

EFFLUENT MANAGEMENT PLAN

Animal effluent and solid animal waste is managed to minimise nutrient leaching and run-off

Property Name: Maerewhenua Investments Ltd	
Supplier number: 36749	
Person responsible for implementing this plan: Grant Tremewan	
Date: 10/12/23	
Contacts for breakdowns and maintenance: <ul style="list-style-type: none"> o Waterforce Oamaru o Calect Electrical 	pics

Target 1: Compliance	Evidence if applicable
Fonterra Farm Dairy Inspections Enviroment Canterbury inspections	<ul style="list-style-type: none"> o Ecan inspections o Supplier inspections

Target 2: Storage Management	Evidence if applicable
Storage system and design	
The system features gravity feed from the shed, through a sump, into an anaerobic pond. It is then siphoned into an aerobic pond. When conditions allow zero solids effluent is spread on the paddocks via Pivot 1. The pump automatically shuts off the pump if loss of pressure or flow occurs. The pivots have backflow preventers. The dairy shed makes use of recycled cooler water for wash down to minimise effluent quantity, and has a closed loop chilled water cooling system. Nozzles in the shed are operated at the lowest pressure and flow at which they can be effective.	<ul style="list-style-type: none"> • site inspection
Storage Management	
It is our policy to apply stored effluent at the earliest opportunity allowed by the soil moisture conditions so that the storage pond is at the lowest possible level at any given time to prepare for extended periods of high soil moisture which excludes pasture application.	<ul style="list-style-type: none"> o Site inspection

Target 3: Application	Evidence if applicable
Application Area	Evidence/records
The application area is 35ha, through pivot 1.	Maps Nutrient Budget
Application Depth 5.8mm of diluted effluent with irrigation water	

<ul style="list-style-type: none"> ○ Effluent capable pivot application rates from bucket testing. ○ Pivot one. 5.8mm 	Bucket Tests
Operations and Maintenance	
<p>All maintenance is recorded in the irrigation maintenance register</p> <p>Operations are described in the Effluent SOPs</p> <p>A recording that the pump is in good operational order is inside the switchboard at the pump shed.</p>	Application map
Environmental and Health and Safety Risks	
<ul style="list-style-type: none"> - Overview of farm risks – environmental and health and safety <ul style="list-style-type: none"> ○ Paddocks 1-6 can cause runoff ○ end gun must be turned off ○ 30% min speed is 7mm application ○ low pressure cutout must be active 	
<p>Proof of placement....</p> <ul style="list-style-type: none"> ● Effluent application is recorded on irrigation google doc 	

Operations	
Daily	Evidence/records

<ul style="list-style-type: none"> o Weather forecast checked. o Check two days since rain exceeded 12mm. Measure soil moisture if there is any doubt. o Ensure weather pattern does not drift odor to neighbours o Check for signs of ponding or overland flow after 30 minutes <p>Start-up Instructions</p> <ul style="list-style-type: none"> o As per Effluent SOPs 	<ul style="list-style-type: none"> o Records o Effluent application map
<p>Maintenance</p> <p>Daily</p> <ul style="list-style-type: none"> o Check pond level o Check pump is running correctly <p>Monthly</p> <ul style="list-style-type: none"> o Check stone traps and empty <p>Annually</p> <ul style="list-style-type: none"> o Train staff on operation and maintenance of system o Bucket tests o Drop test o Spread solids o Soil test effluent block 	
<p>Incident procedures</p> <ul style="list-style-type: none"> o What to do when: o Saturated soils - pump to storage o Storage issues - prevent by keeping pond at lowest possible level prior to any rain events. o Hydrant or pipe leaking - turn off effluent, report on group message and fix immediately. 	

Target 4: Staff Training											
<p>Staff Training on Farm I have read and understood the Effluent Management Plan</p> <table border="1"> <tr> <td>Name</td> <td>Position/responsibility</td> <td>Signature</td> <td>Date</td> </tr> <tr> <td>Greg Hore</td> <td>assistant manager</td> <td>GH</td> <td>12/12/20</td> </tr> </table>				Name	Position/responsibility	Signature	Date	Greg Hore	assistant manager	GH	12/12/20
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