

## **Removal of Ultraviolet Disinfection Requirement for On-lot Sewage Treatment and Disposal Systems**

Please be advised that, as of the effective date of this memorandum, ultraviolet disinfection units are no longer required to be included as components of on-lot sewage treatment and disposal systems that may be sited on shallow limiting zone sites (sites with limiting zones less than 20 inches from the mineral soil surface.)

Research conducted and Delaware Valley College demonstrated that fecal organisms discharged into the upper aerobic soil horizons are sufficiently attenuated by naturally-occurring biologic and chemical processes without additional disinfection, and that disinfecting sewage effluent prior to final treatment and disposal into soil did not provide a measurable increase in safety. Investigation of various literatures did not produce any clear documentation of cases of illnesses within Pennsylvania that could be clearly attributed to properly functioning on-lot sewage treatment and disposal systems that did not include an ultraviolet disinfection unit component.

This decision impacts certain on-lot sewage treatment and disposal alternate technologies currently described in the Alternate Systems Guidance (<http://www.elibrary.dep.state.pa.us/dsweb/Get/Document-47722/362-0300-007.pdf> ) and also specific technology listings posted on the Department's website at [http://www.portal.state.pa.us/portal/server.pt/community/sewage\\_and\\_disposal/10583/onlot\\_alternate\\_technology\\_listings/607632](http://www.portal.state.pa.us/portal/server.pt/community/sewage_and_disposal/10583/onlot_alternate_technology_listings/607632). As the alternate technology descriptions listed in the Alternate Systems Guidance are transitioned to the Department's website, the listings will be revised to reflect this change. Once the transition of these technologies to the website is complete, the Alternate Systems Guidance will be rescinded. The Sewage Enforcement Officer continuing education training curriculum will also be updated to reflect this change.