

On Site Wastewater Drip Dispersal Maintenance Checklist

This checklist is intended for installers and end users when performing a system check or preventive maintenance.

States and local jurisdictions may have regulations regarding the dispersal of effluent which must be strictly complied with. Any local, state or federal regulations must take precedence over this checklist. Check with your local regulatory agency for specific requirements.

PUMP

- Check for damage and blockages to the impeller.
- Check the noise level of pump while operating. If the pump is vibrating, a bearing may be failing.
- Check the pump and associated fittings for leaks.

DOSE TANK FLOAT SWITCHES

- Check the liquid level in the dose (pump) tank to confirm that all switches are operating properly.

HEADWORK / FILTER ASSEMBLY

- Disassemble, inspect and wash with pressurized water.
- In cases of slime or carbonate build up, chemical washing with acid or chlorine may be necessary. Refer to manufacturer's instructions.
- Check filters and associated fittings for leaks.
- Inspect the valve box (if installed) to ensure it is clean and free of debris.

AIR/VACUUM RELIEF VALVES

- Check all Air/Vacuum Relief Valves for leaks while the zone is operating.

DRIPPERLINE & PIPING NETWORK FLUSHING

Forward flushing of the dripperline and the associated piping network helps prevent dirt and microbial growth from accumulating.

For systems that automatically flush at preset intervals, make sure that it is operating properly. If it does not have an automatic flushing feature, the interval between flushings will depend on:

- Effluent quality and characteristics
- Filtration efficiency
- The length of dripperline in each zone
- Any regulatory requirements regarding maintenance

When determining how often flushing should be done, it should start with short intervals:

- The interval can be extended according to system performance.
- If there are a minimum of contaminants present, time between flushing can be extended. If a large amount is found, flushing should occur more frequently.
- The flush interval may also need to be changed at different times of the year according to operation frequency and water quality.

Maintenance Checklist

DRIPPERLINE & PIPING NETWORK FLUSHING (CONTINUED)

Netafim recommends that forward flushing be done at a rate of 2 fps (feet per second). This flush rate equates to moving an additional 1.6 GPM per lateral through the end of the dripperline.

Using a less aggressive flush rate (less than 2 fps per lateral) may be sufficient for drip dispersal systems on secondary systems that generate lower BOD/TSS levels, but using the 2 fps recommendation even on these systems will help ensure that the entire piping network will perform as designed.

How to Flush the Zone:

- Open flush valve(s) and turn on the pump
- Allow the zone to flush for 3-5 minutes. Dirt will not begin to flush immediately. It may take several minutes before dirt starts visibly flowing.
- Measure and record the pressure at all recording points and compare the readings to installation records.
- While the system is operating, check the field for wetness that could indicate leaks. Repair as necessary.
- Conduct a visual check of the boundaries of the dripfield, particularly any low point(s) to see if any run-off may be occurring.
- If check valves are installed, check for leaks.
- Close the valve after the majority of the dirt has been purged, and clean water is freely flowing.
- Repeat for each zone.

CHLORINE

If chlorine disinfection is required, ensure that the proper type of tablet is being used.

The customary method of feeding chlorine disinfectant in residential systems is the tablet feeder. In these devices calcium hypochlorite cake tablets, about 3" in diameter, are dropped into a tube over which the effluent flows. The tablets slowly dissolve producing a hypochlorous acid solution, introducing the disinfecting agent into the effluent. Many jurisdictions expect the homeowner to maintain these systems and leave it up to them to purchase and replenish the chemical when needed.

The difficulty arises when homeowners substitute chlorine tablets that are made for swimming pools. These tablets are actually a stabilized chlorine compound used to mitigate the effects of sunlight: trichloroisocyanuric acid or sodium dichloroisocyanurate. They are not calcium hypochlorite. One of the difficulties with these compounds is that they make the chlorine less effective thereby reducing the efficacy of the disinfection process.

The chemical produced by these **swimming pool tablets**, cyanuric acid, do not hold up as well as a wastewater disinfectant and **are not recommended for Netafim Bioline® dripperline dispersal systems**. The concentration of cyanuric acid can be detected with a special test kit (not a chlorine test kit which would produce false low "chlorine residual" readings since the dominant chemical produced is not hypochlorous acid but cyanuric acid).

Only calcium hypochlorite tablets approved for wastewater are acceptable.



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