

City of Vernon
Environmental Health Department
Stormwater Program

Guide to designing a rainwater diversion system.

Rev. 05/07/07

This guide is provided to assist contractors/engineers to address storm water concerns during the design of a storm water diversion system. This guide describes options to minimize future illicit discharges and minimize vector harborage conditions to prevent violations of Vernon City Code.

All systems shall have the rain diversion system panel with a manual reset mechanism in an easily visible and accessible area. A sign shall be posted next to panel with instructions detailing when, and how system should be reset. All systems shall have a visual indicator to display system status. Each system should provide at least one option in each of the following three categories.

1. Mechanism or procedures in the event of a pump failure or sewer blockage.

Systems should have at least one of the following:

- Provide 2 pumps to the sanitary sewer with on and off level at different height and alternate load.
- Provide separate visual or audible (separate from rain switch indicator lights) alarm indicating overflow into the storm drain system.
- Capping the overflow to storm drain inlet during dry weather. This shall only be acceptable when the outlet to the storm drain is visible at the public right-of-way.
- Any other proposed procedure or mechanism approved by our department.

2. Mechanism or procedures in the event of failure to manually reset rain switch.

Systems should have at least one of the following:

- Automatic reset mechanism programmed to reset within 24 hours. (Mechanism shall only to be used as a back-up system.)
- Separate visual or audible alarm indicating that pump to sewer is off, or that 2nd pump to storm drain is on.
- Any other proposed procedure or mechanism approved by our department and the L.A. County Sanitation District.

3. Mechanism or procedures to prevent mosquito breeding. (All pump systems shall have on and off float levels at the lowest possible operating level.)

Systems should include at least one of the following:

- Provide pocket for pump to sit lower within the catch basin to minimize volume of standing water when pump turns off.
- Provide weep holes at bottom of catch basin. (This design should not be used in areas where contact with chemicals will take place such as loading dock wash down with cleaners or sanitizers).
- Provide porous concrete catch basin. (This design should not be used in areas where contact with chemicals will take place such as loading dock wash down with cleaners or sanitizers).
- Inlet is not within the immediate proximity to underground treatment device. This provides a distance factor for mosquitoes to fly within a pipe to reach the standing water of the catch basin.
- Any physical barrier to prevent mosquitoes from reaching the standing water which is approved by this department.

A modification to the system may be required, if after installation, repeated failures occur in any of the three categories described above.

If you need assistance or have any questions please contact our office at (323) 583-8811 ext. 204.