POSITION PAPER – NEW PERMIT

Utilizing the proposed language of the new permit, we have reason to believe that it is the concealed intent of the Permittee to substanually decrease, if not totally eliminate, the use of proprietary filtration devices, and insisting on the use of infiltration devices, (BMPs) alone.

The Permittee's rationale is that there is "a need for standardization* of all BMPs, in case the County becomes responsible for maintenance of the BMPs once a property owner has demonstrated their inability, or unwillingness, to perform those tasks.

Some of our concerns with the new permit language are:

1. Permittees Failure to accept Proprietary Filtration Devices

The Permittees failure to accept proprietary filtration technologies, even when they have demonstrated pollutant removal efficiencies much higher than those demonstrated by infiltration BMP practices, will deny the public's access to those new technologies <u>and fails to act in the public's best interest.</u>

Over 90% of the watersheds identified within the permit are utilized for (a) agricultural purposes, (b) recreational activities with direct human contact (REC1), and (c) domestic or municipal water supplies. ALL of these waterbodies are currently listed on the 303(d) impaired waterbodies list – prior to implementation of the new permit and the expanded use of infiltration devices.

* Standardization is extremely prejudicial against new filtration technologies and could, (potentially) subject the Permittees to extensive litigation for violating federal laws pertaining to restrain of free enterprise and federal fair trade practices.

2. Pretreatment Requirements

The CASQA New Development and Redevelopment Manual (2003, 2009) states that <u>prior to the use of any infiltration device</u>, or practice, <u>pretreatment is required</u>, "discharging waters must be <u>fully pretreated</u> prior to the use of an infiltration device or practice".

The new Permit does not define, (a) what fully treated means, (b) what constitutes an acceptable pretreatment device, nor (c) does it delineate what the devices' treatment capabilities should be.

Furthermore, there is no criteria for the establishment of a review / analysis of pretreatment devices, leaving the decision of whether a pretreatment device is "acceptable" up to each individual Permittee. This is not generally referred to as standardization.

If the use proprietary devices are unilaterally denied, then what type of device does the Permittee suggest <u>will</u> be available for the *required* pretreatment BMP? Certainly not another infiltration device.......

3. Regional Evaluations

The new permit allows Permittees to utilize a "regional approach" for determination of when an infiltration device (practice) is feasible for a project. We believe this to be an oversight of the new permit, whereas ALL previous permits contained very specific language stating that every BMP under consideration must utilize a <u>site-specific applicability analysis</u>.

Additionally, a regional analysis determination will not be acceptable criteria, as it does not consider the extremely variable soil types found throughout the Riverside, San Bernardino and Orange County areas.

A multitude of worldwide studies are available on the Internet, all documenting that various soil types exhibit a wide range of cation exchange capacities (CEC), a soils ability to absorb water and filter out pollutants.

When **any** soil disturbance occurs, the CEC is <u>substanually</u> altered, reducing the soils ability to infiltrate water. Even without disturbed soils being compacted (generally required for new development / redevelopment), **the CEC properties are <u>permanently</u> altered**, and even with extensive remediation, these capabilities generally cannot be re-obtained.

Extensive USDA studies have demonstrated that California has three predominate soil types, **all** of which lose over 90% of their CEC abilities when disturbed, specifically when native vegetative cover is removed, (commonly referred to as clearing and grubbing).

4. No Design Criteria

The new permit fails to provide the Permittees a method for determining what design criteria should be used for insuring proper sizing of the infiltration devices proposed, based upon the varying soil types found within a specific location, (site).

As an example, a development may wish to establish Drainage Area #1 (5-acres) wherein the predominant soil type is Mollisols, (sub cat. Xerolls) and the soils are dry throughout most of the year, allowing moisture to move freely through the soils and providing storage above bedrock in normal years. [This is in its native (undisturbed) state, however, the CEC properties will change as the soils are subjected to disturbances].

When creating Drainage Area # 2 (5-acres) it is determined that it contains primarily Entisols, (sub cat. Orthents) which have extremely low CEC capabilities.

An approach for Drainage Area # 1 (i.e. 3,700 c/f per acre) would provide much greater infiltration properties than a similar sized infiltration device in Drainage Area # 2.

A simple soils analysis would show that an infiltration device located in Drainage Area # 2 would have to be substanually larger than that utilized in Drainage Area # 1, or that intensive soils remediation would have to occur in that area prior to it's use as an infiltration BMP.

Whereas it has been well documented that soil types <u>do</u> vary tremendously from one area to another, (even within the same site), then how can a regional analysis approach possibly work?

(4 - Cont'd)

Further, whereas no design criteria has been established, "approvals" will be left up to the individual Permittee who, in most cases, does not have staff properly educated in the required disciplines. The Permittee is faced with a choice of either following someone else's lead or are left to guess if something makes sense or not.

SUMMATION

It is our opinion that the language of the new permit has not been sufficiently developed so as to provide Permittees with clearly stated objectives or design criteria suggestions.

Mandating the use of infiltration devices without substantive data pertaining to:

- (a) When they should be utilized,
- (b) What criteria must be established prior to their use,
- (c) What sizing design criteria should be utilized, [based upon various soil types],
- (d) Etc.

We believe is a short-term solution (possibly based upon the need for reduction of expenditures for flood control infrastructure development and maintenance requirements), and is <u>not</u> particularly acting in the *public's* best interest.

This leaves a multitude of questions pertaining to the long-term effects (damages) to our local surface and groundwater water quality, especially when subjected to concentrated pollutant sources, i.e. infiltration BMPs. Particularly for those waterbodies already included in the 303(d) list.

We do not feel that this was the intent of this permit, nor was it the stated intent of the Clean Water Act.

Respectfully Submitted,

Kip B. Searcy

Kip B. Searcy – Principal & General Manager CESC Engineering, LLC Katchall Filtration Systems, LLC