

4 April 2019

Lacey Bragg
 Environment Southland
 Lacey.Bragg@es.govt.nz

REVIEW OF DROP TEST FOR APP-20181917 SOUTH PRO MAITLAND LIMITED

Dear Lacey

Environment Southland has requested that RDA Consulting review a drop test conducted on FDE sludge beds located at 133 Garden Gully Road, Maitland.

Drop Test – Dairy Shed Pond

<i>Appendix P Requirement</i>	<i>Met?</i>
Testing undertaken over 48 hours minimum	YES
Testing equipment accurate to 0.8mm or less	YES
Continuous readings at no more than 10 second intervals	YES
Any change in fluid level is accounted for	YES
Pond must be at or over 75% of design depth	YES
Desludged in previous 12 months	YES
No sludge or crust on surface	YES
Pond surface not frozen	YES
Anemometer installed, wind <10m/s for >24 hours	YES

Test Level Change Reported: +0.2 mm/day

Maximum Allowable Drop: -1.6 mm/day

Comments

We agree that the apparent gain is at the accuracy limit of the test equipment and is well within Appendix P requirements.

Overall the trend in effluent level in the beds appears to correlate well with the evaporation pan. There has been a detailed discussion regarding the potential impacts of rainfall, and the selective analysis of shorter periods within the test and outside the rain events supports the overall result and conclusions.

We consider that the requirements of Appendix P have been met for this test.

Limitations

The above review is limited to the Drop Test Report provided to us by Environment Southland on 3 & 4 April 2019.

If you have any queries or require further clarification please do not hesitate to contact me.

Yours sincerely



Karen Ladbrook
NZCE (Civil), MEngNZ
Project Engineer