



COUNTY OF SONOMA
PERMIT AND RESOURCE MANAGEMENT DEPARTMENT
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Attachment B

Department of Transportation and Public Works

Responses to the draft Waste Discharge Requirements (Order No. R1-2008-0106)

Permit Boundary (Findings, No. 9)

The intent of the MS4 program would not seem to apply to outlying rural areas. The urban condition of developed land with interconnected storm drain systems and impervious surfaces is typically not present in rural areas. Surface water generally traverses native soils – swales, ditches, and overland sheet flow – which would seem to provide significant opportunity for natural cleansing of the water delivered from the non-concentrated sheet flow off of impervious roadway surfaces, resulting in little need, and by extension provide little cost effectiveness, for the MS4 type urban area requirements. Permit boundary should remain as-is or be expanded only under careful analysis in consideration of the existence MS4 type conditions. The efficacy of applying such MS4 water quality practices to areas encompassing rural roads is questionable, particularly at the expense of scarce public resources that would need to be diverted to such activities.

New Development Projects (Part 4, No. 3)

(a)(7): For projects outside the urban setting, changing the threshold from the current one acre of impervious surface to 5000 square feet strains reason in regards to the cost effectiveness of providing post construction treatment controls. These potentially costly and maintenance inducing facilities should be limited to areas and impervious surface projects where they can be reasonably warranted, i.e. the existence of nearby sensitive receptors or the allowance for the existence of natural filtering typically present in rural settings. Applying judgement rather than a blanket approach would seem appropriate to this requirement.

While it is not clear what the actual impacts would be from this proposed change in the requirements, but the costs for treatment of runoff from new impervious surfaces could be substantial if detention ponds are necessary since land would in most cases have to be purchased as well as the added cost for design, permitting & construction of the treatment facility. Also, the reduced area that triggers the need for treatment is significant. For example, 650 feet of an 8' wide bike trail would require treatment as would 1250' of a paved shoulder. These same concerns are true for redevelopment projects.

Redevelopment Projects (Part 4, No. 4)

4(b): Projects that replace existing impervious surfacing should be exempt from the requirement for a permit and post construction treatment controls because logically this activity does not result in any increase in impervious surface area. There is no reasonable nexus to

this activity and the need to mitigate by implementing post construction treatment controls. This is particularly disagreeable when the threshold area is 5000 square feet.

Vehicle and Equipment Wash Areas (Part 9, No.4)

In rural corporation yards – Forestville, Guerneville, Healdsburg, and Annapolis – wash areas are available that capture and contain all runoff in permeable native soils, on site. Sanitary sewer is either not reasonably available or is cost prohibitive. Capturing wash water and transporting to disposal or treating are excessive and costly burdens which would seem to provide little reasonable benefit at these rural locations.

Storm Drain Operation and Management (Part 9, No. 6)

(a) Catch basin cleaning: This should apply specifically only to curbed streets and/or storm drain systems discharging into sensitive or significant waterways, which is more the case for typical urban areas rather than rural areas.

Drainage from native ground, which may include some minor impervious road area drainage, into a catch basin should not require the catch basin to be scheduled for regular cleaning, in the same manner that scrubbing the flow line of a native swale on a regular basis would not be of particular benefit. Similarly, regular cleaning of catch basins which lack connection to a storm drain system, particularly those that do not drain to sensitive receptors (common in rural areas), would seem to be of negligible benefit and less than cost effective.

The establishment of a zone system (A, B, & C) could significantly increase the costs for the inspection & cleaning routine, depending on the size of the zones. The change from an annual basis (or as needed if a problem occurs) to 4 cycles for Zone A & 2 cycles for Zone B (Zone C remains once a year) would out strip the department's capabilities at the current levels of funding, personnel, & equipment. This activity could be handled through contracts, but at a cost that is not currently part of the departmental budget.

To maintain this level of maintenance for this activity, it is anticipated that there would have to be additional equipment (2 vacuum trucks @ \$200,000/unit) & personnel (2 operators & 2 maintenance workers) plus fuel, maintenance, & overhead. The total cost per year could be in the range of almost \$500,000 (the capital equipment cost would be \$400,000). This is potentially a very costly program.

(e) Trash Excluders: The cost overall of this requirement, even limited to curbed street catch basins connected to storm drain systems is considerable.

There could be several thousand catch basins involved in this program (there are approximately 400 in the vicinity of the airport alone). Retrofitting these basins could range from a few hundred dollars for a simple insert to several thousand dollars if the basins require replacement or a major reconstruction to accommodate a trash filtering device.

Of more concern is the creation of flooding potential. During storm events it is extremely unlikely that the excluders could be maintained in such timely manner to reasonably prevent clogging, which can well lead to localized flooding and create associated personal injury and property damage risk and liability. In view of this, trash excluders should only be considered on specific catch basins on a case by case basis where the benefit/risk is warranted.

The implementation of such a program (design, retrofit, permitting, etc.) will be a lengthy & expensive process. By adding these filtering devices, they will have to be monitored more

frequently to maintain proper operation. The personnel & equipment shown in item "a" above should be able to include most of the monitoring w/in their routine.

(f) Storm drain maintenance: This section is taken to essentially relate to open channels and not pipes. The words "and other drainage structures" is confusing.

COMMENT: the direction that these changes lead us is to the creation of a separate environmental storm water & drainage section. The vacuum trucks & the personnel described above would be included in this organization, but water quality becomes a significant task that will involve testing, monitoring, pollution investigations, & a host of other related activities. Quickly, these requirements could result in an annual cost more than \$1 million that is not budgeted today.

Streets and Roads (Part 9, No. 7)

(a)Maintenance: The current permit calls for a sweeping frequency of six times per year or once every two months. This new requirement would quadruple this frequency. The additional costs of providing for this dramatic increase as a blanket or shotgun approach to all commercial areas is seemingly unwarranted and potentially wasteful. A more reasoned and cost effective approach would be to identify specific areas where the current sweeping frequency is considered inadequate and increase the frequency in those areas as necessary. This type of approach could include industrial and other areas as well.

The increased requirements could result in adding 1 or 2 additional sweepers w/their operators. The sweepers cost approximately \$200,000/unit. Annual operating costs are approximately \$450,000 for 2 sweepers. Again, this activity could be contracted, but it is not certain that any savings would accrue. If a separate environmental storm water & drainage section was developed, this operation would be included.

Illicit Connections (Part 10, No. 4)

(a)(1)(A) GIS layers: Mapping of storm drains should be defined as typically applying only to those associated with drainage of curbed streets. The non-curbed street drainage is usually not part of a bona fide storm drain system (interconnected and /or significant) and provides little opportunity for illicit connection. Instances where a storm drain system exists in a non-curbed street network could be identified on a case by case basis and included for mapping under this requirement.

Ken Giovanetti 9/30/08