SECTION 6

ADVANCED PROTECTION MANAGEMENT PROGRAM

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A. INTRODUCTION

According to Section 10.0 of the SWRCB OWTS Policy, an Advanced Protection Management Program is the minimum required management program for all OWTS located near a water body that has been listed as impaired due to nitrogen or pathogen indicators pursuant to Section 303(d) of the Clean Water Act.

Per County Ordinance Article 6, the Advanced Protection Management Program for San Mateo County is intended to apply to new, replacement and expansion OWTS within the following areas:

1. Those lands addressed by a specific TMDL issued by a CRWQCB;

2. Those specific areas as may be determined by the Board of Supervisors as impaired areas based on results of cumulative impact evaluations consistent with the OWTS Code. Such impaired areas may require additional protections related to OWTS design, installation, and reporting (none established as of October 2015); and

3. Those lands within six hundred (600) lineal feet from the natural or levied bank of creeks and rivers, high water for lakes and reservoirs, and the mean high tide line for tidally influenced water bodies, of any impaired water body or segments thereof that are identified by the State Water Board and by US EPA pursuant to Section 303(d) of the Federal Clean Water Act.

Description of all areas considered to be within the Advanced Protection Management Program will be maintained by San Mateo County Environmental Health as part of this Onsite Systems Manual. Maps are provided in at the end of this section for those areas of the County currently designated as “impaired”.

B. REQUIREMENTS

1. For those lands addressed by a specific TMDL, advanced protection management requirements for OWTS will be as defined by the TMDL implementations plan. However, no TMDLs have been completed as of January 2016, that include load allocations for OWTS. For those Impaired Water Bodies that do have an adopted TMDL addressing the impairment, but the TMDL does not assign a load allocation to OWTS, no further action is required unless the TMDL is modified at some point in the future to include actions for OWTS.
2. For those specific impaired areas determined by Environmental Health based on cumulative impact evaluations, any advanced protection management requirements for OWTS will be defined as to mitigate the specific impact(s) (none identified as of January 2016).

3. For those areas within six hundred (600) lineal feet of 303(d) listed water bodies impaired for either pathogens or nitrogen, in the absence of an adopted TMDL, new, replacement and expansion OWTS shall comply with applicable requirements contained in SWRCB OWTS Policy, Section 10, and in this Onsite Systems Manual, including:

a. Operating Permit Required as Alternative OWTS.

   Apply for and maintain an operating permit as an Alternative OWTS, subject to all the requirements of this Manual and County Ordinance 4.84.

b. Supplemental Treatment for Pathogen Impairment.

   (1) Effluent Quality. For OWTS adjacent to water bodies impaired for pathogens, provide ongoing supplemental treatment for pathogens using supplemental treatment components designed to perform disinfection providing sufficient pretreatment of the wastewater so that effluent from the supplemental treatment components does not exceed a thirty (30)-day average TSS of thirty (30) mg/L and shall further achieve an effluent fecal coliform (or E. coli) bacteria concentration less than or equal to two hundred (200) MPN per one hundred (100) milliliters.

   (2) Groundwater Separation. The minimum soil depth shall not be less than three (3) feet, and the minimum depth to the anticipated highest level of groundwater below the bottom of the dispersal system shall be as defined in County Ordinance 4.84, and Section 3 of this Manual. All dispersal systems shall have at least twelve (12) inches of soil cover.

   (3) Monitoring and Reporting. In addition to all other design, operation, monitoring and reporting requirements of County Ordinance 4.84 and this Onsite Systems Manual, OWTS with required disinfection for pathogens shall be inspected for proper operation quarterly by a service provider while the system is in use unless a telemetric monitoring system is installed capable of continuously assessing the operation of the disinfection system. The wastewater flowing from the supplemental treatment components that perform disinfection shall be sampled quarterly
at a point in the system after the treatment components and prior to the dispersal system and shall be tested for fecal coliform (or E. coli). Reporting of all effluent sample results shall include the geographic coordinates of the sample location. Effluent samples shall be taken be a service provider, using appropriate chain of custody and sample holding and handling techniques, and analyzed by a California Department of Public Health certified laboratory.

c. Supplemental Treatment for Nitrogen Impairment

For OWTS adjacent to a water body impaired for nitrogen, the OWTS must provide ongoing supplemental treatment for nitrogen using supplemental treatment components certified by NSF, or other approved third party tester, to meet a fifty percent (50%) reduction in total nitrogen when comparing the thirty (30)-day average influent to the thirty (30)-day average effluent.