ADDENDUM TO CAG COMMENTS ON OWTS POLICY

I. Further discussion on comment number 5, Reserve Replacement Area For Building Permit applications

The County Code requires that a parcel not be over built with respect to the amount of area available for the septic system and future repair of the system. This requirement can be satisfied by a determination that the work proposed under a building permit does not impose additional sewage loading onto the septic system and does not encroach onto the existing system or approved reserve expansion area. Reserve expansion areas have been required to be properly tested, designed and designated on parcels by the County since at least 1980. All of these approved areas should be recognized and accepted in the building permit review process if the reserve area is unaffected and there is not an increase in wastewater flow. If there is not an approved reserve area, then the size of the reserve area should be based upon the size of the existing, properly functioning septic system and the setbacks to water wells, streams, etc.

The California Plumbing Code Section 101.6 states that "Private sewage disposal systems shall be so designed that additional seepage pits or subsurface drain fields, equivalent to not less than 100 percent of the **required original system**, shall be permitted to be installed where the original system cannot absorb all the sewage."

The above is a partial quotation. CPC Section 101.6 contains additional language that reads, "No division of the lot or erection of structures on the lot shall be made where such division or structure impairs the usefulness of the 100 percent expansion area."

Note that this Plumbing Code section references the 100% reserve expansion area as being based upon the **required original system** and this section is the only section of the Plumbing Code that references reserve expansion areas. There is no requirement in the Plumbing Code that evaluation of building permit applications be based upon a code conforming 100% reserve expansion area. Similarly, there is no provision in the State OWTS policy for review of the reserve expansion area when a building permit is applied for.

Sonoma County Code requires 200% expansion areas for parcels created after 1971.

Plumbing Code Section 101.7 states that "No property shall be improved more than its capacity to absorb sewage effluent properly by the means provided in this code." This section also does not require that the reserve area be code conforming when evaluating building permit applications.

Proposal:

Review of OWTS for building permit issuance for increased building footprints or detached structures where there is no increase in flow to the OWTS:

1. If 100% (or 200% as required) reserve expansion area is available as shown on the original, approved septic system permit, and is not affected by the proposed project, the reserve area is adequate for approval of the project with no further review or analysis.

Agreed, with the caveat that the reserve area was evaluated for the on-site septic design parameters such as soil type, soil depth, percolation rate, rough sizing, etc. In many instances there was little to no on-site evaluation for reserve areas and merely a circle or label de-noting "reserve area."

2. If no reserve expansion area was shown on the original septic system permit, a plot plan shall be submitted showing that there is 100% (or 200% as required) reserve area available. The reserve area shall be based upon the original, permitted size of the dispersal system.

On-site parameters and sizing evaluation is still needed to ensure the area can actually support a septic system. We have decreased the sizing requirement from 150 gpd per bedroom to 120 gpd per bedroom. And we allow the use of more of the side wall of standard trenches. Both of these revised standards lead to smaller systems as compared to the previous design parameters. However, clients can use the prior design parameters and exceed the standards if they choose.

3. If the septic system predated the requirement for a septic system permit, then the reserve area must be shown based upon the size of the existing system provided that it is functioning properly.

Question appears to be the same as #2? Response is the same as for #2.

4. If a building project with no increase in sewage flow is proposed for increased building footprints or detached structures and the proposed construction is located in an area of the parcel that is unsuitable for dispersal system construction, then no demonstration of reserve expansion area will be required for approval of the project. Areas that will be considered unsuitable for a dispersal system include areas within the required setback to a water well, stream, property line or other areas as noted in the setback requirements of Table 7.2.C. of the OWTS policy.

The determination of "unsuitable" land areas would need to be addressed. In our "encumbrance method" we treat setbacks (from wells, steams, steep slopes, etc) as encumbered areas. Already developed areas are also encumbered.

A structure proposed in an already encumbered area would not add to the already encumbered area and therefore would not require a reserve area evaluation.

If the proposed structure is not located in an identified encumbrance (stream or well setback, steep slope, etc.), the only way to determine if the area is unsuitable is for an evaluation of the area including soil eval, perc test, etc.? A second approach is to

demonstrate an adequate reserve area elsewhere on the parcel. We would only require the reserve area evaluation if the percent encumbrance exceeded 50% of the land.

II. Setback Requirements for OWTS

TABLE 7.2.C

This table has been completely revised from the existing County OWTS policy. Setbacks for streams are now listed for "Blue line streams, non mapped streams and natural swales". A blue line stream now requires a 100 foot setback from a stream shown on USGS maps as a solid blue line **or a dot and dash blue line**. The dot and dash blue line delineation on a USGS map indicates intermittent flow. This alteration to the setback results in a substantial increase in setback distances to smaller streams. Previously, these streams were classified as "ephemeral" and had smaller setbacks than for "perennial" streams. The justification for this increase in the setback to seasonal streams is not clear and does not appear to be justified.

Staff propose to revert to using perineal and epheral streams. One Technical Advisory Committee recommended switching to using mapped streams (blue line or dot-and-dashed streams). In more recent discussions with the Land Use Advisory Panel, it was agreed to revert to using perineal / ephermal streams.

There is no definition of where stream setbacks are measured from. It should state top of bank or normal high water flow line.

The current OWTS Manual has setbacks from streams using the top of bank as the starting point. The starting measuring point was inadvertently omitted in the draft. We intend to revise to include the top of bank as the starting point.

There is no specification of which scale USGS map is to be used (it makes a difference). We recommend 100,000 scale.

Staff propose to revert to using perineal and epheral streams, making this a moot issue.

There is a lot of ambiguity currently regarding where the setback from the Russian River is measured from. The river generally has a series of plateaus along its banks. Some staff have interpreted the edge of the highest plateau as the point where the setback is to be measured from. The setback for the river should be specified as from the top of the closest bank to the river.

There is a new requirement for setbacks from Storm Water and Groundwater Infrastructure. Although setbacks are probably a good idea, the proposed setbacks seem unnecessarily restrictive especially with regards to the setback for the discharge from an interceptor drain. These setbacks will impact the area available for an OWTS and will create the need for variances. They should be pulled out of the standards and subjected to a peer review process.

The current version has setbacks for drainage ways with the break point at 18": greater than 18" required a 50' setback; less than 18" then 25' setback.

The draft version relabels "drainage ways" as "storm drain pipes" keeping the same setbacks.

The draft version created a new category for "Post Construction Storm Water Treatment Facility" with a break point of 12" in depth: greater than 12" depth has a 50' setback; less than 12" depth has a 25' setback.

Storm water treatment systems receive storm water runoff and are a type of drainage way. In practice we have treated storm water treatment facilities with the same setbacks as drainage ways. For transparency, we propose to include all types of drainage ways (drainage ways, storm drain pipes and storm water treatment facilities) in the revised OWTS Manual.

The justifications for the above changes to table 7.2.C. are unclear. We suggest that changes that deviate from the State OWTS policy and adopted codes be clearly substantiated by scientific evidence that supports the need for the proposed requirement and be subject to a peer review process.

The State's OWTS Policy contains six pages on the requirements for a tier II program. The OWTS Policy was never intended to provide the details on how to construct a septic system. Every page on the construction standards (OWTS Manual) would be subject to this suggestion.