

Washdown Areas – what are your requirements?

Richard Stuttard, Environmental Consultant of the STRI, writes...

The issue of contaminated water discharge from golf course machinery washdown areas is one that is quite rightly currently receiving a great deal of attention throughout the golf industry.

There is an increasing acknowledgment at club level of the need to ensure golf facilities are operating within the confines of what is increasingly stringent legislation. There is however a great deal of confusion surrounding what exactly is, and is not, acceptable practice. As is frequently the case, the legislation encompassing this issue is quite complex and baffling, leading to many clubs choosing to ignore and claim ignorance, rather than act.

This article sets out exactly what the legislation means to golf and guides you through the options available to your club to ensure compliance.

The legislation

The key piece of legislation relating to the discharge of contaminated water is the Environmental Permitting Regulations (2010). Replacing the Groundwater Regulations (1997) the purpose of this legislation is to govern the level of pollutants entering surface and groundwater. Environmental Permits to Discharge (issued by the Environment Agency) determine the permitted limits of pollutants, with differing limits set dependant on pollutant type and site location. Pollutants most relevant to golf are nitrates and phosphates (present in grass clippings with levels enhanced by fertiliser applications) which have limit levels typically set at one part per million (ppm) and pesticides, with limits of typically one part per billion (ppb).

If you're thinking that doesn't sound like a lot, you'd be right, however, only minute amounts of these

pollutants are enough to damage ecosystems. The discharges from golf facility washdown areas are typically around twenty times the legal limits specified above. It must be stressed that concentrations of contaminants will vary significantly depending on the amounts of chemicals and fertilisers used on the course, time of year and the extent to which best practice is followed when applying chemicals, but it is certain to be the case that your club is exceeding legal limits by some margin frequently during the course of the year.

Are you compliant?

If your current practice is to wash machinery on waste ground, or in front of the sheds and allow water to discharge away (with no prior cleansing) to a ditch / other surface water, or allow it to soak away to groundwater you are not complying with legislation unless you have been granted an Environmental Permit to Discharge by the Environment Agency. This is something that all clubs who discharge water (whether it is cleansed or not) should have. This comes at an annual cost to the club and will only be granted if the level of contaminants within the clubs discharge is below the legal limits set for your area, which, in almost all cases, clubs will find it won't be.

To be certain of compliance, your club must be adopting one of the following options:

1. Machinery is washed down on a bunded washpad with all contaminated water collected in a sump, which is then collected and disposed of by a licensed waste management contractor.

2. Machinery is washed down on a bunded washpad with all contaminated water fed into a mechanical water recycling system where it is cleansed and can be re-used or discharged.





3. Machinery is washed down on a bunded washpad with all contaminated water fed by sealed pipe into a dedicated and bespoke reedbed system, where it is cleansed sufficiently for discharge or re-use.

The above options will be legal requirements for the vast majority of golf clubs in the UK, however there are circumstances, relating to the type of substrate water is being discharged to, where a club may be permitted to discharge without prior cleansing. As such, it is well worth a call to the Environment Agency to have your individual situation confirmed.

Equally if you are discharging to foul sewer, the issue is no longer the concern of the Environment Agency and it is down to your local water board to determine whether they are happy for the discharge to be sent through their systems without prior cleansing. It is the duty of the golf club to inform the relevant water board and confirm permission.

There has been a certain degree of scaremongering going on throughout the industry in recent times with threats of quite exorbitant fines being instantly imposed on golf clubs found to be contravening regulations.

The claims of six figure penalties are quite outlandish and should be taken with a pinch of salt. That, said, it is certainly the case that action will be taken against clubs found to be non-compliant with, at the very least, a requirement made for the club to rectify the problem immediately. As legislation tightens over the coming 2-3 years it is likely that fines will be used more frequently as a method of encouraging compliance and as such now really is the time to establish your clubs requirements and begin to set aside funds to fulfil your club's needs.

Best Practice is important

Following best practice guidelines relating to pesticide and fertiliser application is essential for all users of such products and will ensure that the amount of pollutants being discharged from your facility is kept to a minimum. As such it is crucial to ensure that all operators of spraying equipment are appropriately trained and are fully aware of best practice operating.

Reedbed Systems

Many of you may not have previous knowledge of the option of reedbed systems to solve your waste water problem. Reedbed

water filtration systems bring with them a raft of benefits to the golf club thanks to their low cost, low maintenance attributes and their natural appearance.

Reedbed systems, when designed correctly, are highly effective cleansing systems with reductions in contaminants facilitated through sedimentation, filtration, chemical precipitation, microbial interaction and plant uptake. Now, you may think I'm trying to blind you with science and that this is some hair brained 'muck n magic' idea with no substance behind it. The truth is however that this is by no means a new technology. Such systems have been in use in a variety of industries for more than 30 years and, over the last 5 years or so, have gained an ever increasing following in the golf sector.

Design and installation of these systems will cost typically between £5000 and £7000 and once installed their maintenance requirements consist simply of an annual clean out of any decaying vegetation at the base of the reeds and a cutting operation every few years to keep the reeds healthy.

Additionally, their attractive appearance means that they can be situated out on the golf course (within areas of rough etc) if space within the maintenance area is short, thereby further enhancing their appeal.

There are a significant number of examples of reedbeds in use within golf facilities throughout the UK and further afield with numbers rising rapidly. As such these systems are certainly worth considering as a viable solution to this pressing issue.

In Summary

Don't panic! The purpose of this article has been to provide you with a definitive answer to the question of wastewater discharge on the golf course, not to instil panic in those of you who now fear you may not be complying with legislation.

In essence, each facility is different and as such a call to the Environment Agency, or to STRI, who will act on your behalf, will be the first step towards determining your requirements. Once you have answers, you can act accordingly.

The topic is an important one however, and I would urge those of you who have doubts regarding your clubs compliance to look into this issue at the earliest opportunity.

More information can be obtained by contacting Richard Stuttard at STRI on 01274 565131.