



# Under Floor Drainage and Leak Detection Systems

- It is good practice to install drainage under new effluent storage ponds (under floor drainage).
- Under floor drainage connected to a sump that can be checked and, if necessary, sampled is a great way to check the liner is not leaking (leak detection).
- It is much more cost effective to do the under floor drainage during construction than after the pond is full of effluent.

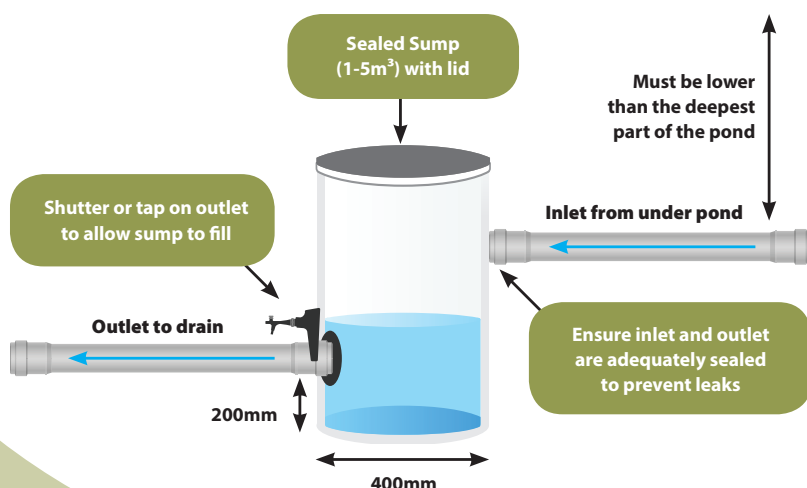


Grid pattern under floor drainage – prior to installation of liner

The under floor drainage system must provide good coverage of the base of the storage pond – 5m spacing between pipes for heavy soil types and 1m spacing between pipes for free-draining soil types. A grid or herringbone pattern is the most common design. Installing a leak detection system during construction is a cost effective way of showing the liner is not leaking. It will:

- collect groundwater following storage installation;
- minimise the cost of showing the liner is not leaking in the future.

It would be sensible to take a photograph or make a plan showing the layout of the installed drainage in case it is needed later. Please **contact the Rural Advice Team** if you need more information.



**An under floor drainage system should lead to a sump that enables drainage water testing as shown in the diagram.**



## Additional information

Contact Horizons Regional Council on **0508 800 800** or email [help@horizons.govt.nz](mailto:help@horizons.govt.nz)