

Dairy farm effluent self assessment

– helping to achieve compliance in Northland

This checklist is supported by the following organisations: DairyNZ, Farmers of New Zealand, Fonterra, Federated Farmers and the Northland Regional Council who are committed to improving water quality in both Northland and New Zealand. Minimising the risk of effluent entering surface or groundwater 365 days a year is a critical step you can take to help maintain and improve Northland's precious water resources.

This checklist is a self audit for you and your staff to ensure ongoing compliance of your effluent system with regional council rules. Some good practice tips are included to help achieve year round compliance.

We strongly urge you to follow up any boxes that are not ticked as soon as possible. If you need assistance, please contact one of the organisations listed at the back of the checklist for help.

Note: Please see for Rule 16 & 17 of the Regional Water and Soil Plan for Northland for exact rule wording if required (nrc.govt.nz)

- You must ensure that your effluent treatment/disposal system and any discharge from the system complies with regional rules and (where applicable) your resource consent conditions at all times, regardless of the time of year, weather conditions, breakdowns or staffing issues
- Ensure that contingency plans are in place and documented
- Aim for every day good practice rather than just achieving compliance on inspection day
- Fully train your staff on:
 - the rules;
 - the operation and maintenance of your effluent system; and
 - what to do and who to contact if the system breaks down
- Ensure your plan is adjusted to match any changes to your farm system
- The Resource Management Act states any discharge to water is illegal unless authorised.



Northland checklist

Effluent discharge – includes liquids/solids/sludge/slurries generated from:

- milk room and washdown water
- yards, entry/exit races, concreted races
- sumps, gravel traps
- ponds (desludging)
- stand-off areas (includes races if used for holding stock)
- feed pads, wintering barns and calf rearing facilities
- underpasses.



Do you understand the regional council rules for effluent management?	
Do you understand the conditions of your resource consent? (If you do not, please contact your regional council farm dairy effluent team for an explanation of your conditions)	
If you have done any of the following: increased the number of cows, added imported feed, stand-off pads, feed pads, underpasses, wintering barns, loafing pads, calf rearing facilities, piggeries etc, has your effluent system been upgraded?	
At the farm dairy	
Stormwater from buildings is diverted away from the effluent system (i.e. guttering leads to drain or holding tank)	
Clean stormwater from the dairy yard is diverted away from the effluent system before the stone trap, but effluent contaminated stormwater is never diverted	
Effluent from all sources is captured within an effluent treatment system	
Sumps and gravel traps are sealed and are designed so that any overflows are directed into the effluent system <i>Note: sealing requires construction with non-permeable material</i>	
Gravel traps and sumps are regularly cleaned out	
Solids removed from feed pads and gravel traps and other areas are stored on a contained, sealed surface which drains back into the effluent system	
Solids/sludges/slurries and stand-off pad bedding material is spread evenly over land with no runoff to waterways, and meets land application criteria (see Land Application section)	
Stand-off pads are designed so all effluent is contained within a bedding layer, or collected in a sealed effluent system. For more information refer to <i>Stand-off pads – your essential guide to planning, design and management</i>	
There is enough contingency storage to ensure effluent is not irrigated during periods when soil is saturated (or likely to be, due to forecast of heavy rain). <i>Note: if your ponds are full you have no effective contingency storage</i>	



Land application	
Pumps, pipelines, hydrants, connections and irrigators are all well maintained and managed. For more information refer to <i>A Northland farmer's guide to managing farm dairy effluent</i>	
Effluent applicator has been well maintained, such as tyre pressure, lubrication, nozzle condition, hoses. For more information refer to <i>A staff guide to operating your effluent irrigation system – travelling irrigator</i> and <i>A staff guide to operating your effluent irrigation system – low rate irrigator</i> .	
There is at least a 20m setback between effluent spray/overland flow and any waterways or drain containing water	
There is at least a 10m setback between effluent spray/overland flow and any dry drain	
There is at least a 20m setback between effluent spray/overland flow and any neighbouring property	
There is at least a 50m setback between effluent spray/overland flow and any occupied dwelling	
There is no effluent discharge via sub-surface drains	
There is no excessive ponding of effluent after application. (<i>Note: under council rules 'excessive' means there is no ponding for longer than 3 hours</i>)	
All necessary actions are taken to minimise overland flow of effluent	
Effluent application is evenly distributed onto the application area	
Management, maintenance, people and contingency	
Everyone in the farming operation understands the importance of effluent management and the consequences of non-compliance. For more information refer to <i>A Northland farmer's guide to managing farm dairy effluent</i>	
There is a documented operating procedure for effluent system operators which includes: <ul style="list-style-type: none"> • areas of the farm used for land application of effluent • areas of the farm to avoid applying effluent • basic use of the farm land application system • a daily/weekly task list to sign off • correct irrigator hose layout • basic maintenance requirements of the effluent system • a contingency plan which includes: key contact names and numbers for when there are system failures, bad weather or issues which may compromise the correct operation of the system 	
All people with effluent management responsibilities have been trained in the operating procedure, and training records are kept	
External training courses are utilised to increase understanding of good practice	
There is a documented effluent system maintenance plan in place which is followed. For more information refer to the <i>Effluent management plan</i> poster	



Pond discharge treatment systems

- Treated discharge does not cause any significant change to the colour or clarity of the receiving water
- Pond is sealed (lined or compacted clay where suitable) to restrict leaching
- No untreated effluent is able to get into waterways or within setback areas
- The first (anaerobic) pond is routinely desludged. *(Note: ask the regional council how often the pond should be cleaned)*
- Embankments are not damaged and do not leak. *(Note: damage can often be caused by heavy stock or machinery)*
- There is freeboard in the pond so they don't overflow. *(Note: freeboard is the difference between the water level and the lowest part of the embankment – usually 0.5 m)*
- Pond surface and pipework is clear of weeds and obstructions
- The baffle or tee on discharge pipe from anaerobic pond is keeping solids out of the aerobic pond
- No evidence of effluent short-circuiting the system
- Solids are prevented from entering the aerobic pond
- Ponds are well maintained and fenced off

Rule 17. Permitted Activity – Key points for making silage, disposal of dead stock and disposal of offal

- There must be no discharge:
- within 50m (horizontally) from any surface water or water supply bore
 - within 50m of any residence
 - of leachate to water
- and**
- catchment runoff must be prevented from entering any disposal site
 - offal pits and dead stock disposal sites must be covered to prevent nuisance odours
 - the volume of any silage pit is not greater than 1000m³

Any activity which does not meet the permitted activity criteria requires application for resource consent.

Disclaimer: The information that appears in this checklist is intended to provide the best possible compliance guidelines for dairy farm effluent practices. However, the information is provided as a general guidance only and is not intended as a substitute for specific advice. Practices, systems and advice may vary depending on the circumstances applicable to your situation. The information may also be subject to change at any time without notice. DairyNZ, Farmers of New Zealand, Federated Farmers, Fonterra, Northland Regional Council and AgITO take no responsibility whatsoever for the currency and/or accuracy of this information, its completeness or fitness for purpose.

Contacts

You can check out the rules on www.nrc.govt.nz, see Rules 16 and 17. If you need assistance with any environment issues on your farm, call one of these organisations for help:

DairyNZ Sustainability Team	0800 4 DairyNZ (0800 4 324 7969)
Fonterra Sustainable Dairying Team	0800 65 65 68
Northland Regional Council	0800 002 004
Federated Farmers	0800 Farming (0800 327 6464)
Farmers of New Zealand	09 439 5219
PrimaryITO	0800 80 20 80