Discharges from Residential Swimming Pools
Best Management Practice

Discharges from swimming pools result from the backwashing of filters or from the draining of pools either at the end of the swimming season or for periodic maintenance. This water often contains pool treatment chemicals that can cause damage to the receiving environment. The discharges from commercial and public bathing pools are regulated by a New Jersey Department of Environmental Protection permit. Discharges from residential pools are allowed through the town’s stormwater discharge permit but it is expected that residents will follow the best management practices outlined in the state wide permit. These practices include:

1. Making sure the discharge flow is regulated so the amount of water and the rate of flow does no physical damage to the receiving environment. If the discharge is from the filter backwash the amount of water is usually low and the discharge can be kept on the property and the water will filter into the ground and replenish the ground water supply. If the discharge is from emptying the pool, it should be directed to the nearest water course or storm sewer. If the discharge is directed over the ground, the rate should be slow enough that it does not cause erosion of the soil. If the discharge is direct to a stream or storm drain it should be slow enough not to scour the stream bottom and stir up sediments.

2. Making sure the discharge does not contain a high amount of suspended solids. Usually filter backwash is cloudy and full of solids. If the water is being directed to the ground water the soil will filter out the particles. If the water is being directed to a stream or storm drain it should first run through some filtration material like hay bales. Also, a retention or settling pond can be used to remove solids.

3. Making sure the discharge does not contain harmful chemicals. The most common treatment chemical in a residential pool is chlorine, which can be deadly to fish and other organisms in the environment. It is best to avoid adding chlorine to the pool for seven days before emptying the pool; this will allow the chlorine to dissipate. You should test the water with a pool test kit and make sure there is no detectable level of chlorine before allowing any discharge. Other chemicals such as algaecides or additives to adjust pH may not dissipate. It may be necessary to find other ways to make sure these chemicals do no harm to the environment. Pool water being discharged to a stream or storm basin should have a pH in the range between 6.5 and 8.5.

The most important aspect of discharging swimming pool water is proper planning. While the discharge from residential pools is allowed without a specific permit and the best management practices mentioned above are suggestions, if the discharge causes environmental damage, the homeowner and any service persons involved are subject to heavy fines and penalties from the NJ Department of Environmental Protection. For more information, contact your local health department.