP Operator will be audited against these actions to ensure they are being implemented.

During the FEP, the actions which came from the risk assessment should be discussed with the FEP Implementer to ensure they are able to demonstrate actions are being implemented and included in the Sensitive Receptors section of the FEP.

6.8 FEP Map Updates

Farm maps are to include (as a minimum):

(a) The boundaries of the property or land areas comprising the farming enterprise.

(b) The boundaries of the main land management units on the property or within the farming enterprise.

(c) The location of permanent or intermittent rivers, streams, lakes, drains, ponds, or wetlands.

(d) The location of riparian vegetation and fences adjacent to water bodies.

(e) The location on all waterways where stock access or crossing occurs.

(f) The location of any areas within or adjoining the property that are identified in a District Plan as "significant indigenous biodiversity".

(g) The location of any critical source areas for phosphorus or sediment loss for any part of the property including any land within the High Runoff Risk Phosphorus Zone.

(h) The location of flood protection or erosion control assets, including flood protection vegetation.

(i) Public access routes or access routes used to maintain the rivers, streams, or drains.

(j) Sensitive Receptors

All farm maps are reviewed and updated as required at each FEP Update.

Changes to the FEP boundary, irrigation, or farm system type change how nutrients are calculated for compliance reporting. Any changes to the FEP boundary, farm system type, winter grazing area or irrigation changes need to be traceable and recorded, and sufficient information will need to be provided to ensure the changes are accurate. All updates to the maps used for compliance reporting are to be approved by the Environmental Manager or their delegate. Once QGIS has been updated with changes, produce new maps in accordance with EIPFEP – 003 (FEP Mapping) with the changes, save into the farm's folder under the applicable season the change was made and replace the maps in the FEP Dashboard with the most up to date maps.

6.9 Additional Support

Provide any additional support or guidance during the time of the one-on-one. This may include:

- Guidance on new technology or resources which assist with reducing on-farm environmental risks
- Winter Grazing Plans

- Dairy Effluent Storage Calculation
- Irrigation Management Plan & SOP
- Effluent Management Plan & SOP
- Irrigation Scheduling options
- MHV Water Handouts
- Irrigation calibration assessment options
- Guidance on requirements of National Environmental Standards for Freshwater 2020
- He Waka Eke Noa obligations, options to reduce GHG emissions
- Upcoming workshops that may be useful
- Information on FAVA process, Land sales or Leases

6.10 FEP Report

Once the FEP one on one is completed and all applicable maps are updated, a draft FEP report shall be provided to the shareholder and all other identified interested parties. If feedback is provided, update the FEP as required. All updated FEPs are to be saved in the farm's folder under the applicable year.

6.11 FEP Follow Up Actions

During the follow up it is also important to ensure the following is actioned if applicable:

- **Change of Ownership/Lease/Implementer:**
  These changes trigger an audit for that season. Ensure that the shareholder audit information is updated on Smartsheet, a nutrient budget is completed, and the shareholder's details are added to the auditing Excel spreadsheet.
- **Potential or retrospective FAVA:**
  Email FAVA information on how to apply and criteria to the shareholder and make a note in the FAVA Smartsheet.
- **Bucket test register:**
  If the shareholder showed interested in getting help to complete their bucket tests, make sure to add their details to the Bucket Test Register or provide information on how to complete a test.
- **Change in irrigation/FEP Boundary/Land use:**
  If there have been any mapping changes for irrigation, FEP boundary or land use, let the Environmental Manager know so maps can be updated.

7 Remediation and Response Plan

Where a Remediation and Response Plan recommends additional action is undertaken in the Farm Environment Plan, MHV Water will review and update the Farm Environment Plan template and incorporate the recommendations at the next Farm Environment Plan update.

8 Relevant Documents

Document
Resource Consent CRC185857
MHV Water Environmental Management Strategy
Industry-agreed Good Management Practices relating to water quality
EMSNM – 002 FAVA Process
EMSSR – 001 Community Drinking Water Protection Zones
EMSSR – 002 Sensitive Receptors

EIPFEP – 001 FEP Procedure
EIPFEP – 002 FEP Risk Assessment
EIPFEP – 003 FEP Mapping
EIPFEP – 004 FEP Dashboard Shareholder Management
Dairy Effluent Management Guidance for FEP Auditors (June 2021)
Irrigation Guidance for FEP Auditors (June 2021)
Soil Management Guidance for FEP Auditors (June 2021)

9 Document Management Control

Version	Date Reviewed	Purpose / Amendments	Section Reviewed	Reviewer	Status
1.0	May 2022	Development of EMSFEP - 001	All	Sarah Hayman and Eva Harris	FINAL DRAFT
1.0	13 May 2022		All	Mel Brooks	Approved
2.0	13 June 2024	EMS review recommendations	All	Nicole Matheson and Mel Brooks	Approved