

Watershed Agricultural Program Guideline

2.1.25

GRAYWATER TREATMENT

Purpose

The purpose of this guideline is to provide direction to WAP staff members on the preferred treatment method for greywater (wash water) from agricultural operations.

Background

There are several WAC participants (horse farms) who currently have Vegetated Treatment Areas (VTAs) installed to treat greywater from wash stalls and/or farm washing machines. In an effort to determine how to properly handle soils from VTAs that are nearing the end of their life, soil sampling was conducted on three participating farms in the spring of 2014 to identify levels of potential contaminants that could warrant specific disposal or restrictions on future use. Each VTA was sampled by WAC and tested by EnviroTest Laboratories, Inc. for 215 possible contaminants including metals, PCBs/pesticides, semivolatile organic compounds, and volatile organic compounds (VOCs). Several contaminants were identified in each sampled VTA including various pesticides, metals and VOCs, with some exceeding critical limits established by New York State DEC. These exceedances would warrant soil disposal when the VTA is due for replacement, which is extremely costly.

Treatment

Based on the levels of regulated contaminants present in the three greywater VTAs sampled and potential costs of disposal of contaminated soil, it is recommended that all farm discharges of greywater that present a risk to water quality be treated using the WAC Washwater Infiltration System standard (no. 4100) or other approved design standard for subsurface treatment of greywater.

Additionally, Operation and Maintenance Agreements shall state that no hazardous wastes or rinsate from hazardous waste containers shall be emptied down any drain leading to the Washwater Infiltration System including but not limited to paint, thinners and strippers, pesticides/insecticides including fly repellent, automotive fluids, horse/livestock medications, fertilizer and cleaning products.