

Availability of Onsite Sewage Treatment System Nitrogen Reducing Technologies in Florida (September 26, 2016 - Draft)

Nitrogen Removal Level	System	Common Reference	Status
Low (25-35%)	Conventional: primary treatment + soil treatment unit with 24 inches separation to the seasonal high water table.	Septic tank + drainfield	Available To replace old legacy systems that do not meet current water table separation requirement in 64E-6, F.A.C in order to achieve 25-35% nitrogen reduction.
Medium (50-70%)	ATU (NSF40) + soil treatment unit	ATU + drainfield	Available Found in Table 3. Florida approved options: About 30 treatment system models have been approved as ATU in Florida. http://www.floridahealth.gov/environmental-health/onsite-sewage/products/_documents/pbts-components.pdf
	ATU (NSF245) + soil treatment unit	ATU (established Nitrogen Reduction) + drainfield	Available Florida Regulations do not recognize NSF 245 systems. Therefore, there is no separate listing. Some NSF 245 systems can be found from Tables 2 and 3. Some NSF40 certified systems may have the NSF245 certification for nitrogen removal. Treatment technologies used in PBTS and innovative systems included some NSF245 certified systems. http://www.floridahealth.gov/environmental-health/onsite-sewage/products/_documents/pbts-components.pdf
	Nitrogen Reducing PBTS	Current nitrogen-reducing PBTS, with aeration	Available Found in Table 2. Florida approved options: Three technologies are commonly specified by Florida engineers for PBTS that include nitrogen reduction. About 10 treatment systems have received innovative system permits. http://www.floridahealth.gov/environmental-health/onsite-sewage/products/_documents/pbts-components.pdf
	Conventional + In-tank PNRS Stage 1 + Recirculation tank	Recirculating Media Filter	Working on system design specifications. Expect to be done by the end of 2016.
	Conventional + PNRS In-ground Stage 1 underlain by Stage 2	Septic tank + drainfield + lined media	Needs 64E-6 Rule Revision. Now working with TRAP on proposed rule language.
High (85-95%)	Conventional + PNRS In-tank Stage 1 + PNRS In-tank stage 2	Septic Tank + In-Tank Media Filters	Working on system design specifications. Expect to be done by the end of 2016.
	Conventional + PNRS In-ground Stage 1&2a + PNRS In-tank Stage 2b	Combined Systems. Septic Tank + Lined Drainfield + In-Tank Media	Working on system design specifications. Expect to be done by the end of 2016.

Note:

ATU: Aerobic Treatment Unit

PBTS: Performance Based Treatment System

PNRS: Passive Nitrogen Removal system

NSF: National Sanitary Foundation