Dairy farm effluent

– the rules for achieving compliance in the Greater Wellington region

This checklist is a self audit to help farmers to achieve resource consent compliance. It is for your own information and you do not have to share it with any organisation. We recommend you 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.

- Not all resource consents are the same. Some older consents will not list all the conditions in this checklist but will likely be in your next consent. It's a good idea to read this checklist in conjunction with your individual consent
- You must remain compliant with your consent requirements every day – regardless of the time of year, weather, breakdowns or staffing issues
- Ensure you have a plan in place to cope with all of the above scenarios
- Make sure all staff on your farm know the rules, are fully trained in the operation and maintenance of the effluent system, and know what to do and who to contact if the system breaks down
- Always aim for good practice rather than just achieving compliance.

Version 3, March 2015

Greater Wellington region

1. Get familiar with the conditions of your consent and actively seek compliance	
Much of the non-compliance reported in Greater Wellington region is for minor issues that can easily be avoided. Take the time to go through your consent and make sure that all the administrative conditions have been fulfilled	
Effluent is only applied to the area of land specified in your consent document	
The number of cows being milked is within the limit specified on the consent	
A copy of your effluent consent is displayed in a prominent place in the dairy shed[1]	
Consent is current (if property has been bought/sold consent has been transferred to the new owner)	
No significant farm system changes have been made since the effluent system was designed as covered by your consent (i.e. type of irrigator, underpass, wintering pad, new pond etc)	
All other requirements of the consent have been fulfilled	
2. Have an effluent system that is capable of complying with your consent conditions, in terms of infrastructure and ongoing maintenance ***Effluent systems that can deliver these results will save you money through better nutrient utilisation and will help prevent environmental effects on water***	
Effluent must not enter waterways under any circumstance. *A waterway is a water carrying body, i.e. stream, river, ground water (aquifer), lake, pond, ditch, intermittently flowing drainage channel etc*	
Stormwater from the dairy roof and surrounding areas does not enter the effluent system	
There is sufficient effluent storage for times when soil moisture levels are high[2]. For more information refer to *A farmer's guide to managing farm dairy effluent*.	
All effluent is contained within structures (ponds or sumps) which do not leak[3] as specified in your consent, prior to application. For more information refer to *Farm Dairy Effluent (FDE) Systems – A farmer's guide to building a new effluent storage pond*.	
The depth (mm) and rate (mm/hr) of effluent application has been measured and satisfies the requirements of the consent (at the most extreme distance or elevation above the pump). For more information refer to *A staff guide to operating your effluent irrigation system – travelling irrigator* and *A staff guide to operating your effluent irrigation system – low rate irrigator*.	
Effluent application depth and rate does not result in ponding and effluent runoff into ground or surface water[4]	
The application area is large enough to meet the requirements of the consent for N loading[5] . For more information refer to *A farmer's guide to managing farm dairy effluent*.	
The pump pressure is sufficient to ensure compliant effluent application depths can be met over all of the effluent area (i.e. at the most extreme distance or elevation above the pump)	
A regular maintenance regime is in place for the effluent system – such as greasing, water-blasting, desludging, cleaning, flushing, stirrer, nozzles, tyres, checking pipes, hydrants, stone traps etc. For more information refer to *A staff guide to operating your effluent irrigation system – travelling irrigator* and *A staff guide to operating your effluent irrigation system – low rate irrigator*.	
Effluent solids, sludges and slurries (i.e. from ponds, feed pads and sand trap cleanings) are stored on a sealed surface[3] which drains back into the effluent system Effluent solids are spread evenly (approx less than 5mm depth) on pasture to avoid overloading with nutrients. Effluent solids should not be spread on land used for liquid dairy effluent application.	

	✓ / ✗
Feed pads, stand-off pads and underpasses are included on your consent and designed so that all effluent is contained, or collected in a sealed effluent system	
Effluent applied at least 20m from the following areas: • neighbouring property boundary, • any surface water body, • farm drain, • water supply race, • any bore or coastal marine area.	
Other effluent generating areas which are not required on your consent, but should be carefully managed: • Bridges/culverts • Laneways (entry and exit points).	
Meeting the above conditions also applies when effluent ponds are emptied by contractors. It is your responsibility to provide clear instructions for the contractors and enough suitable area for the effluent to be applied. (There is a template to help you with this on ***compliancetoolkit.co.nz*** *> Effluent Contractors Acknowledgement Form)*	
3. People and systems ***(These are not always requirements of your consent, but will help you and your staff comply on a daily basis)***	
An effluent management plan is in place that clearly defines responsibilities as per your consent. For more information refer to the *Effluent management plan* poster.	
Good practice tips: Everyone in the farming operation understands the importance of effluent management and the consequences of non-compliance. Everyone knows what to do if something goes wrong. For more information refer to the *Effluent management plan* poster.	
Contingency measures are in place in the event of a system failure[6]	
A training schedule is maintained for staff with direct effluent management responsibilities	
External training courses are utilised to increase understanding of good practice	
All practicable steps are in place (fences, guards, shields, signs, farm inductions and briefings) to ensure the safety of people around effluent system (this is Department of Labour legal requirement)[7]. For more information refer to *A good practice guide for land application systems*.	
4. Permitted Activity rules for offal pits and silage stacks ***(These are not part of your effluent consent, but areas which commonly cause trouble on farm)***	
Placement of offal pit or silage stack is more than 20m from any surface water body, from any bore used for drinking water supply or from the coastal marine area	
The base of the offal pit is at least 1m above the highest level of the water-table. (Have you ever seen water pooling in the bottom of the pit?)	
There is no discharge from the offal pit or silage stack to surface water	
The offal pit is securely covered and only contains plant and animal waste generated on this farm (there can be no discharge of hazardous substances into the offal pit)	
No more than six months after the closure of the offal pit, the site is rehabilitated to a condition that is compatible with the surrounding land uses	

For new or renewed consents, Greater Wellington Regional Council require new pond and dairy designs to be undertaken or reviewed by a Farm Dairy Effluent Accredited Designer (www.effluentaccreditation.co.nz). If designs are provided by a non-accredited designer, they may need to be 'Quality Assured' by an Accredited Designer at the farmer's expense.

[1] Not all consents require this, but it's a good idea anyway. If you would like a copy of your consent, call Greater Wellington Regional Council

[2] Storage requirements are dependent on many factors, the best way to determine your individual storage requirements is to use the Pond Storage Calculator.

[3] Sealed means does not leak, such as concrete or synthetically lined. For independent advice on sealing options, contact DairyNZ, Fonterra or Greater Wellington Regional Council

[4] Topography, rainfall, soil moisture, soil type and drainage all influence the risk of runoff and ponding. A soil moisture probe can be used to check soil moisture

[5] Refer to your nutrient budget in order to determine your farm's N loading on your effluent application area

[6] Contingency measures include things like additional storage capacity, having a spare pump or irrigator, staff know who to call etc

[7] Every year people die doing day-to-day tasks on dairy farms. The effluent system is a particularly hazardous area. A Health and Safety Plan is a legal farm requirement, DairyNZ has a template to help with this; see compliancetoolkit.co.nz

Contacts

You can check out the rules in the regional plan at: gw.govt.nz

If you are unsure of any of the questions in this checklist, or need further assistance contact:

DairyNZ	Sustainability team 0800 4 DairyNZ (0800 4 324 7969)
Fonterra	Sustainable Dairying Team 0800 65 65 68
Greater Wellington Regional Council	06 378 2484
Federated Farmers	0800 Farming (0800 327 6464)
Primary ITO	0800 80 20 80