

NZPork Effluent Management Plan Template

Introduction

This document has been prepared by New Zealand Pork to assist farmers developing an Effluent Management Plan for land application of nutrients. This template covers both liquid effluent and solid manure/spent bedding/compost. This is a generic template and it is important that the requirements of the council in which the farm operates is incorporated into the plan. Please also consider the New Zealand Pork Good Management Guide: Nutrients in Pork Production which is available at www.nzpork.co.nz. The text in the template shaded grey is for your information and can be deleted from your plan as you replace it with farm specific text.

Date:
Farm Name:
Farm Address:
Person(s) in charge:
Consent number:
Consent expiry date:

Key Rules (check with your regional council)

Maximum application rate liquid effluent (mm/hr):
Maximum application depth liquid effluent (mm):
Maximum nitrogen loading rate from effluent (kgN/ha/yr)
Nitrogen loading rate per application solid manure (kgN/ha)
Consent number:
Consent expiry date:

Minimum Irrigation Buffer Distances (check with your regional council)

Property boundary (m):
Property boundary adjoining a road (m):
Significant indigenous biodiversity or mahinga kai areas (m):
Neighbouring houses (m):
Schools, halls, marae and community buildings (m):
Water bores and soak holes (m):
Community drinking water supply bore sourcing water (m):
Wetland, surface water body, artificial water course (m):
Piggery activities and buildings (m):
Outdoor pigs (m):
(check with your regional council for others)

* The Good Management Practices for Outdoor Pigs require no effluent to be spread on the outdoor unit.

Farm Map

Include a farm map here. You may already have a suitable map in your Farm Environment Plan to use. This map should include:

- Boundaries
- Location of residential houses including neighbouring properties
- Compass orientation and prevailing or wind directions
- Predominant soil types
- Layout of sheds, sumps, handling systems (solids separation, composting areas), anaerobic/ aerobic ponds.
- High risk soil areas, topography and slope
- Areas where effluent should not be applied
- Hydrants
- Streams, waterways and water courses
- Buffer zones
- Water bores or springs
- Carcass disposal areas- offal holes
- Community drinking water zones

Application Plan

Describe the effluent and/or manufacture handling and application processes in place on your farm. Take into consideration the following:

Handling processes

1. Treated or not
2. Screened – liquid fraction
3. Screened –solid fraction
4. Travel via an anaerobic pond
5. Travel via an aerobic pond
6. Travel via an anaerobic/aerobic pond
7. Application of spent bedding – straw/sawdust
8. Composted solids
9. Pond sludge

Application plan

1. Daily
2. Weekly when weather suitable
3. Prior to crops being planted

Method of application

1. Stationary sprayer
2. Pods or sprinklers
3. Travelling irrigator
4. Solids spreader
5. 'Honey' wagon
6. Dribblers
7. Soil injection

We do not irrigate liquid manure if the soil is water logged, flooded or snow covered

Daily Checks:

- Check the soil conditions are appropriate for irrigation or application of solids
- Check storm water and wash water diversion is in correct position
- Ensure irrigator is in correct place for its application
- Check for signs of ponding or overland flow

Weekly Checks:

- Check irrigator operation and solids spreader and maintain as recommended
- Check effluent lines and hydrants for leaks
- Ensure irrigator is in correct place for its application
- Check for signs of ponding or overland flow
- Check pond level
- Check pumps are running correctly
- Empty effluent stone trap

Annual Checks:

- Train staff in operation and maintenance of system
- Depth and rate test and calibrate irrigators
- Maintain irrigators, pump, and effluent equipment
- Clean solids out of storage if required
- Soil test for nutrients in effluent block
- Check nutrient make up of applied liquid or solids

Contingency Plans

Write what to do when for the following situations:

Raining or soils are saturated:
Irrigator stalls, breaks down or blocks:
Pump fails or breaks down:
No storage/storage getting full:
Hydrant/pipe leaking:
Complaint from neighbour/community member:



Recording of Applications

Type of Material	Spreading Method	Date/Time Spreading	Block/land Area Spread	Irrigation/Spreading Rate	Weather Conditions	Person in Charge	Comments