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From: NBWA Water Quality Technical Committee's Stormwater-Wastewater Coordination Work Group (Terri Fashing - Marin County Stormwater Pollution Prevention Program, Beverly James – Novato Sanitary District, Mark Williams – Las Gallinas Sanitary District, Kevin Booker – Sonoma County Water Agency).

To: Harry Seraydarian, NBWA

RE: NBWA – Assessment of Stormwater Regulations and Policies that affect POTWs and Collection Systems

Objectives: Present and summarize the suite of stormwater regulations in Marin, Sonoma and Napa counties that require municipalities to encourage or to require stormwater or wash water to be routed to the sanitary sewer. Present the potential impacts to POTWs and collection systems and present some of the concerns held by local NBWA sanitary districts

Propose and discuss opportunities to develop local mutually beneficial policies and outreach efforts that will serve the objectives and regulatory requirements of [Phase II NPDES](#) stormwater permitted municipalities and sanitary districts. [We can address Phase I NPDES as well but I have more familiarity with Phase II requirements].

Issue paper should facilitate planning for a workshop that will be designed to develop a consensus message.

Problem statement: Currently, the statewide Phase II NPDES general stormwater permit (covers small “MS4s” or municipally owned storm drain networks) requires permittees to:

“To the extent allowable under State or local law, effectively prohibit, through ordinance, or other regulatory mechanism, non-storm water discharges into the MS4 and implement appropriate enforcement procedures and actions”

The Phase II permit also allows certain types of non-stormwater discharges as well, but these exceptions vary from municipality to municipality and local ordinances may not allow all of the non-stormwater discharges listed below:

“Address the following categories of non-storm water discharges or flows (i.e., authorized non-storm water discharges) only where they are identified as significant contributors of pollutants to the Small MS4:

Water line flushing; landscape irrigation; diverted stream flows; rising ground waters; uncontaminated ground water infiltration (as defined at 40 CFR §35.2005(20)) to separate storm sewers; uncontaminated pumped ground water; discharges from potable water sources; foundation drains; air conditioning condensation; irrigation water; springs; water from crawl space pumps; footing drains; lawn watering; individual residential car washing; flows from riparian habitats and wetlands; and dechlorinated swimming pool discharges.

Discharges or flows from fire fighting activities are excluded from the effective prohibition against non-storm water and need only be addressed where they are identified as significant sources of pollutants to waters of the U.S.”

Based on these requirements, many municipalities have passed ordinances that prohibit non-stormwater discharges. In Marin County all municipalities passed a version of the “Urban Runoff Pollution Prevention” ordinance which is based on a model ordinance provided by MCSTOPPP. Generally, each municipal stormwater ordinance prohibits non-stormwater discharges and exempts the categories listed above.

These requirements have also inspired municipalities to develop public outreach materials designed for various audiences, including construction site managers, mobile surface cleaners, restaurants, carpet cleaners, swimming pool owners, home gardeners, etc. The outreach materials sometimes advise the audience to implement Best Management Practices (BMPs) in order to comply with local ordinances and state and federal laws. These directives allow municipalities to further efforts to comply with the permit requirements above that prohibit, for the most part, non-stormwater discharges.

Some Best Management Practices suggest that certain types of wash water or stormwater be routed to the sanitary sewer. This may present regulatory or capacity issues for sanitary districts and collection systems, and be contrary to regulatory mandates that require those agencies to reduce inflow and infiltration to the collection system and to reduce the use of “blending” at the POTW. This issue paper identifies categories of stormwater BMPs that may impact POTWs and that appear in stormwater outreach documents directed at the public or at businesses. The NBWA Water Quality Committee will potentially use this list of categories to discuss solutions and possibly to develop local mutually beneficial policies and outreach efforts that will serve the objectives and regulatory requirements.

BMPs or Activities of Concern to POTWs

1. Stormwater requirements for some New Developments. Plumb to sanitary the following (guidance also requires wash areas to be covered):
 - Outdoor wash rack drains (restaurants)
 - Swimming pool drains
 - Fire sprinkler test water (unclear requirement at Water Board currently)
 - Maintenance Bays, loading docks and equipment wash areas
 - Commercial refuse areas

Problem: Swimming pools are often treated with copper-containing products to control algae. Connecting them to the sanitary sewer is a concern to POTW’s. POTW’s may have difficulty removing copper-containing products which may result in NPDES limit violations.

Swimming pool’s that utilize salt systems will degrade recycled water quality if pool water is discharged into the sewer system.

Swimming pool’s and other non-sewage discharges consume sewer system and wastewater treatment plant capacity, and are of particular concern during wet weather events when treatment plant hydraulic capacity may be limited. POTWs are subject to an 85% removal requirement that may be difficult to achieve if they accept pool water during the wet season. The additional increased hydraulic loading may result in excursions of effluent regulatory requirements beyond the 85% removal requirement, and run contrary to mandates that POTWs reduce reliance on “blending” as a means to accommodate high wet weather flows.

Fire sprinkler water may pose capacity issues during wet weather season. [Request input from NBWA Water Quality committee sanitary district reps on impacts of other wash water going to sanitary].

Any outdoor drains connected to the sewer system have the potential to contribute rainfall runoff during wet weather events causing hydraulic capacity problems in the sewer system and potential to degrade treatment capabilities at the treatment plants.

Potential Solution: Stormwater agencies and sanitary agencies should work together to ensure all local considerations and concerns regarding spa/pool and wash rack drainages are clearly addressed. A high level of collaborative public/business education on best management practices should be pursued. [Discuss fire sprinkler test water separately-Water Board is developing an opinion on this issue]

Stormwater agencies and sanitary agencies also need to work together to develop coordinated permitting so that facilities are not constructed and permitted by one agency that adversely affects another agency.

2. Mobile surface cleaners are guided by stormwater agencies to use the sanitary system for wash water from painted building exteriors, sidewalks, plazas, parking areas, drive-throughs, and food service facility dumpsters / grease containment areas as long as dry cleanup methods are used for initial cleaning and the wash water does not contain hazardous waste. For parking lots, traffic areas and food service facility dumpsters / grease containment areas property owners or grounds managers are directed to determine what the requirements of the local sanitary district are.

Problem: [Input from NMWA Water Quality Committee please] Sewer systems are not designed to convey sand, rock and debris from surface locations. Discharge of this type of material can result in sewer overflows.

Wastewater Treatment plants are designed to treat domestic and some industrial/commercial sewage (industrial/commercial sewage discharge is often monitored by wastewater agencies). The discharges of unregulated non domestic or commercial sewage could result in wastewater treatment plant effluent violations.

There are also issues associated with permitting and collection of fees that need to be worked out before this is implemented.

Potential Solution: Stormwater and sanitary agencies should work together to ensure all local considerations and concerns to effectively address these issues, including appropriate pretreatment measures, permitting, and fees, if necessary.

3. Carpet cleaners – stormwater guidance is to discharge wash water to sanitary and to filter the water to remove fibers prior to discharge.

Problem: Contaminants and debris could impact the collection and treatment of Carpet cleaner discharge.

Potential Solution: Stormwater agencies and sanitary agencies should work together to ensure all local considerations and concerns to effectively address these issues.

4. “Contaminated groundwater” from pumping at construction/excavation sites and at pump and treat sites (underground cleanup).

Problem: Discharge of untreated contaminated groundwater could impact the collection and treatment. Wastewater treatment plant may not have the capability to effectively remove contaminants.

Potential Solution: Guidance should state that sanitary districts often require a permit in order to accept this water. Pretreatment prior to discharging to sewer systems may be required, as well as limitations on the timing of such discharges. Dischargers should contact sanitary districts prior to discharging the water.

5. Auto dealer car washing: stormwater requirements state that interceptors and wash pad drains are routed to sanitary.

Problem: Sewer systems are not designed to convey sand, rock and debris from surface locations. If these locations are not covered, sewer systems and treatment plant capacities will be impacted during rain events. Contaminants may not be effectively removed by traditional wastewater treatment plant technology. The discharge from auto dealer car washing could result in wastewater treatment plant effluent violations.

Potential Solution: Guidance should state that sanitary districts often require a permit in order to accept this water.

Auto dealers wash areas should be covered to divert rain water to the storm water system. Monitoring program may be required to effectively manage auto dealers wash areas. Dischargers should contact sanitary districts prior to discharging the water.

6. Future stormwater regulations could require diversion of dry weather and first flush flows to POTWs (See the attached fact sheet and letter form BACWA for more information).

Problem: Direct diversion of urban runoff will impact POTWs by increasing costs and by affecting their ability to meet NPDES permit requirements.

Potential Solution: In the future, consider a process to review the many technical, legal and financial issues that would need to be addressed prior to implementing a long-term diversion project. The review of legal issues should also include incidental taking of species of concern that may occur as a result of diversion of dry weather flows to the sanitary sewer system (from BACWA 2008).

References:

Bay Area Clean Water Agencies (BACWA) Permits Committee. 2007. *Stormwater Municipal Regional Permit – Potential Concerns to POTWs*. Fact sheet.

Michele Pla (Bay Area Clean Water Agencies (BACWA) Executive Director). February 29, 2008. Letter to the San Francisco Bay Regional Water Quality Control Board. *Subject: Comments on the Municipal Regional Stormwater NPDES Permit Tentative Order (CAS612008)*.

Bay Area Stormwater Management Agencies Association (BASMAA). 2003. *Pollution from Surface Cleaning: Flat Work, Sidewalks, Plazas, Building Exteriors, Parking Areas, Drive-throughs*. Brochure. Available online:

<http://www.basmaa.org/recognition/resources/files/documents/Pollution%20from%20Surface%20Cleaning.pdf>.