

THE USE OF ALTERNATE ONLOT TECHNOLOGIES FOR NEW LAND DEVELOPMENT

In a meeting between the Department and Chairman Mowery on, Thursday, January 26, 2017, Mr. Mowery requested that we provide the SAC board with the Department's position on alternate systems and sewage planning. From time to time, we receive questions from the regulated community regarding the consideration of alternate and experimental technologies for new land development proposals in planning. The purpose of this summary is to explain that current regulations prohibit us from basing planning decisions on suitability for shallow (less than 20-inch Limiting Zone (LZ) depth) absorption area systems classified as alternate technology or for any experimental system.

Alternates in Planning

25 Pa. Code Chapter 71, Section 71.62 of the regulations requires that the general site suitability criteria, described in Sections 73.14 and 73.15 be applied in planning. General site suitability establishes that a feasible alternative for a conventional sewage system, as defined in Section 73.1, is available to serve the sewage disposal needs of the new lot to be created. If the requirements of Section 71.62 cannot be met, and the site is not generally suitable, there is no authority in Department regulations to approve the planned subdivision.

Specific designs, or technologies beyond those systems defined in the regulations as conventional system are not considered in making determinations for sewage planning proposals. The exception is Individual Residential Spray Irrigation System (IRSIS). IRSIS proposals include site specific design requirements due to two factors; it's the only conventional system suitable for use on shallow LZ soils (10" to Seasonal High Water Table, 16" to bedrock), and the relative size of the systems. If general site suitability cannot be proven, the only possible option is to attempt to adequately characterize the proposed lots as suitable for IRSIS, including sizing the lots to accommodate the proposed IRSIS systems.

Shallow soil absorption area alternate and experimental technologies and systems are necessary to resolve less than ideal conditions on previously established lots only. These are existing lots that were created without conformance to current regulatory requirements. These existing lots have site-specific solutions available to provide for sewage disposal.

Alternate and experimental technologies may be used on sites after planning approval has been granted based on meeting the general site suitability requirement. Essentially, only after planning approval is granted may these systems be considered on the newly created lots during the permitting process.

Alternates and the Exemption Provision

25 Pa. Code Chapter 71, Section 71.51 of the regulations allows for exemptions from planning. There are five criteria that must be met in order to be eligible for the exemption. Item (v) of the requirements has been misinterpreted as allowing for alternate systems through the exemption process. Item (v) states:

- (v) Complete soils testing and site evaluation establish that separate sites are available for both a permittable primary soil absorption area or spray field and a replacement soil absorption area or spray field on each lot of the subdivision as confirmed by a signed report of the sewage enforcement officer serving the municipality in which the new land development is proposed. The local agency or municipality may require deed restrictions or take other actions it deems necessary to protect the replacement soil absorption area or spray field from damage which would make it unsuitable for future use.

Item (v) states that **complete soils testing** for primary and replacement absorption areas or spray fields is required for the use of an exemption. §73.14 (a)(5) provides that percolation tests may *not* be conducted when the soil profile shows a limiting zone within 20 inches of the mineral soil surface. Therefore, exemption proposal for sites with shallow LZ do not meet the requirement for complete soil testing since percolation tests are not to be performed for these sites per the regulations. The Site Investigation, Percolation Tests and Absorption Area and Spray Field sections of the regulations (§73.14 - §73.16) make no mention of alternate system systems. Proposal for new land development are to be based on the use of onlot sewage disposal facilities that utilize conventional systems, soils absorption area or spray fields.

Additionally, alternate and experimental systems rely on treatment technology rather than soils for renovation of the effluent. §71.73, Sewage management programs for sewage facilities permitted by local agencies requires programs to assure proper operation and maintenance for these facilities. Assuring that municipalities have these programs in place before they approve and permit the use of alternate systems is a critical component of sewage facilities planning. Evaluation of the use of these technologies is not something we ever intended to be exempt from that planning.