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saveSFbay.org

February 29, 2008

John Muller, Chair  
San Francisco Regional Water Quality Control Board  
1515 Clay Street, Suite 1400  
Oakland, CA 94612

Dear Mr. Chairman and members of the Board:

On behalf of our 10,000 members throughout the Bay Area, we thank you for this opportunity to provide comments on the Tentative Order of the Municipal Regional Urban Runoff Phase I NPDES Stormwater Permit (MRP). We look forward to a final MRP which makes significant and measurable improvements San Francisco Bay water quality, especially through specific, enforceable new requirements to reduce trash and marine debris.

### **The Bay Area is Watching**

Over the last year, Bay Area residents have demonstrated their deep and increasing concern over trash in Bay Area waterways. Save The Bay alone hosted 35 shoreline cleanups at sites all around the Bay, where more than 800 people cleaned up 13,000 pounds of trash. Millions of Bay Area residents have learned more about the effects of trash on our Bay environment through news coverage, billboards, radio public service announcements, and advertisements on local transit. Save The Bay members and the public documented 16 trashed waterway sites in nearly 100 photographs, submitting them to the Regional Water Board for the 2008 303d list. In all, nearly 1,000 photographs of trash were submitted. Photos of Bay trash posted to Save The Bay's web site ([www.saveSFbay.org/baytrash](http://www.saveSFbay.org/baytrash)) were viewed by nearly 16,000 people, and on YouTube, Save The Bay's videos of trashed creeks received half a million views. More than 60 media stories covered the impacts of stormwater pollution and trash on local waterways, including front page coverage in the San Francisco Chronicle and a Bay Area News Group editorial encouraging increased trash regulations that ran in San Jose, Contra Costa, Alameda, Marin, and San Mateo. Radio public service announcements reminded listeners to "stash their trash," and news radio covered trash pollution issues in depth.

Bay and creek users know well how trashed local Bay waterways are, and there is enormous frustration that so little has been done to date about this serious problem by municipalities and the Regional Water Quality Control Board. Shocking photographs of local creek and shoreline trash hot spots, as featured on our website and covered by every major local news media outlet, have brought the problem more widespread attention among all of the region's residents.

### **Increased Trash Provisions Widely Supported**

There is broad, demonstrable public support for increased regulation on trash in the MRP. More than 2,000 individual citizens have signed petitions to the Water Board asking for



stronger provisions on trash. Twenty-five state and federal legislators whose districts are affected by the MRP have sent you joint or individual letters in strong support of these provisions. Thirty-four local, state, and national environmental organizations have joined the campaign to reduce trash pollution of Bay Area waters, including groups concerned with water quality, recreation, local creeks, marine sanctuaries, bird, plant, and mammal welfare, and waste reduction.

There is unanimous agreement on the importance of the trash reduction goal, even among parties who differ on how to achieve it. The Bay Area Stormwater Management Agencies Association noted in a July 13, 2007, letter to the Board that trash is a significant problem and more should be done about it: "BASMAA concurs with the need for more systematically assessing trash accumulation areas potentially associated with stormwater and then taking enhanced action to better address controllable sources and/or conveyance of stormwater-related trash affecting such areas..." Numerous permittees endorsed BASMAA's comments.

### **Some Measures More Effective Than Others**

How the trash problem is tackled will determine whether progress is made: some methods will be effective, while others will not yield significant improvement in the condition of Bay waterways. We strongly support the tentative order's requirement to install trash capture devices in a percentage of each permittee's land area. Emphasis on other trash control measures, such as product bans, education, and extended producer responsibility will have limited impact without trash capture as a primary control measure.

The banning of Styrofoam food containers or plastic bags has been offered as a trash control measure. But trash in waterways is comprised of literally thousands of different items, and no one item makes up a large enough percentage of the total that banning it alone could significantly affect trash levels in waterways. In a San Francisco street litter survey, eighty-four types of large litter were noted, and bannable items such as plastic retail shopping bags made up just 0.6% of total litter, with over twenty-five types of litter found in larger abundance on the streets. The survey was conducted in April 2007, approximately six months before San Francisco banned plastic shopping bags. The city had banned polystyrene food service ware in January 2007, but polystyrene cups and clamshells were still found on the streets.

From City of San Francisco Streets Litter Audit, June 2007, p. 28.

<http://www.sfenvironment.org/downloads/library/rolitterstudy12june07final.pdf>.

### **San Francisco - Large Litter Observations - Top 25 Categories**

	<b>Large Litter Category</b>	<b>% of Total</b>
1.	Misc. Paper	15.0%
2.	No Brand Name Towels / Napkins / Serviettes	13.0%
3.	Misc. Plastic	9.0%
4.	Printed material (newspapers, flyers, books etc.)	7.5%
5.	Receipts (business forms, bus transfers, etc.)	5.3%
6.	Candy bar wraps	4.0%
7.	Home Articles	3.8%
8.	Tobacco other (packs, matches, cellophane)	2.9%
9.	Foil materials / foil pieces	2.7%
10.	Cup Lids, Pieces lids	2.6%
11.	Snack food packaging	2.4%

12.	Plastic bags - not retail	1.9%
13.	Misc. Glass	1.7%
14.	Misc. Paperboard	1.6%
15.	Misc. Cardboard	1.3%
16.	Utensils	1.3%
17.	Condiment package (salt, ketchup, vinegar etc.)	1.2%
18.	Polystyrene cups (foam)	1.1%
19.	Vehicle & Metal Road Debris	1.1%
20.	Paper bags - not retail	1.1%
21.	Paper Cups (Hot)	0.9%
22.	Other cloth	0.9%
23.	Plastic Jars / Bottles/ Lids	0.9%
24.	Paper Food Wrap	0.9%
25.	Gum wrappers	0.8%
	Percentage of total litter	84.9%

Educating Bay Area residents about the impacts of trash on waterways also is important, and numerous ongoing campaigns are addressing this issue, from Caltrans' "Don't Trash California" to city efforts such as Oakland's "Don't Trash Oakland, It's Home," to non-profit efforts such as Save The Bay's "They Don't Do It to You" campaign. These education and outreach campaigns, which have been pursued for decades, can change trash producing behaviors over time, but are demonstrably insufficient. These efforts do not readily translate to reduced trash in creeks, as demonstrated by photos of trash accumulations on creek banks and shorelines. Intercepting and capturing trash is necessary to ensure that waterways meet water quality standards.

There are also efforts underway to make broader changes in the way products are formulated to minimize their environmental impacts. Extended producer responsibility and product stewardship may have the potential *in the long term* to reduce impacts of some kinds of litter, but they do not address the multitude of trash items impacting waterways now and will take decades of concerted effort to see results.

Only trash capture devices and increased cleanup measures will significantly reduce the trash, litter, and dumping that impacts creeks and the Bay. These devices are proven to work effectively to reduce trash discharged to receiving waters, and it is essential that the requirement to treat 5% of each permittee's land area with full capture devices be strengthened in this order. The trash capture device requirements in this order take an extremely incremental approach to trash. By comparison, Los Angeles' trash program is much more extensive: zero trash over the entire Los Angeles River watershed, to be achieved by full capture devices wherever possible.

Many lessons can be learned from Los Angeles' trash requirements. In Los Angeles, as in the Bay Area, municipalities opposed the zero trash requirements, citing concerns about cost. Yet the zero trash approach has withstood legal challenges in Los Angeles, and municipal budget concerns have no place in determining stormwater permit provisions. The Bay Area's proposed capture device requirement is modest: about one-twentieth of Los Angeles's requirements, yet Bay Area cities are following in the footsteps of Los Angeles cities by circulating inflated cost estimates to protest even these minimal new trash requirements.

Most importantly, it was only after Los Angeles municipalities were *required* to implement the new trash program that significant and creative work began to develop new funding mechanisms for infrastructure and more effective control practices. Money was successfully raised: a local bond measure was passed to raise \$500 million for trash capture devices and other clean water projects, a county property assessment was created, a stormwater fee was raised, and a special parcel tax was passed even with a 2/3 vote requirement. State infrastructure bonds are also available for water infrastructure improvements that can provide trash controls. Multiple funding approaches are available to Bay Area municipalities once a trash control program is required by the Board's permit actions.

The optimal approach by the Board would be to require structural treatment everywhere to interdict trash, with an option for permittees to demonstrate where alternative compliance mechanisms would provide equal or better results more cost effectively. In this MRP, we recommend a strengthened version of the tentative order's approach in order to secure some significant improvements in water quality promptly.

### **Action Needed Now**

The Board must not delay implementation of the MRP's trash provisions. Seven years ago, the Board directed cities to address problematic trash levels in creeks and the Bay, without formal regulatory requirements. At that time, the Board chose to allow cities to address the problem informally, with regulation reserved as a future step if the voluntary process did not work. The voluntary approach has failed: most permittees simply ignored the directive. Santa Clara's Urban Runoff Pollution Prevention Program put some effort into study and documentation, but these preliminary steps have not yielded significant progress on reducing trash. The Board must follow through now and ensure that the MRP provisions adopted actually create measurable reduction in trash levels in creeks, within the permit term.

### **Specific Needed Changes to the Tentative Order**

Save The Bay appreciates the effort that has gone into planning the MRP and its new provisions on trash. We support the historic inclusion of trash provisions in the tentative order and believe this MRP can be a major step in controlling trash pollution of local waterways. We recognize the effort required to develop entirely new regulations for trash as a pollutant of concern. We also appreciate that the provisions have evolved in response to comments, becoming stronger and more cohesive with each revision. Following are our specific recommendations to ensure that the final order creates a strong program that accomplishes measurable reductions and protects the Bay from trash. To that end, we urge you to increase accountability and oversight and speed up the timelines in this permit to ensure measurable reductions in trash polluting waterways.

### **Measurable Reductions**

This section will fail to achieve its objectives if permittees cannot demonstrate measurable reductions in the amount of trash polluting waterways by the end of the permit term. We recommend including a provision that states that permittees shall achieve twenty-five percent reductions in trash polluting local waterbodies by the end of the permit term. Reductions should be documented using trash assessments, downstream bypass monitoring, or increases in volume of trash removed from waterways by capture devices or cleanups.

### **Long-Term Plan**

The long-term trash management plan section should be fleshed out in more detail. Though the plan will not be written for several years after permit adoption, the permit should specify what goals the plan intends to accomplish, what should be taken into account, and how it should be structured. At a minimum, the permit should specify that plan will take into account data from capture devices and other permit compliance measures. The permit should specify that the long-term plan achieve incrementally increasing reductions, such as 10% additional reductions per year. Measures to track effectiveness must also be included: at the end of the plan, some type of reporting or field study should be undertaken to verify whether trash impacts to beneficial uses have indeed been eliminated.

The long-term plan's goal is currently to achieve "no impacts to beneficial uses." This end point is not clear enough to determine when the goal is reached. We strongly recommend changing the objective to "trash free waterbodies" to be achieved by 2023.

The order should also be modified to specify that nothing in this permit or the long-term plan will preclude additional requirements which may be imposed by the next permit cycle adopted in 2013, by 303(d) listing, by a trash TMDL, by enforcement of permit provisions, or by any other measure.

### **Sites to be Managed and Trash Sources**

Section C.10.a, Implement Pilot Enhanced Trash Control at High Trash Impact Storm Drain Catchments, asks permittees to identify where trash is being generated upstream that impacts downstream water bodies. We request additional language to clarify that the high-trash generating areas must be mapped to impacts on creeks, wetlands, or shoreline downstream. Strategies used to address trash upstream must be tied to demonstrable reductions in trash at the downstream sites.

It is also important to expressly require trash management measures at trashed waterway sites impacted by trash that is littered or dumped on-site or generated by uses such as encampments, not only trash generated upstream. These sites should be managed through increased cleanup requirements, possibly in conjunction with or other measures such as increased trash receptacle placement and maintenance or concerted, site-specific litter reduction campaigns.

The tentative order's requirement to identify and treat trash-impacted catchments totaling 10% of urban and suburban land area is too modest. No trash in waterways should be acceptable; current discharge prohibitions and receiving water limitations, give the Board has a strong mandate for requiring structural treatment everywhere. In the final order, we request tripling the proposed land area to be treated for trash to 30%. Much more ambitious trash control is being pursued in Los Angeles, and trash TMDLs are being developed for numerous other water bodies in the Los Angeles region.

### **Site Selection Process**

The initial site selection process in the final order should require detailed documentation. The order should require permittees to inventory two types of areas impacted by trash: high-trash generating areas, using the criteria for areas of intensive public use (generally upstream) AND waterways impacted by trash (generally downstream). Data should be gathered by polling municipal workers with experience in waterways, by field inspections,

and by consulting with the public. Sites should be mapped, and maps should include known locations of dumping sites and encampments, as well as pump station outfalls.

### **Speed Up the Timeline**

We share the widespread concern that the timeline included in the tentative order delays for too long the requirement on permittees to reduce trash, and would produce inadequate results unless strengthened. We propose the following timeline, which is both realistic and oriented towards trash reductions in this permit term:

#### **In First 90 Days**

- Submit an inventory to the Board of both types of areas impacted by trash: upstream high-trash generating areas and waterways impacted by trash downstream.
- Prioritize both highest-trash generating areas for installation of capture devices and highest trash-impacted waterways for increased cleanup measures.
- Determine types of trash sources in each area and propose tentative enhanced management measures (non-capture device) to reduce trash flowing from upstream trash-generating areas to downstream trash-impacted areas, to be finalized and implemented by the end of the first year.

#### **By End of Year 1**

- After site selection is completed (first 90 days), implement enhanced trash management measures for prioritized areas.

#### **By End of Year 2**

- Identify funding and complete design of trash capture devices.
- Report on volume of trash removed from downstream waterways, through cleanups or enhanced management measures.

#### **By End of Year 3**

- Capture devices installed.

#### **By End of Year 4**

- Develop long-term plan to eliminate all trash impacts on beneficial uses, with benchmarks to be met each year (for example, 10% additional reduction in trash each year).
- Report on first-year performance of trash capture devices (upstream) as well as condition of downstream areas (trash removed via cleanups, or other measures taken to reduce trash impacts). For trash capture device performance reports, include comparison of installed devices with similar devices installed at other locations, to demonstrate that devices are performing up to reasonable standards, are sited appropriately, and are fulfilling their mission to remove trash from waterways. If device is problematic, does not function, or does not trap trash, any problems shall be corrected by Year 5.
- Report on maintenance of capture devices each year.

#### **By End of Year 5**

- Comply with first year requirements of long-term plan.
- Report on maintenance of trash capture devices.

The timeline in the trash section is currently presented in terms of reporting deadlines, which leaves unclear when actions themselves are required, and when reporting on those actions is required (generally, up to a year of implementation, then a reporting period). We suggest including a similar timeline, with each milestone spelled out, to supplement the existing reporting timeline.

### **Control Measures**

C.10.b.i.(1), Enhanced Management Control Measures – Clarify that this section requires implementation of *all* listed measures. It is crucial to add to the list “increased cleanup of trashed waterways, whether by municipal crews or volunteers” when such water bodies exist in the permittee’s jurisdiction. Many trashed waterway sites are impacted by encampments or localized littering or dumping, and would not be improved by upstream trash management. It should be stated explicitly that permittees’ trash cleanup responsibility is not limited to what flows through the MS4.

Also in this section, several individual control measures are required to be increased in frequency, but specifics are not given (i.e. increase from what, to what?) A minimum frequency or other metrics should be added for “increased inspection and cleanup of illegal trash dumping incidents, maintenance of adequate litter receptacles in high traffic areas, and increased public outreach on litter and trash control.”

We suggest changing the language regarding maintaining adequate litter receptacles to “Assess where more trash receptacles would reduce trash accumulation, and install additional receptacles, with adequate pickup frequency.”

To facilitate assessing the performance of trash management measures, data should be collected (either in terms of trash collected or in terms of trash present at the site) from all management measures at each site. Control measure programs should be coordinated to ensure that data gathered can be compared across sites. Provided it does not delay implementation of trash management measures, countywide stormwater programs should ensure that capture device installations or management measure programs are designed to maximize scientific utility and collect baseline information on trash conditions and loading at managed sites.

This section should include a requirement that a permittee’s drainage infrastructure improvements (storm drains, pumps or pump stations, flood control projects) that would require Corps of Engineers/Regional Water Quality Control Board 401 Water Quality Certification should include full trash capture devices. In cases when that is not technically feasible, a written justification should be provided for not retrofitting with full capture trash removal devices.

C.10.d, Reporting, includes requirements to report each year whether new ordinances have been adopted that impact trash, such as plastic bag bans or litter fees. The order does not indicate what purpose is served by this reporting, since there are no requirements to adopt such measures, no incentives to do so, and no penalties if they are not adopted. If the intent is that these measures should be adopted, a clearer program should be put forth requiring their adoption. However, these measures should not be allowed to substitute for capture devices or waterway cleanups.

### **Accountability**

Selecting the most effective sites for trash management measures is the foundation that can yield the greatest benefit from implementation measures during the permit's lifetime period. We strongly encourage the Board to ensure accountability for site selection by requiring public input and participation in site selection process. Where creek groups, citizens, recreators, and activists have knowledge of trash conditions, that information should be factored into the selection process carried out by municipalities.

To ensure that capture devices are successful in actually reducing trash, it is essential to require some assessment of conditions of downstream sites. It may be possible to develop a "thumbnail sketch" assessment rather than a full Rapid Trash Assessment or Urban Rapid Trash Assessment. Successful performance could also be demonstrated by installing structural full capture BMPs downstream.

The following opt-out clause in C.10.b.ii, describing alternate assessment options on sites where Rapid Trash Assessments are not feasible, raises two concerns:

"If there is no practical location for trash assessment downstream of the managed catchment, the total annual volume of trash collected by all enhanced management measures shall be reported instead."

First, "no practical location" should meet defined criteria, such as "creek banks are too steep to permit access," so that the opt-out measure is not invoked inappropriately and excessively. Second, reporting the total annual volume of trash collected by all enhanced management measures should be modified to break down reporting by site – overall numbers will give no indications which measures are applied at each site, and which are working.

In general, the permit must ensure that language is clear enough to be enforced.

### **Corrections**

- C.10.b.2 – The maintenance language at the end of paragraph is written only for booms, and not spelled out for other methods. Maintenance frequency should be specified for all measures.
- C.10.c – The long-term plan component is listed as due in the October 2012 report in the first paragraph of this section, whereas C.10.d lists the long-term plan as due in the October 2011 report.

### **Definitions**

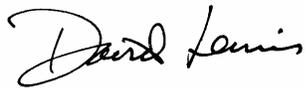
- Certifications of full capture devices by the Los Angeles Regional Water Board have been problematic. Permittees should provide peer-reviewed technical studies documenting that control measures achieve full capture, or some other measure the Regional Board determines to be appropriate.
- It should be clarified that "high trash impact catchments" refer to sub-watershed areas draining to a specific area rather than referring to specific catch basins or sections of stormwater pipe.
- The requirements for land area to be managed for trash should be clarified for counties; current language makes land area requirements look larger than they are intended to be.
- Exemptions are currently provided for "natural resources protection areas" and "estate residential development." It is important to ensure that these areas do not include known trash or littering sites, such as a marina at a shoreline park. Estate

residential area definitions should include housing units per acre. For both areas, it should be specified that these are excluded because they are among the lowest-intensity land uses.

- Permittees should not receive credit for trash capture devices installed within the last ten years, unless they can demonstrate that these devices have achieved trash-free receiving waters. All municipalities should be making progress towards trash-free water bodies.

Thank you for considering these comments, which will improve the Board's MRP and its ability to achieve measurable reductions in trash polluting local creeks, wetlands, and the Bay. Anything less would be a disservice to the millions of Bay Area residents who are demanding reductions in trash pollution to improve the health of the Bay.

Sincerely,

A handwritten signature in black ink that reads "David Lewis". The signature is written in a cursive, flowing style.

David Lewis  
Executive Director