STATE OF CALIFORNIA
REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

STAFF SUMMARY REPORT (Imtiaz-Ali Kalyan)
MEETING DATE: December 11, 2019

ITEM: 8

SUBJECT: **Municipal Regional Stormwater NPDES Permit, Permittee Compliance with the 80 Percent Trash Load Reduction Requirement** – Information Item

CHRONOLOGY: November 19, 2015 – Permit reissued

DISCUSSION: This is a summary of the progress of Permittees covered by the Municipal Regional Stormwater NPDES Permit (MRP) to meet MRP requirements to reduce discharges of trash. The requirements affect 70 of the MRP Permittees, including municipalities in Alameda, Contra Costa, Santa Clara, and San Mateo counties, and the cities of Fairfield, Suisun City, and Vallejo in Solano County. They were required to achieve an 80 percent trash load reduction, from a 2009 baseline, by July 1, 2019. This summary report does not cover unincorporated County and the cities in East Contra Costa County, Brentwood, Oakley, and Antioch. They were added into the MRP in February 2019 and have a separate trash reduction schedule that requires a 70 percent trash load reduction from 2016 baseline conditions by December 31, 2019.

The Permittees reported on their compliance with the 80 percent trash load reduction in their 2018-19 annual reports submitted on September 30. Appendix A contains our tabular summary of trash reduction reported by each Permittee and how it was achieved. Sixty-five of the 70 Permittees reported 80 percent or greater trash load reductions. The five Permittees that reported less than 80 percent trash reduction are the cities of Pinole, Hayward, Alameda, and Vallejo and the Vallejo Flood and Wastewater District. The MRP requires Permittees who have not achieved the required trash reduction to submit a report of non-compliance that includes a plan to achieve compliance. The plan must be comprised of full trash capture device implementation or a demonstration of where such devices are not feasible, and a proposal for other measures to achieve the required reductions. All five Permittees noted in their annual reports their lack of compliance and submitted plans of varying quality to achieve compliance, discussed below.

Permittees primarily use two methods to control trash. One is the installation and appropriate maintenance of full trash capture devices. More than half of the Permittees are using full trash capture devices to achieve 50 percent or greater trash reduction. The MRP requires, at a minimum, inspection and maintenance of full trash capture devices at least once per year. However, in high and very high trash generation rate areas, the MRP requires inspection of full trash capture

devices at least twice per year, and as frequently as needed to ensure they are functioning effectively. Proper maintenance can be a challenge. For example, leaves are the primary factor in filling or clogging one kind of full trash capture device, storm drain inlet filters, such that more-frequent seasonal maintenance is needed for those controls.

During FY 2018-19, we conducted 20 inspections of cities in Contra Costa and San Mateo counties to determine if full trash capture devices were being adequately maintained. As defined in the MRP, devices that are more than half-full at the time they are maintained must subsequently be maintained more frequently. Most full trash capture devices we inspected were less than half-full of debris; if a full trash capture device was observed to be clogged and/or more than half-full of debris, we alerted city staff to increase their maintenance frequency. In general, city staff have been responsive in addressing maintenance issues that we brought to their attention. We will further review the adequacy and frequency of inspections and maintenance issue as part of the MRP reissuance effort.

The other acceptable method to achieve trash load reduction is the implementation of trash discharge prevention or cleanup actions that are equivalent to full trash capture. These actions typically include street sweeping, installing and maintaining trash receptacles, and regular litter and trash pick-up. The effect of these actions must be documented by conducting on-land visual trash assessments (OVTAs) at a frequency sufficient to confirm full trash capture equivalence. Twelve Permittees claimed a relatively high trash reduction (more than 60 percent) associated with control measures other than full trash capture systems, verified by OVTAs.

In addition to implementing full trash capture systems and other equivalent actions to achieve trash load reductions, the MRP allows trash reduction credits for implementing source control measures such as single-use plastic bag restrictions and a ban on commercial use of polystyrene foodware. A Permittee may cumulatively claim up to 10 percent credit by providing substantive and credible evidence that the action(s) reduce trash by the claimed value. Fifty-five Permittees claimed the source control credit, with most claiming the maximum 10 percent.

The MRP also allows some offset of trash load percent reduction requirements based on trash cleanup actions and the amount of trash collected. Up to 10 percent offset is allowed for completing creek and shoreline cleanups beyond those required by the MRP, and up to 15 percent offset is allowed for implementing an approved comprehensive direct discharge cleanup program that addresses trash discharges associated with homeless encampments and illegal dumping. Twenty-one Permittees claimed the additional creek cleanup offset, and four Permittees claimed the direct discharge cleanup program offset.

In addition to our review of the Permittee annual reports, we will continue to review and ground truth the information supporting the reported results. This includes verifying the drainage areas of full trash capture systems and full trash capture equivalency controls and whether they include drainage from private land areas. Some private land area, particularly parking lots have their own storm drain inlets. We will also verify the adequacy of full trash capture device operation and maintenance and whether on-land visual trash assessments are conducted at sufficient locations and frequencies to demonstrate effectiveness of full trash capture equivalency controls. We will also review claimed credits for source control efforts like single-use plastic bag restrictions to ensure the source control is being implemented by a Permittee claiming a source control credit and it is as effective as claimed.

Among the five Permittees that reported less than 80 percent total trash reduction, three, the City of Vallejo and the Vallejo Flood and Wastewater District (collectively Vallejo) and Pinole, are currently under cease and desist orders (CDOs) due to non-compliance with the MRP requirement to achieve 70 percent trash load reduction, relative to 2009 baseline conditions, by July 1, 2017. The Board also previously adopted CDOs for the cities of Hercules, Livermore, and East Palo Alto, and unincorporated Alameda County for non-compliance with the 70 percent trash load reduction requirement. All of these Permittees met the 80 percent trash load reduction requirement by July 1, 2019.

Vallejo is anticipating the approval of a construction contract in January 2020 for three large full trash capture devices. Pending this approval, construction is scheduled to begin in Spring 2020, after the rainy season. The City anticipates that the three systems will be installed and operational by October 5, 2020, leading to a citywide trash reduction of above 90 percent, comprised of 44 percent trash full capture, 41 percent other control measures confirmed by OVTAs, and a 6 percent credit for jurisdiction-wide source control measures. Despite not complying with MRP and CDO deadlines, Vallejo has been dedicating significant effort to compliance and communicating appropriately with us, and its current implementation timing is a reasonable outcome given the constraints associated with capital project implementation.

Pinole reported a trash reduction of 63 percent, comprised of 56 percent trash load reduction using full trash capture devices, 5 percent credit from source control efforts, and 2 percent offset from additional creek and shoreline cleanups. Pinole expects to achieve compliance by June 30, 2020 with both the 70 percent and 80 percent trash load reduction requirements by requiring installation of trash capture devices on private properties that are plumbed to its storm drain system.

The other two Permittees that did not achieve the 80 percent trash load reduction requirement are the cities of Hayward and Alameda. Hayward reported a total trash reduction of 62 percent. Noteworthy is this was less than the 79 percent

reduction Hayward reported in 2017. While the City modestly increased its full trash capture device implementation, it reported no trash control from measures other than full trash capture devices—a drop of 19 percent in that category. It no longer maintains a community litter and trash clean-up program. The City stated it intends to construct five full trash capture devices by 2022, including three devices funded by Caltrans. This would achieve an 85 percent reduction, and the City states it would rely on offsets to achieve any additional reduction that may be required under the MRP.

Alameda reported a total trash reduction of 73 percent, only a modest increase over the 68 percent reduction reported in 2017. The City substantially increased its use of full trash capture devices (59 percent now versus 39 percent in 2017). Despite that increase, the City was unable to achieve the required 80 percent reduction because it decreased non-full trash capture action reductions from 10 to 1.4 percent and its claimed additional shoreline cleanup offset was reduced from 10 to 2.6 percent. The City proposes to meet the required reduction by June 30, 2020, through the following actions: implementing additional shoreline cleanup efforts; implementing additional on-land visual trash assessments to provide increased verification of the positive trash load reduction values from control measures other than full trash capture systems; and initiating parcel-level analyses and verification of trash generation rates at individual properties to improve and update the City's baseline trash generation map and related trash load reduction accounting and verification.

At a future Board meeting, we will provide an updated compliance evaluation based on our further review and ground truthing of reported results. We will also report on active or potential enforcement actions needed to resolve any non-compliance with the 80 percent trash load reduction requirement. At that or another meeting, we will also discuss potential challenges that Permittees face to further control trash and issues for consideration and resolution through the reissuance of the MRP next year, and we will discuss the status of trash reduction actions by Caltrans and efforts and opportunities for Caltrans and municipalities to coordinate their trash reduction actions.

APPENDIX A: Permittee-Reported Trash Reductions as of July 1, 2019

# APPENDIX A

# Permittee-Reported Trash Reductions as of July 1, 2019

Values are rounded percent reduction from 2009 levels.

Permittees with < 80 percent reduction are highlighted in yellow.

| Permittee | Full Trash Capture Systems | Other Control Measures – On-land Visual Trash Assessment Confirmed | Jurisdiction-Wide Source Control Measures | Offset: Additional Creek and Shoreline Cleanup / Direct Trash Discharge Control[1] | Total Trash Reduction Claimed [2] |
|---|---|---|---|---|---|
| Alameda County | | | | | |
| Unincorp. Alameda County | 72 | 0 | 10 | 0 | 82 |
| Alameda | 59 | 1 | 10 | 3 | 73 |
| Albany | 51 | 22 | 10 | 10 | 93 |
| Berkeley | 63 | 0 | 10 | 10 | 83 |
| Dublin | 75 | 0 | 7 | 0 | 82 |
| Emeryville | 35 | 43 | 10 | 0 | 88 |
| Fremont[1] | 69 | 0 | 10 | 0/15 | 94 |
| Hayward | 47 | 0 | 10 | 5 | 62 |
| Livermore | 46 | 32 | 10 | 2 | 90 |
| Newark | 75 | 0 | 6 | 0 | 81 |
| Oakland[1] | 12 | 48 | 10 | 10/15 | 96 |
| Piedmont | 22 | 62 | 6 | 0 | 90 |
| Pleasanton | 22 | 75 | 3 | 0 | 100 |
| San Leandro | 71 | 0 | 10 | 0 | 81 |
| Union City | 72 | 0 | 10 | 0 | 82 |
| Contra Costa County | | | | | |
| Unincorp. Contra Costa County[1] | 30 | 30 | 0 | 10 /10 | 80 |
| Clayton | 100 | 0 | 0 | 0 | 100 |
| Concord | 83 | 0 | 0 | 0 | 83 |
| Danville | 26 | 72 | 0 | 0 | 99 |
| El Cerrito | 68 | 5 | 9 | 10 | 92 |
| Hercules | 80 | 0 | 5 | 10 | 95 |
| Lafayette | 51 | 37 | 0 | 0 | 88 |
| Martinez | 54 | 22 | 6 | 8 | 90 |

[1] Four Permittees claimed offsets for implementing a Direct Discharge Cleanup Program: Unincorporated Contra Costa County (10%), the City of San Jose (15%), the City of Fremont (15%), and the City of Oakland (15%).

[2] Some numbers may not add up due to rounding of reported values.

| Permittee | Full Trash Capture Systems | Other Control Measures – On-land Visual Trash Assessment Confirmed | Jurisdiction-Wide Source Control Measures | Offset: Additional Creek and Shoreline Cleanup / Direct Trash Discharge Control[1] | Total Trash Reduction Claimed [2] |
|---|---|---|---|---|---|
| Moraga | 95 | 0 | 0 | 0 | 95 |
| Orinda | 2 | 84 | 0 | 0 | 87 |
| Pinole | 56 | 0 | 5 | 2 | 63 |
| Pittsburg | 29 | 35 | 7 | 10 | 81 |
| Pleasant Hill | 83 | 0 | 5 | 0 | 88 |
| Richmond | 67 | 5 | 10 | 9 | 91 |
| San Pablo | 68 | 0 | 10 | 3 | 81 |
| San Ramon | 0 | 100 | 0 | 0 | 100 |
| Walnut Creek | 22 | 66 | 8 | 0 | 96 |
| San Mateo County | | | | | |
| Unincorporated San Mateo County | 56 | 26 | 10 | 0 | 93 |
| Atherton | 86 | 0 | 0 | 0 | 86 |
| Belmont | 55 | 41 | 0 | 0 | 96 |
| Brisbane | 70 | 8.5 | 10 | 0 | 89 |
| Burlingame | 64 | 10 | 10 | 0 | 84 |
| Colma | 74 | 8 | 10 | 0 | 92 |
| Daly City | 46 | 24 | 10 | 0 | 80 |
| East Palo Alto | 62 | 23 | 7 | 0 | 92 |
| Foster City | 39 | 53 | 0 | 0 | 92 |
| Half Moon Bay | 86 | 0 | 10 | 0 | 96 |
| Hillsborough | 100 | 0 | 0 | 0 | 100 |
| Menlo Park | 27 | 60 | 10 | 0 | 98 |
| Millbrae | 73 | 13 | 10 | 0 | 96 |
| Pacifica | 20 | 58 | 10 | 0 | 88 |
| Portola Valley | 0 | 82 | 10 | 0 | 92 |
| Redwood City | 53 | 22 | 10 | 3 | 89 |
| San Bruno | 40 | 34 | 10 | 4 | 88 |
| San Carlos | 68 | 2 | 10 | 0 | 81 |
| San Mateo | 30 | 53 | 10 | 0 | 92 |
| South San Francisco | 49 | 26 | 10 | 0 | 85 |
| Woodside | 0 | 0 | 0 | 0 | 100 |

| Permittee | Full Trash Capture Systems | Other Control Measures – On-land Visual Trash Assessment Confirmed | Jurisdiction-Wide Source Control Measures | Offset: Additional Creek and Shoreline Cleanup / Direct Trash Discharge Control | Total Trash Reduction Claimed |
|---|---|---|---|---|---|
| Santa Clara County | | | | | |
| Campbell | 40 | 40 | 10 | 10 | 99 |
| Cupertino | 25 | 65 | 0 | 1 | 90 |
| Los Altos | 61 | 29 | 10 | 0 | 100 |
| Los Altos Hills | 0 | 0 | 0 | 0 | 100 |
| Los Gatos | 17 | 43 | 10 | 0 | 92 |
| Milpitas | 52 | 13 | 6 | 0 | 85 |
| Monte Sereno | 0 | 100 | 0 | 0 | 100 |
| Mountain View | 28 | 66 | 10 | 0 | 92 |
| Palo Alto | 65 | 71 | 10 | 0 | 83 |
| San Jose[1] | 46 | 8 | 10 | 10 / 15 | 97 |
| Santa Clara | 45 | 30 | 10 | 0 | 85 |
| Saratoga | 22 | 64 | 0 | 0 | 89 |
| Sunnyvale | 28 | 52 | 10 | 0 | 89 |
| Unincorporated Santa Clara County | 15 | 59 | 10 | 1 | 85 |
| Solano County | | | | | |
| Fairfield | 96 | 0 | 3 | 0 | 99 |
| Suisun | 80 | 0 | 3 | 0 | 83 |
| Vallejo[3] | 7 | 41 | 6 | 1 | 55 |
| Vallejo Flood and Wastewater District | 7 | 41 | 6 | 1 | 55 |

[3] Although they are different legal entities, the City of Vallejo and the Vallejo Flood and Wastewater District share responsibility for the same contributing area and storm drain system. Thus, the reduction numbers are the same for each.