



Monroe County Health Department

Monroe County, Indiana

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Sand Lined Septic Systems in Monroe County

Prior to 2007, septic systems installed in Monroe County were like most in the State of Indiana, in-ground stone filled trench systems with a few mound septic systems on more restrictive sites. From the late 1990's to 2005, stone filled trenches were replaced by either chambers or a graveless type pipe. It appeared, to members from this department, that we were having a high rate of return visits on certain sites and we begin to question our own procedures.

With this in mind, in 2004 members of the wastewater division of Monroe County Health Department conducted a survey of septic systems installed and approved by the department within the county over the previous ten year period. This was printed and distributed in the spring of 2005. In the survey, we randomly picked 400 or 10% of the (out of 4007 new systems installed during the previous ten years) new septic system permits which had been installed and approved by this department. The permits were picked by their permit numbers only for a more indiscriminate survey. The result of the survey found that we had found 14 actual failures out of 400 systems checked or about 3.5%. Some of these were no less than two to five years old.

In the fall of 2005, our department was approached by Mike Market and Dave Presby with a new system which utilizes sand as an additional cleansing agent, such as the mound septic system does, but with a specially designed pipe. The pipe itself, with its specially designed fabric was to initially clean the effluent by tying up and breaking down any harmful bacteria contained within the septic effluent before entering the sand, and finally released to the surrounding soil. Unlike the mound which requires a slope less than 6%, the Presby septic system could be placed on most slopes up to 12-15% and did not require a pump system. The most important aspect of the systems was that if effluent would escape it should have little to no *e. coli* present (*common bacteria tested from presence of sewage*). To ensure this, monitor wells were installed in all systems.

During the first two years all Presby septic system installed were monitored several times to ensure they were in good working condition and no problems were found. By 2008, most septic systems installed were Presby septic systems because of their ability to fit in most sites, especially for repairs of older failing septic systems. In some cases due to the lack of additional space on certain lots the Presby septic system was installed in the same location of the failing site, even on some failing mound sites. In 2012, with such great results this department required, with the Health Boards blessing, Presby septic systems to be installed on all new and repair sites. Also during this time an additional sand lined filter system appeared (Geo-flo) and was approved for use by the Monroe County Board of Health.

In 2013, the Indian State Board of Health approved a new version of Presby Environmental, Presby Advance. Presby Advance has additional material (more area for the bio mat to grow which aids in the capturing of the bad bacteria). Although the ISDH allowed a smaller sizing for Presby Advance we have reduced to a size that this department feels is adequate to continue cleansing. We still allow Presby Environmental and Geo-flo to be installed but at a greater size than Presby Advance.