Baseline Trash Load and Initial Short-Term Trash Load Reduction Plan

Submitted by:

City of Fremont
Environmental Services Division
39505 Liberty Street
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In compliance with Provisions C.10.a (i) and C.10.a (ii) of Order R2-2009-0074

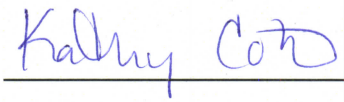
February 1, 2012

CITY OF FREMONT
INITIAL SHORT-TERM TRASH LOAD REDUCTION PLAN

CERTIFICATION STATEMENT

"I certify, under penalty of law, that this document and all attachments were prepared either under my direction or supervision, or were prepared by our consultants or consultants of the Alameda Countywide Clean Water Program in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted, is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Signature by Duly Authorized Representative:



Kathy Cote
Environmental Services Manager

February 1, 2012

TABLE OF CONTENTS

CERTIFICATION STATEMENT II

TABLE OF CONTENTS III

LIST OF ATTACHMENTS IV

ABBREVIATIONS V

PREFACE 6

1.0 INTRODUCTION 1

Baseline Trash Generation Rates Project 1
Trash Load Reduction Tracking Method Summary 2
Short-Term Trash Load Reduction Plan 2

2.0 BASELINE TRASH LOADING ESTIMATE 4

Permittee Characteristics 4
Default Trash Generation Rates (Regional Approach) 5
Jurisdictional and Effective Loading Areas 5
Permittee-Specific Baseline Trash Loading Rates 6
Baseline Street Sweeping *7*
Baseline Storm Drain Inlet Maintenance *7*
Baseline Stormwater Pump Station Maintenance *7*
Baseline Trash Loading Estimate 7

3.0 LOAD REDUCTION CALCULATION PROCESS 10

Step #1: Existing Enhanced Street Sweeping 10
Step #2: Trash Generation Reduction Control Measures 11
Step #3: On-land Interception Control Measures 11
Step #4: Control Measures that Intercept Trash in the MS4 12
Step #5: Control Measures that Intercept Trash in Waterways 12
Step #6: Comparison to Baseline Trash Load 12

4.0 ENHANCED TRASH CONTROL MEASURES 13

CR-1: Single-use Carryout Plastic Bag Policy/Ordinance 14
Baseline Level of Implementation *14*
Enhanced Level of Implementation *14*
Reduction from Implementing Control Measure *15*
CR-2: Polystyrene Foam Food Service Ware Ordinance 16
Baseline Level of Implementation *16*
Enhanced Level of Implementation *16*
Percent Reduction from Enhancements *17*
CR-3: Public Education and Outreach Programs 18
Baseline Level of Implementation *18*
Enhanced Level of Implementation *18*

CR-4: REDUCTION OF TRASH FROM UNCOVERED LOADS 22
Baseline Level of Implementation *22*
Enhanced Level of Implementation *22*
Percent Reduction from Enhancements *22*
CR-5: ANTI-LITTERING AND ILLEGAL DUMPING ENFORCEMENT ACTIVITIES 24
Baseline Level of Implementation *24*
Enhanced Level of Implementation *24*
Percent Reduction from Enhancements *25*
CR-6: IMPROVED TRASH BIN/CONTAINER MANAGEMENT 26
Baseline Level of Implementation *26*
Enhanced Level of Implementation *27*
Percent Reduction from Enhancements *27*
QF-5: FULL-CAPTURE TREATMENT DEVICES 28
Baseline Level of Implementation *28*
Enhanced Level of Implementation *28*
Percent Reduction from Enhancements *28*
QF-6: CREEK/CHANNEL/SHORELINE CLEANUPS 30
Baseline Level of Implementation *30*
Enhanced Level of Implementation *30*
Percent Reduction from Enhancements *30*

5.0 SUMMARY OF TRASH CONTROL MEASURE ENHANCEMENTS 31

5.1 ANNUAL REPORTING AND PROGRESS TOWARDS TRASH LOAD REDUCTION GOAL(S) 33
5.2 CONSIDERATIONS OF UNCERTAINTIES 33

6.0 IMPLEMENTATION SCHEDULE 34

7.0 REFERENCES 36

LIST OF ATTACHMENTS

Attachment CR-1—StopWaste.org Fact Sheet for Alameda County Single-Use Bag Ban
Attachment CR-4—Excerpt from City of Fremont Contract with Allied Waste
Attachment CR-5—City of Fremont Enforcement Response Plan

ABBREVIATIONS

BASMAA	Bay Area Stormwater Management Agencies Association
BID	Business Improvement District
CalRecycle	California Department of Resources Recycling and Recovery
Caltrans	California Department of Transportation
CASQA	California Stormwater Quality Association
CDS	Continuous Deflection Separator
CEQA	California Environmental Quality Act
CY	Cubic Yards
EIR	Environmental Impact Report
EPA	Environmental Protection Agency
GIS	Geographic Information System
MRP	Municipal Regional Stormwater NPDES Permit
MS4	Municipal Separate Storm Sewer System
NGO	Non-Governmental Organization
NPDES	National Pollutant Discharge Elimination System
Q	Flow
SFRWQCB	San Francisco Regional Water Quality Control Board
SWRCB	State Water Resource Control Board
TMDL	Total Maximum Daily Load
USEPA	United States Environmental Protection Agency
Water Board	San Francisco Regional Water Quality Control Board
WDR	Waste Discharge Requirements

PREFACE

This Baseline Trash Load and Short-Term Trash Load Reduction Plan (Plan) is submitted in compliance with provision C.10.a(i) and C.10.a(ii)of the Municipal Regional Stormwater NPDES Permit (MRP) for Phase I communities in the San Francisco Bay (Order R2-2009-0074). This Plan was developed using a regionally consistent format developed by the Bay Area Stormwater Management Agencies Association (BASMAA). Based on new information that becomes available during the implementation of this Short-Term Plan (e.g., revisions to baseline loading estimates or load reduction credits of quantification formulas, etc.), or if circumstances arise during implementation that were not anticipated at the time of this submission, the City of Fremont may choose to amend or revise this Plan. If revisions or amendments are necessary, a revised Short-Term Plan will be submitted to the Water Board via the City of Fremont's annual reporting process.

1.0 INTRODUCTION

The Municipal Regional Stormwater NPDES Permit for Phase I communities in the San Francisco Bay (Order R2-2009-0074), also known as the Municipal Regional Permit (MRP), became effective on December 1, 2009. The MRP applies to 76 large, medium, and small municipalities (cities, towns, and counties) and flood control agencies in the San Francisco Bay Region, collectively referred to as Permittees. Provision C.10 of the MRP (Trash Load Reduction) requires Permittees to reduce trash from their Municipal Separate Storm Sewer Systems (MS4s) by 40 percent before July 1, 2014.

Required submittals to the San Francisco Bay Regional Water Quality Control Board (Water Board) by February 1, 2012 under MRP provision C.10.a (Short-Term Trash Loading Reduction Plan) include:

1. (a) Baseline trash load estimate, and (b) description of the methodology used to determine the load level.
2. A description of the Trash Load Reduction Tracking Method that will be used to account for trash load reduction actions and to demonstrate progress and attainment of trash load reduction levels.
3. A **Short-Term Trash Loading Reduction Plan** that describes control measures and best management practices that will be implemented to attain a 40 percent trash load reduction from its MS4 by July 1, 2014;

This Short-Term Trash Load Reduction Plan (Short-Term Plan) is submitted by the City of Fremont in compliance with the portions of MRP provision C.10.a.i listed as 1a and 3 above. In compliance with 1b, BASMAA submitted a progress report on behalf of Permittees that briefly describes the methodologies used to develop trash baseline loads (BASMAA 2011a). These methods are more fully described in BASMAA (2011b, 2011c). Lastly, the *Trash Load Reduction Tracking Method Technical Report* (BASMAA 2011d) was submitted by BASMAA on behalf of Permittees in compliance with submittal 2 described above. The Baseline Loading Rates and Tracking Method projects are briefly described below.

Baseline Trash Generation Rates Project

Through approval of a BASMAA regional project, Permittees agreed to work collaboratively to develop a regionally consistent method to establish baseline trash loads from their MS4s. The project, also known as the *BASMAA Baseline Trash Generation Rates Project* assists Permittees in establishing a baseline to demonstrate progress towards MRP trash load reduction goals (i.e., 40 percent). The intent of the project was to provide a scientifically sound method for developing (default) baseline trash generation rates that can be adjusted, based on Permittee/site specific conditions; and used to develop baseline loading rates and loads. Baseline loads form the reference point for comparing trash load reductions achieved through control measure implementation.

Baseline trash loading rates are quantified on a volume per unit area basis and based on factors that significantly affect trash generation (e.g., land use, population density, and economic profile). The method used to the establish baseline trash loads for each Permittee builds off “lessons learned” from previous trash loading studies conducted in urban areas (Allison and Chiew 1995; Allison et al. 1998; Armitage et al. 1998; Armitage and Rooseboom 2000; Lippner et al. 2001; Armitage 2003; Kim et al. 2004; County of Los Angeles 2002, 2004a, 2004b; Armitage 2007). The method is based off a conceptual model developed as an outgrowth of these studies (BASMAA 2011b). Baseline trash loading rates were developed through the quantification and characterization of trash captured in Water Board recognized

full-capture treatment devices installed in the San Francisco Bay area. Methods used to develop trash baseline loading rates are more fully described in BASMAA (2011b, 2011c, and 2012).

Trash Load Reduction Tracking Method Summary

The trash load reduction tracking method, described in the *Trash Load Reduction Tracking Method Technical Report,* assists Permittees in demonstrating progress towards reaching trash load reduction goals defined in the MRP (e.g., 40 percent). The tracking method is based on information gained through an extensive literature review and Permittee experiences in implementing stormwater control measures in the San Francisco Bay Area. The literature review was conducted to evaluate quantification methods used by other agencies to assess control measure effectiveness or progress towards quantitative goals. Results are documented in the *Trash Load Reduction Tracking Method: Technical Memorandum # 1 – Literature Review* (BASMAA 2011d).

Methods attributable to specific trash control measures fall into two categories: 1) trash load reduction quantification formulas; and 2) load reduction credits (BASMAA 2012b). Quantification formulas were developed for those trash control measures that were deemed feasible and practical to quantify load reductions at this time. Load reduction credits were developed for all other control measures included in the methodology development. Both categories of methods assume that as new or enhanced trash control measures are implemented by Permittees, a commensurate trash load reduction will occur. Progress towards load reduction goals will be demonstrated through comparisons to established trash baseline load estimates developed through the BASMAA *Baseline Generation Rates Project*.

Short-Term Trash Load Reduction Plan

The purpose of this Short-Term Plan is to describe the current level of implementation of control measures and best management practices, and identify the type and extent to which new or enhanced control measures and best management practices will be implemented to attain a 40 percent trash load reduction from their MS4 by July 1, 2014. The Short-Term Plan was developed using a template created by BASMAA through a regional project. New and enhanced trash control measures (i.e., Best Management Practices) that Permittees may implement to demonstrate trash load reduction goals are included in Table 1.1. This list was developed collaboratively through the BASMAA Trash Committee, which included participation from Permittee, stormwater program, Water Board, and non-governmental organization (NGO) staff. The list of control measures is based on: 1) the potential for Permittees to implement; 2) the availability of information required to populate formulas and develop credits; and 3) the expected benefit of implementation. Load reductions associated with each control measure are demonstrated either through a quantification formula (QF) or credits (CR) described in the *Trash Load Reduction Tracking Method Technical Report* (BASMAA 2012b).

In efforts to reduce trash discharged from MS4s, Permittees may choose to implement control measures that are not included in Table 1.1 or described more fully in BASMAA (2012b). If a Permittee chooses to do so, methods specific to calculating trash load reductions for that control measure would need to be developed. Additionally, at that point, consideration should be given to updating this Short-Term Plan.

Additionally, based on new information that becomes available during the implementation of this Short-Term Plan (e.g., revisions to baseline loading estimates or load reduction credits of quantification formulas, etc.), or if circumstances arise during implementation of the Plan that were not anticipated at the time of submission, the City of Fremont may amend or revise this Plan. If revisions or amendments

are necessary, a revised Short-Term Plan will be submitted to the Water Board via the City of Fremont's annual reporting process.

Table 1.1. Trash control measures for which load reduction quantification credits or formulas were developed to track progress towards trash load reduction goals.

Load Reduction Credits
CR-1 Single-use Carryout Plastic Bag Ordinances
CR-2 Polystyrene Foam Food Service Ware Ordinances
CR-3 Public Education and Outreach Programs
CR-4 Activities to Reduce Trash from Uncovered Loads
CR-5 Anti-Littering and Illegal Dumping Enforcement Activities
CR-6 Improved Trash Bin/Container Management Activities
CR-7 Single-Use Food and Beverage Ware
Quantification Formulas
QF-1 On-Land Clean-up
QF-2 Enhanced Street Sweeping
QF-3 Partial Trash Capture
QF-4 Inlet Maintenance
QF-5 Full-Capture Treatment Devices
QF-6 Creek/Channel/Shoreline Cleanups (Volunteer and/or Municipal)

This Short-Term Plan is organized into the following sections:

- Introduction;
- Trash Baseline Load Estimate;
- Load Reduction Calculation Process
- Planned Implementation of New or Enhanced Control Measures;
- Implementation Schedule; and
- References

2.0 BASELINE TRASH LOADING ESTIMATE

Note: *Tables and information presented in this section are subject to change based on the results of a third monitoring event of the BASMAA Baseline Trash Loading Rates Project. Therefore, this section of the Short-Term Plan may be updated with revised trash generation rates, baseline loading rates, and baseline loads.*

This section provides the estimated annual trash baseline load from the City of Fremont's Municipal Separate Storm Sewer System (MS4). In compliance with Provision C.10.a.ii of the MRP, the City of Fremont worked collaboratively with other MRP Permittees through BASMAA to develop data and the process necessary to establish baseline trash loading estimate from our MS4. The collaborative project was managed through the BASMAA Trash Committee and included a series of steps described in BASMAA (2012) and listed below. The approach was intended to be cost-effective and consistent, but still provide an adequate level of confidence in trash loads from MS4s, while acknowledging that uncertainty in trash loads still exists. The approach entailed the following steps:

1. Conduct literature review;
2. Develop conceptual model;
3. Develop and implement sampling and analysis plan;
4. Test conceptual model;
5. Develop and apply default trash generation rates to Permittee effective loading areas;
6. Adjust default trash generation rates based on baseline levels of control measure implementation by the Permittee to develop trash baseline loading rates; and,
7. Calculate Permittee-specific annual trash baseline load.

Through the collaborative BASMAA project, default baseline trash generation rates (volume per area) were developed for a finite set of categories, based on factors that significantly affect trash loads (e.g., land use). These trash generation rates were then applied to effective loading areas in applicable jurisdictional areas within the City of Fremont. Trash generation rates were then adjusted based on baseline street sweeping, storm drain inlet maintenance, and stormwater pump station maintenance conducted in each applicable area. The sum of the trash loads (i.e., rate multiplied by area) from each effective loading area represents the City of Fremont's baseline trash load from its MS4. A full description of the methods by which trash baseline loads were developed is included in BASMAA (2012a) and is summarized below.

Permittee Characteristics

Incorporated in 1956, the City of Fremont covers 50,374 acres in Alameda County, and has a jurisdictional area of 20,917 acres. According to the 2010 Census, it has a population of 214,089, with a population density of 2,443.6 people per square mile, and average household size of 2.99. Of the 214,089 who call the City of Fremont home, 24.9% are under the age of 18, 7.3% are between 18 and 24, 31.3% are between 25 and 44, 26.4% are between 45 and 65, and 10.2% are 65 or older.[1]

As the fourth largest city in the San Francisco Bay Area, Fremont has 71,699 residential units, 9.1 million square feet of commercial development and 40.3 million square feet of industrial/office space. Fremont has a daytime population of over 241,000 with strong employment in the areas of high technology, biotechnology, software, and health sciences. The top five employers in the City of Fremont include the

[1] Alameda County Clean Water Program

Fremont Unified School District, Washington Hospital, Boston Scientific, Western Digital, and Seagate. About 49% of Fremont residents have an Bachelor Degree or higher; median household income was $114,169 in 2011.[2]

Default Trash Generation Rates (Regional Approach)

A set of default trash generation rates was developed via the BASMAA regional collaborative project (BASMAA 2012a). Default generation rates were developed based on a comparison between trash characterization monitoring results, land uses, economic profiles, and other factors that were believed to possibly affect trash generation. Three trash characterization monitoring events were scheduled via the *Trash Loading Rates Project*. Due to the compliance timeline in the MRP, only two of three trash characterization monitoring events were used to develop trash generation rates described in BASMAA (2012a) and presented in this section. Following the completion of the third characterization event (Winter 2011/12), this section of the Short-Term Plan may be updated to reflect the most up-to-date trash generation and loading rates available. Trash generation rates based on the results of two of the three characterization events are shown in Table 2-1 for each trash loading category.

Table 2-1: Regional Default Annual Trash Generation Rates by Land Use Category.

Land Use Category	Generation Rates (Gallons/Acre)
Retail and Wholesale	29.99
High Density Residential	17.04
K-12 Schools	13.14
Commercial and Services/ Heavy, Light and Other Industrial	7.08
Urban Parks	2.14
Low Density Residential	1.25
Rural Residential	0.17

Jurisdictional and Effective Loading Areas

Default trash baseline generation rates presented in Table 2-1 were applied to effective loading areas with **jurisdictional areas** within the City of Fremont. The City of Fremont's jurisdictional areas includes all urban land areas within the City of Fremont boundaries that are subject to the requirements in the MRP. Land use areas identified by a combination of the ABAG 2005 land use dataset and Permittee knowledge that were not included within the City's jurisdictional areas include:

[2] City of Fremont Office of Economic Development "Fremont Community Profile 2012"

- Federal and State of California Facilities and Roads (e.g., Interstates, State Highways, Military Bases, Prisons);
- Roads Owned and Maintained by Alameda County;Colleges and Universities (Private or Public);
- Non-urban Land Uses (e.g., agriculture, forest, rangeland, open space, wetlands, water);
- Communication or Power Facilities (e.g., PG & E Substations);
- Water and Wastewater Treatment Facilities; and
- Other Transportation Facilities (e.g., airports, railroads, and maritime shipping ports).

Once the City of Fremont's jurisdictional area was delineated, an effective trash loading area was developed by creating a 200-foot buffer around all streets within the City's jurisdictional area. The purpose of the effective loading area is to eliminate land areas not directly contributing trash to the City's MS4 (e.g., large backyards and rooftops). Both the jurisdictional and the effective loading areas for the City of Fremont are presented in Table 2-2.

Table 2-2: Jurisdictional Areas and Effective Loading Areas in the City of Fremont by Land Use Classes Identified by ABAG (2005)

Land Use Category	Jurisdictional Area (Acres)	Effective Loading Area (Acres)	% of Effective Loading Area
High Density Residential	2,828	2,633	17
Low Density Residential	9,719	8,967	57
Rural Residential	633	490	3
Commercial and Services/ Heavy, Light and Other Industrial	4,590	2,241	14
Retail and Wholesale	846	610	4
K-12 Schools	784	367	2
Urban Parks	1,517	442	3
TOTAL	20,917	15,749	**100%**

Permittee-Specific Baseline Trash Loading Rates

Regional default trash generation rates developed through the BASMAA regional collaborative project were applied to effective loading areas within the City of Fremont based on identified land uses. These generation rates were then adjusted based on the calculated effectiveness of baseline street sweeping, storm drain inlet maintenance, and pump station maintenance implemented by the City. These adjustments were conducted in GIS due to the site specificity of baseline generation rates and baseline control measure implementation. The following sections describe the baseline level of implementation for these three control measures. A summary of trash baseline generation and loading rates for the City of Fremont are provided in Table 2-3 and areas associated with these rates are illustrated in Figure 2-1.

Baseline Street Sweeping

A "baseline" street sweeping program is defined as the sweeping frequency and parking enforcement implemented by the City of Fremont prior to effective date of the MRP. Baseline street sweeping differs from "enhanced" street sweeping, which includes increased parking enforcement and/or sweeping conducted at a frequency greater than baseline ceiling (i.e., once per week for retail land uses and twice per month for all other land uses). The baseline ceiling was created to not penalize implementers of enhanced street sweeping programs prior to the effective date of the MRP. For those Permittees that sweep less frequent than the baseline ceiling, their current sweeping frequency serves as their baseline.

The City of Fremont's baseline and current street sweeping program includes sweeping all streets within the City once per month. Posting of parking enforcement signs for street sweeping exists on very few streets within the City. Parking enforcement equivalent exists on most arterial, downtown, and industrial streets. Estimated trash load reduced by baseline street sweeping is presented in Table 2-3.

Baseline Storm Drain Inlet Maintenance

Within the City of Fremont, storm drain inlets were cleaned at a baseline level of approximately one time per year prior to the effective date of the MRP. Based on this baseline frequency and the effectiveness rating developed in BASMAA (2012b), the baseline storm drain maintenance program in the City of Fremont has an annual effectiveness rating of 5%. The estimated trash load reduced via baseline storm drain inlet maintenance is presented in Table 2-3.

Baseline Stormwater Pump Station Maintenance

The City of Fremont owns and maintains four stormwater pump stations, but none of these stations have trash racks that capture trash and allow for removal during maintenance.

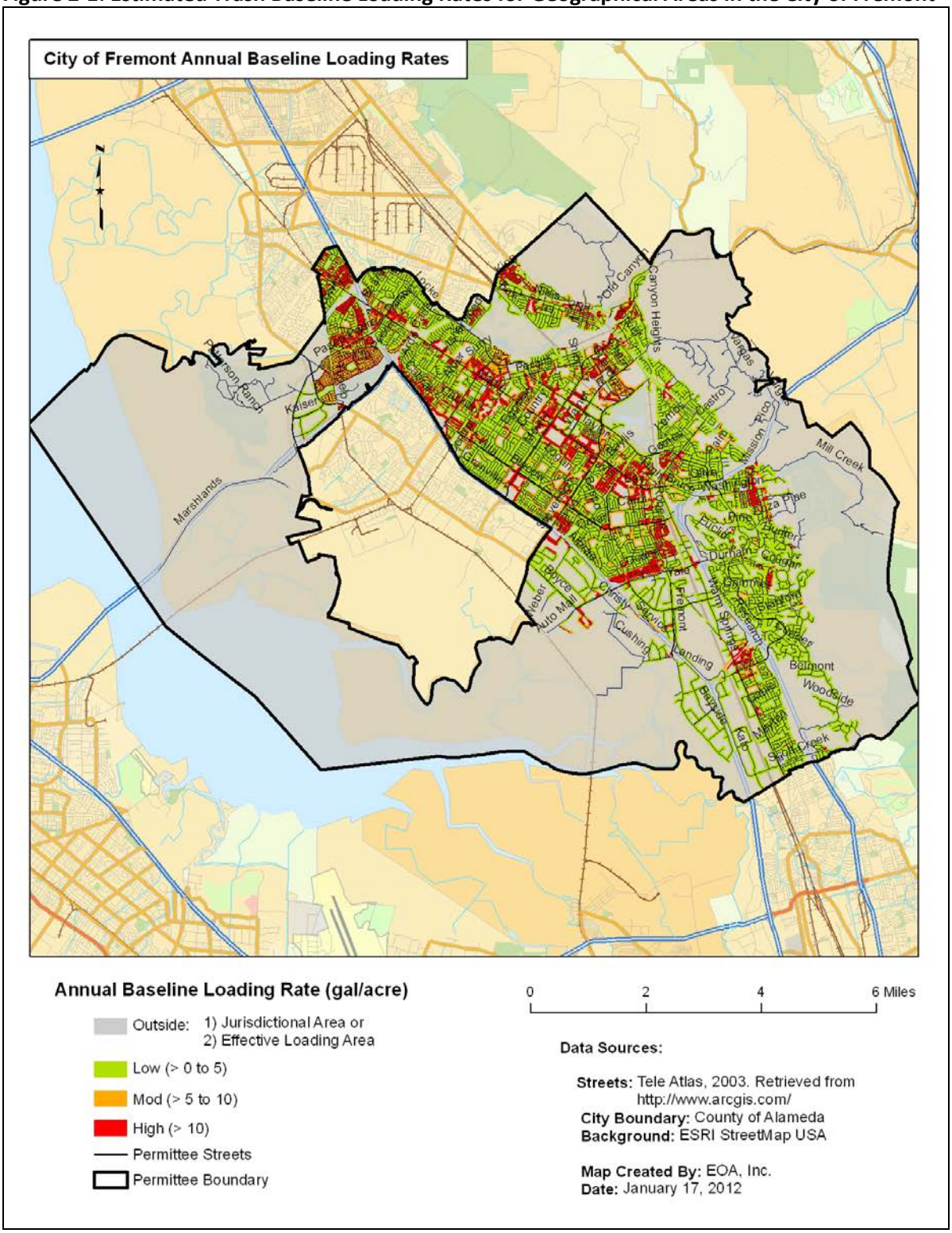
Baseline Trash Loading Estimate

The estimated baseline trash load from the City of Fremont was calculated as the sum of the loads from the City’s effective loading area, adjusted for baseline implementation of street sweeping, storm drain inlet maintenance, and pump station maintenance. The preliminary annual trash baseline load for the City of Fremont is presented in Table 2-3. Preliminary baseline trash loading rates are presented in Figure 2-1 to provide a geographical illustration of areas with estimated low, moderate, high and very high trash loading rates.

Table 2-3: Preliminary Annual Trash Baseline Load for the City of Fremont

Category	Annual Load (gallons)
Preliminary Generation Trash Load	96,078
Load Removed via Baseline Street Sweeping	38,455
Load Removed via Baseline Storm Drain Inlet Maintenance	2,881
Load Removed via Baseline Stormwater Pump Station Maintenance	0
Preliminary Trash Baseline Load	**54,742**

Figure 2-1: Estimated Trash Baseline Loading Rates for Geographical Areas in the City of Fremont



3.0 LOAD REDUCTION CALCULATION PROCESS

Using the guiding principles and assumptions described BASMAA (2012b), a stepwise process for calculating trash load reductions was developed collaboratively through BASMAA. This process is fully described in Trash Load Reduction Tracking Method Technical Report (BASMAA 2012b) and is briefly summarized in this section. The process takes into at what point in the trash generation and transport process a trash control measure: 1) prevents trash generation, 2) intercepts trash in the environment prior to reaching a water body, or 3) removes trash that has reached a water body. In doing so, it avoids double counting of trash load reductions associated with specific control measures.

To demonstrate trash load reductions, baseline trash loading rates will be adjusted using the following process:

Step #1: Existing Enhanced Street Sweeping
Step# 2: Trash Generation Reduction
Step #3: On-land Interception
Step #4: Trash Interception in the Stormwater Conveyance System
Step #5: Trash Interception in Waterways
Step #6: Comparison to Baseline Trash Load

Reductions calculated in Steps 2 and 5 are assumed to be implemented at a constant rate on an "area-wide" basis. For example, if a new region-wide public education strategy is implemented within the San Francisco Bay area, all Permittees can apply load reduction credits associated with this control measure. In contrast, Steps 1, 3 and 4 are "area-specific" reductions that only apply to specific areas within a Permittee's jurisdiction. Area-specific control measures include full-capture treatment devices and enhanced street sweeping. Area-specific reductions may require the use of a Geographic Information System (GIS) to calculate.

Reductions are generally applied in the sequence as presented in Figure 2-1 and described below, although some reductions may be applied "in-parallel" and calculated during the same sub-step in the process.

Step #1: Existing Enhanced Street Sweeping

Trash load reductions due to existing enhanced street sweeping implemented prior to the effective date of the MRP and conducted at levels above baseline levels are not incorporated into each Permittee's trash baseline load. Therefore, load reductions associated with existing enhanced are accounted for first in the trash load reduction calculation process. Existing enhanced street sweeping includes street sweeping conducted at a frequency greater than **1x/week** for streets within retail land use areas or greater than **2x/month** for streets in all other land use areas. The result of adjustments made to trash baseline loads due to the implementation of existing enhanced street sweeping is a set of **current baseline loading rates** and a **current baseline load**.

Step #2: Trash Generation Reduction Control Measures

Trash generation reduction control measures prevent or greatly reduce the likelihood of trash from being deposited onto the urban landscape. They include the following area-wide control measures:

CR-1: Single-Use Carryout Plastic Bag Ordinances

CR-2: Polystyrene Foam Food Service Ware Ordinances

CR-3: Public Education and Outreach Programs

CR-4: Reduction of Trash from Uncovered Loads

CR-5: Anti-Littering and Illegal Dumping Enforcement

CR-6: Improved Trash Bin/Container Management

CR-7: Single-Use Food and Beverage Ware Ordinances

Load reductions associated with trash generation reduction control measures are applied on an area-wide basis.[3] Therefore, reductions in current baseline loading rates are adjusted uniformly based on the implementation of the control measure and the associated credit claimed.

Baseline loading rate adjustments for all generation reduction controls measures implemented may be applied in-parallel, but should be applied prior to calculating on-land interception measures discussed in Step #3. The result of adjustments to trash baseline-loading rates due to the implementation of these enhanced control measures will be a set of **street loading rates**. The **street load** is the volume of trash estimated to enter the environment and available for transport to the MS4 if not intercepted via on-land control measures described in Step #2.

Step #3: On-land Interception Control Measures

Once trash enters the environment, it may be intercepted and removed through the following control measures prior to reaching the stormwater conveyance system:

QF-1: On-land Trash Cleanups (Volunteer and/or Municipal) (Area-wide)

QF-2: Enhanced Street Sweeping (Area-specific)

Since on-land trash cleanups can affect the amount of trash available to street sweepers, load reductions associated with their implementation will be quantified first, followed by street sweeping enhancements. On-land trash cleanups will be applied as an area-wide reduction and all effective loading rates will be adjusted equally. Enhanced street sweeping, however, is an area-specific control measure and only those effective loading rates associated with areas receiving enhancements will be adjusted. Due to the spatial nature of enhanced street sweeping, GIS may be needed to conduct this step.

The result of adjustments to effective loading rates due to the implementation of these enhanced control measures will be a set of **conveyance system loading rates**. The **conveyance load** is the volume of trash estimated to enter the stormwater conveyance system (e.g., storm drains).

[3] The only exception to this statement are load reductions associated with the establishment of Business Improvement Districts (BIDs) or equivalent, which are specific to geographic areas and considered “area-specific”.

Step #4: Control Measures that Intercept Trash in the MS4

Control measures that intercept trash in the stormwater conveyance system are area-specific. Therefore, they only apply to land areas and associated trash loads reduced. Conveyance system loading rates developed because of Step #3 should be adjusted in parallel for the following control measures:

- QF-3a: Partial-capture Treatment Device: Curb Inlet Screens (Area-specific)
- QF-3b: Partial-capture Treatment Device: Stormwater Pump Station Trash Racks Enhancements (Area-specific)
- QF-4: Enhanced Storm Drain Inlet Maintenance (Area-specific)
- QF-5: Full-Capture Treatment Devices (Area-specific)

Load reductions for these control measures are calculated in parallel because they are applied to independent geographical areas. Reductions from all control measures described in this step are area-specific and may require the use of GIS to calculate a set of **waterway loading rates**. Once waterway loading rates have been determined, a **waterway load** will be developed and used as a starting point for calculating load reductions associated with trash interception in waterways discussed in Step #5.

Step #5: Control Measures that Intercept Trash in Waterways

The load of trash that passes through the stormwater conveyance system without being intercepted may still be removed through interception in waterways. There are two control measures associated with interception in waterways:

- QF-3c: Partial-capture Treatment Device: Litter Booms/Curtains (Area-wide)
- QF-7: Creek/Channel/Shoreline Cleanups (Volunteer and/or Municipal) (Area-wide)

As these control measures are implemented, load reduction estimates can be calculated in parallel for these two measures.

Step #6: Comparison to Baseline Trash Load

Applying the four steps described in the processes above will provide an estimated trash load (volume) remaining after trash control measures are implemented. As depicted in the following equation, the relative percent difference between the baseline load and the load remaining after control measures are implemented is the percent reduction that will be used to assess progress towards MRP trash load reduction goals.

$$\frac{\text{Baseline Load} - \text{Remaining Load}}{\text{Baseline Load}} = \%\ \text{Reduction}$$

4.0 ENHANCED TRASH CONTROL MEASURES

This section describes the new or enhanced trash control measures planned for implementation by the City of Fremont. The enhanced control measures described are designed to reach a 40% reduction by July 1, 2014. New and enhanced control measures that will be implemented by City of Fremont include those listed in Table 4.1.

Table 4.1. Trash control measures that will be implemented by the City of Fremont to reach the 40% trash load reduction.

Control Measure
CR-1 Single-use Carryout Plastic Bag Ordinances
CR-2 Polystyrene Foam Food Service Ware Ordinances
CR-3 Public Education and Outreach Programs
CR-4 Activities to Reduce Trash from Uncovered Loads
CR-5 Anti-Littering and Illegal Dumping Enforcement Activities
CR- 6 Improved Trash Bin/Container Management (Municipally or Privately-Controlled)
QF-5 Full-Capture Treatment Devices
QF-6 Creek/Channel/Shoreline Cleanups (Volunteer and/or Municipal)

CR-1: Single-use Carryout Plastic Bag Policy/Ordinance

Single-use plastic carryout bags have been found to contribute substantially to the litter stream and to have adverse effects on marine wildlife (United Nations 2009, CIWMB 2007, and County of Los Angeles 2007). The prevalence of litter from plastic bags in the urban environment also compromises the efficiency of systems designed to channel storm water runoff. Furthermore, plastic bag litter leads to increased clean-up costs for the Permittees and other public agencies.

Based on recent experiences of municipalities throughout the State, the process Permittees must go through to enact a single-use carryout plastic bag policy/ordinance is difficult due to intense scrutiny and opposition from not only public interest groups and lobbyists, but also merchants and community members. In most cases, most opposition groups are pressing for the development of Environmental Impact Reports (EIRs) in accordance with the California Environmental Quality Act (CEQA).

Baseline Level of Implementation

Prior to adoption of the MRP, Permittees within the Bay area have enacted policies or ordinances on Single-use Carryout Plastic Bags. To avoid penalizing these early implementers, an applicable control measure implemented by a Permittee prior to the effective date of the MRP will be credited equally to a control measure implemented after the effective date. Therefore, the baseline level of implementation is not applicable for this control measure.

Enhanced Level of Implementation

As a member agency of the Alameda County Waste Management Authority (ACWMA, and also known as StopWaste.org)), the City of Fremont will voluntarily be subject to ***the proposed Alameda County Single-Use Bag Reduction*** *policy/ordinance* prohibiting the distribution of single-use carryout plastic bags**.**

If approved, the countywide ordinance will ban single-use plastic carryout bags in Alameda County at some stores. Recycled-content paper bags may be provided but only if the retailer charges a minimum of $0.10 for each bag. The ordinance does not ban single-use bags to transport produce, bulk food, or meat within a store to the point of sale.

Reusable bags may also be provided but only if the retailer charges a minimum of $0.10 for each bag. The $0.10 price will increase to $0.25 per single use bag on January 1, 2015 unless the ACWMA finds that this increase is not necessary to sufficiently discourage single-use bag use.

Restaurants, take-out food establishments, retail stores not selling packaged food, and charitable thrift stores are not required to participate in the proposed single-use ban. Retail establishments would be able to provide recycled-content paper bags at no cost to customers participating in the “Women, Infants, and, Children Supplemental Food” programs. Stores may provide a reusable paper bag at no charge if distributed as part of an infrequent and limited-time promotional program. All retailers will be required to keep records for 18 months on sales of recycled paper bags and reusable bags.

Enforcement will be administered and coordinated by ACWMA with information provided by local jurisdiction field inspectors from various departments, e.g., code enforcement, environmental services, and county health department officials.

Please refer to Attachment CR-1 for the StopWaste.org fact sheet describing the proposed ordinance/policy.

The policy/ordinance ***will become effective*** on January 1, 2013. The total percent trash reduced from MS4s because of implementing a single-use carryout plastic bag *policy/ordinance* will be reported in the Annual Report submitted each September to the Water Board.

The City of Fremont **will adopt** the following enhanced control measures associated with the single-use bag policy/ordinance:

Tier 1 – Prohibit Distribution at Large Supermarkets – *Adoption of a local policy or ordinance or implementation of a statewide or countywide action that prohibits large supermarkets from distributing single-use carryout plastic bags within their jurisdictional boundaries.*

Tier 2 – Prohibit Distribution at Retail Establishments that Sell Packaged Foods – *Adoption of a local* policy or *ordinance or implementation of a statewide or countywide action that prohibits retail establishments that sell packaged foods from distributing single-use carryout plastic bags within their jurisdictional boundaries.*

The City of Fremont will include parallel public education and outreach activities related to the single-use bag policy/ordinance in regional and local advertising campaigns, media relations projects, community outreach events, and outreach to school-age children or youth.

Reduction from Implementing Control Measure

The City of Fremont will receive a ten percent reduction credit for implementing Tier 1 and Tier 2 enhanced control measures described in Enhanced Level of Implementation section above. The ten percent reduction credit will be applied to the City of Fremont's baseline trash load. This ten percent reduction credit is consistent with methods presented in the BASMAA (2012b). A summary of all load reductions anticipated through the implementation of this plan are included in Table 5-1.

CR-2: Polystyrene Foam Food Service Ware Ordinance

Polystyrene foam is used as food ware in the food service industry. According to the USEPA, floatable debris in waterways, such as products made of polystyrene, is persistent in the environment, and has physical properties that can have serious impacts on human health, wildlife, the aquatic environment, and the economy (USEPA 2002). Due to its properties, polystyrene foam used as food ware is typically not recycled. Since 1990, over 100 government agencies within the United States, including over twenty within the Bay area have enacted full or partial bans on polystyrene foam food service ware.

Baseline Level of Implementation

Prior to adoption of the MRP, over twenty agencies within the Bay area enacted full or partial bans on polystyrene foam food service ware. To avoid penalizing these early implementers, an applicable control measure implemented by a Permittee prior to the effective date of the MRP will be credited equally to a control measure implemented after the effective date. Therefore, the baseline level of implementation is not applicable for this control measure.

Enhanced Level of Implementation

The City of Fremont **adopted** an ordinance banning polystyrene foam food service ware at the point-of-sale of any establishment, located within the City of Fremont that provides prepared food or beverages including supermarkets, delicatessens, restaurants, retail food vendors, caterers, sales outlets, shops, cafeterias, catering trucks, outdoor vendors, and city facility users. Banned items include expanded polystyrene (#6) food service ware (commonly known as Styrofoam™) such as plates, cups, bowls, and lids. The ordinance became effective on January 1, 2011. The percent trash reduction from MS4s because of implementing a polystyrene foam food service ware ordinance will be reported in the Annual Report submitted each September.

The full text of the ordinance (includes enforcement language) is available at the City of Fremont Municipal Code website under Title IV, Chapter 2, Article 10, §4-210100—4-210106.

http://www.codepublishing.com/CA/Fremont/?Fremont04/Fremont0402.html

The City of Fremont **adopted** the following enhanced control measures associated with the polystyrene foam food service ware ordinance:

Tier 1 – Prohibit the distribution of polystyrene foam single-use food and beverage ware at Permittee-sponsored events or on Permittee-owned property *– Adoption of a local ordinance or implementation of a statewide, countywide, or regional action that prohibits food vendors from distributing polystyrene foam food and beverage ware at Permittee-sponsored events or on Permittee-owned property.*

Tier 2 – Prohibit the distribution of polystyrene foam single-use food and beverage ware at all food service vendors *- Adoption of a local ordinance or implementation of a statewide, countywide, or regional action that prohibits all food vendors from distributing polystyrene foam food and beverage ware.* The City of Fremont will continue to include parallel public education and outreach activities related to the polystyrene foam single use food and beverage ware ordinance in regional and local advertising campaigns, media relations projects, community outreach events, and outreach to school-age children or youth.

Percent Reduction from Enhancements

The City of Fremont will receive an eight percent reduction credit for implementing Tier 1 and Tier 2 enhanced control measures described in *Enhanced Level of Implementation* section above. The eight percent reduction credit will be applied to the City of Fremont's baseline trash load. This eight percent reduction credit is consistent with methods presented in the BASMAA (2012b). A summary of all load reductions anticipated through the implementation of this plan are included in Table 5-1.

CR-3: Public Education and Outreach Programs

Permittees in the San Francisco Bay Area have implemented public education and outreach programs to inform residents about stormwater issues relating to pollutants of concern, watershed awareness and pollution prevention. Public education and outreach efforts include developing and distributing brochures and other print media; posting messages on websites and social networking media (Facebook, Twitter etc.), attending community outreach events, and conducting media advertising. In recent years, some municipal agencies have implemented anti-litter campaigns to increase public awareness about the impacts of litter on their communities and water quality; and to encourage the public to stop littering.

Baseline Level of Implementation

The City of Fremont **implemented** public education and outreach control measures prior to the effective date of the MRP. Over the past several years, the City of Fremont Environmental Services Division provided a wide array of public education and outreach related to environmental awareness. These efforts have consistently met MRP requirements and addressed a host of topics and events that include, but are not limited to:

- Illegal dumping and Illicit discharge awareness
- Watershed health
- Native plants
- Recycling
- Proper waste disposal
- Creek cleanups

These control measures are considered baseline because they were either not related to trash reduction specifically, or they are not planned to be continued during the term of the MRP. New actions or actions started prior to the effective date of the MRP and continued into the future are described under the next section.

For Public Education and Outreach Section of Short-Term Plan

Enhanced Level of Implementation

The City of Fremont **will implement** the following public education and outreach control measures prior to July 1, 2014.

Litter Reduction Advertising Campaign(s)

BASMAA Youth Outreach Campaign (Regional)

Through participation and funding of the regional BASMAA Youth Outreach Campaign (Campaign), the *City of Fremont* **will implement** an outreach campaign designed to reduce littering from the target audience in the Bay Area. The Campaign was launched in September 2011 (post-MRP effective date) and aims to increase the awareness of Bay Area Youth (ages 16-24) on litter and stormwater pollution issues, and eventually change their littering behaviors. Combining the ideas of Community Based Social Marketing with traditional advertising, the Youth Campaign aims to engage youth to enable the peer-to-

peer distribution of Campaign messages. The Campaign will at least run from FY 11-12 through FY 13-14. A brief description of the Campaign activities is provided below:

- Raising Awareness: The Campaign will begin by raising awareness of the target audience on litter and stormwater pollution issues. Partnerships with youth commissions, high schools, and other youth focused organizations will be developed to reach the target audience. Messages targeted to youth will be created and distributed via paid advertising, email marketing, Campaign website, and social networking sites (e.g., Facebook and Twitter).
- Engage the Youth - The advertisements will encourage the audience to participate in the Youth Campaign by joining a Facebook page, entering a contest, taking an online quiz, etc., and providing their contact information. At the beginning of FY 12-13, a video contest will be launched to get Bay Area youth further involved in the Campaign. An online voting system will be used to select the winning entry. Media advertising will be conducted to promote the winning entry.
- Change Behaviors: To move the audience along the behavior change continuum, the Campaign will use electronic platforms such as email marketing and social networking sites to encourage participants to engage in increasingly more difficult behavior changes, such as participating in a clean-up, organizing a clean-up, etc.
- Maintain Engagement: The Campaign will continue to interact with the target audience through email marketing and social media websites.

The Campaign will include a pre/ post-campaign survey to evaluate the effectiveness of outreach. The pre-campaign survey will be conducted in FY 11-12 and the post-campaign survey in FY 13-14. Other evaluation mechanisms, such as website hits, number of youth engaged in the Campaign's social networking website, etc. will also be used to evaluate its effectiveness in increasing awareness and changing behavior.

Advertising Campaign(s) (Countywide Program)
Outreach to Alameda County youth may be limited by scope and budget of the Campaign. Therefore, the Clean Water Program will supplement the Regional Youth Outreach campaign in order to increase the number of participants in Alameda County.

Advertising Campaign (Local) In addition to participating in regional advertising campaigns, the City of Fremont will continue its own advertising program via print media, television, and the internet to educate the public and promote:

- anti-littering behavior
- awareness and hotline information related to illegal dumping and illicit discharge
- compliance with the Alameda County single-use bag ordinance/policy
- compliance with the City of Fremont Styrofoam food and beverage service ware ban

Outreach to School-age Children or Youth

The Countywide Program is currently conducting stormwater pollution prevention and anti-littering outreach to school-age children through contracts with five environmental education organizations. The current contracts expire in 2014. The Program intends to initiate new contracts for outreach to school-age children in 2014. The outreach programs will have an increased focus on anti-littering messages and

will be revised to fulfill the required number of events as described in BASMAA (2012b). The ***City/County*** plans to implement this control measure through participation in the Countywide Program.

In addition to regional efforts, the City of Fremont plans to continue offering six or more outreach activities each year for school-age children promoting

- anti-littering behavior
- the countywide single-use bag ordinance/policy
- the City ban on Styrofoam food and beverage service ware

Media Relations

BASMAA Regional Media Relations Project (Regional)

Through participation and funding of the **BASMAA Regional Media Relations Project**, the ***City/County*** plans to continue to implement a media relations project partially designed to reduce littering from target audiences in the Bay Area. The goal of the BASMAA Media Relations Project is to generate media coverage that encourages individuals to adopt behavior changes to prevent water pollution, including littering. At least two press releases or PSAs focus on litter issues each year (e.g., creek clean-up activities, preventing litter by using reusable containers, etc.).

Media Relations (Countywide Program)
Clean Water Program has already developed a media and community relations plan and contact list. The Program will regularly release articles and information to the appropriate publications, blogs, and community publications on litter issues. Articles will be timed with regular events, such as Coastal Cleanup in September and the beginning of the rainy season, as well as other current events, if applicable. The media and community outreach list contains many smaller publications and online sites as well as larger newspapers, which will increase the chances the articles are published and read. This effort goes beyond the scope of the Regional Media Relations plan by going deeper into the community through highly localized media channels.

Media Relations (Local)

City of Fremont staff will continue to prepare newsletter articles and public service announcements on television to educate the public about environmental awareness and anti-littering behavior. Topics will include promotion of

- anti-littering behavior
- the countywide single-use bag ordinance/policy
- the City ban on Styrofoam food and beverage service ware
- diversion of household waste
- awareness about illegal dumping and illicit discharge prevention

Community Outreach Events

The Countywide Program will develop a “Litter Outreach” kit for community events. Going beyond the usual table with literature, the kit will include such interactive activities as pledge posters to foster commitment to behavior change, and directly relevant promotional items such as reusable bags. This kit will be provided to all Program member agencies for use at their local events.

The City of Fremont plans to use the Litter Outreach kit at four events per year. The City will also conduct community cleanup events that promote anti-littering behavior and environmental awareness.

The City of Fremont will also continue its community outreach that will stress anti-litter behavior. Recent examples of local community outreach include (with attendance estimates):

- Concerts in the Park (total of 6,000 participants for the six-date series)
- The Fremont Festival of the Arts (350,000 visitors total and 3,500 visitors at City Environmental Services information booth)
- The City of Fremont Health Fair (100 city employees and retirees)
- The City of Fremont Compost Giveaway (3,500 residents)
- Earth Day Celebration (2,000 participants)
- Fremont Kids and Kites Festival (3,500 residents)

Percent Reduction from Enhancements

The City of Fremont will receive an eight percent reduction credit for implementing specific enhanced control measures described in Enhanced Level of Implementation section above. This percent reduction is comprised of the following credits, consistent with the Load Reduction Tracking Method:

- Litter Reduction Advertising Campaigns—3%
- Outreach to School-age Children or Youth—2%
- Media Relations—1%
- Community Outreach Events—2%

These eight percent reduction credits will be applied against the City of Fremont's baseline trash load. This percent reduction credit is consistent with methods presented in the BASMAA (2012b). A summary of all load reductions anticipated through the implementation of this plan are included in Table 5-1.

CR-4: Reduction of Trash from Uncovered Loads

Although it is currently illegal to operate a vehicle that is improperly covered and which its' contents escapes[4], vehicles remain an important trash source to MS4s and local waterways. Specifically, vehicles that do not secure or cover their loads when transporting trash and debris have a high risk of contributing trash to MS4s. Land areas that generate trash from vehicles include roads, highways (on/off ramps, shoulders or median strips) and parking lots. To help address the dispersion of trash from unsecured or uncovered vehicles destined for landfills and transfer stations, Permittees may require municipally-contracted trash haulers to cover or secure loads or work with municipal or private landfill and transfer station operators to educate waste haulers on securing loads and/or to enhance enforcement of existing regulations.

Baseline Level of Implementation

The baseline trash load described in Section 2.0, assumes that prior to adoption of the MRP the City of Fremont has not adopted control measures to reduce trash from vehicles with uncovered loads. Therefore, implementation of any of the control measures described in this section is considered to be enhanced implementation.

Enhanced Level of Implementation

The City of Fremont ***has implemented*** the following enhanced control measures to reduce trash from vehicles with uncovered loads prior to July 1, 2014. Title IV, Chapter 2, Article 3, Section 4-2300 of the Fremont Municipal Code prohibits spills, leaks, or other escape [of materials] during transport (adopted February 28, 1995).

The full text of the ordinance is available at the City of Fremont Municipal Code website under Title IV, Chapter 2, Article 3, § 4-2312

http://www.codepublishing.com/CA/Fremont/?Fremont04/Fremont0402.html

The City of Fremont contract with Allied Waste, the City's trash and debris hauler franchisee, includes a specific requirement for covered loads when transporting trash and debris (C.10.3) and requirements related to cleaning up spillage from trucks (C.10.1 and 10.2), reporting unauthorized dumping (C.15), and reporting overflowing containers (C.16).

See Attachment CR-4 for applicable excerpts of the Allied Waste contract.

Percent Reduction from Enhancements

The City of Fremont will receive a one percent reduction credit for implementing specific enhanced control measures described in the *Enhanced Level of Implementation* section above. The one percent reduction credit will be applied to the baseline trash load to urban creeks from the municipal separate

[4] In accordance with the California Vehicle Code Sections 23114 and 23115, it is against the law to operate a vehicle on the highway which is improperly covered, constructed, or loaded so that any part of its contents or loads spills, drops, leaks, blows, or otherwise escapes from the vehicle. Exempted materials include hay and straw, clear water and feathers from live birds. Additionally, any vehicle transporting garbage, trash, or rubbish, used cans or bottles, waste papers, waste cardboard, etc. must have the load covered to prevent any part of the load from spilling on the highway (CVC 2011). Significant fines are possible for non-compliance.

storm sewer system (MS4) owned and operated by the City of Fremont. This one percent reduction credit was obtained from the *Trash Load Reduction Tracking Method Report* (BASMAA 2012b) and is presented in the Trash Load Reduction Summary Table included in Table 5-1.

CR-5: Anti-Littering and Illegal Dumping Enforcement Activities

Successful anti-littering and illegal dumping enforcement activities include laws or ordinances that make littering or dumping of trash illegal. Laws are enforced by various municipal agency staff (e.g., police, sheriff, and public works department staff) who issue citations in response to citizen complaints or other enforcement methods (e.g., surveillance cameras, signage and/or physical barriers installed at illegal dumping hot spots). In some California jurisdictions, the minimum fine for littering is $500 and the maximum penalty for highway littering is $1000 (City of San Francisco 2001). However, it is difficult to enforce small littering events unless they are witnessed or solid proof exists linking the offender to the litter. As a result, enforcement tends to focus on larger scale illegal dumping activities.

Baseline Level of Implementation

The baseline trash load described in Section 2.0, assumes that the City of Fremont has adopted a basic anti-littering and illegal dumping enforcement program that entails receiving and responding to complaints from citizens as resources allow. The City of Fremont Municipal Code provides the framework for an anti-litter and illegal dumping enforcement program as described below.

Depending on the circumstance, the City's Environmental Services and Code Enforcement divisions enforce illegal dumping and littering on public and private property. Dumping found on public property is cleaned up by the City of Fremont Department of Public Works. As described below, members of the public have the ability to report litter and illegal dumping issues via telephone or internet.

Enhanced Level of Implementation

The City of Fremont **has implemented** the following enhanced anti-littering and illegal dumping enforcement control measures prior to July 1, 2014.

Anti-Littering and Illegal Dumping Enforcement: City of Fremont Environmental Services and Code Enforcement staff respond to litter and/or illegal dumpling complaints from citizens, City staff, and outside agencies. Complaints are tracked in a database from time of complaint to resolution of the problem and/or enforcement.

Depending on the circumstance, City of Fremont Environmental Services and Code Enforcement staff have the ability to enforce anti-littering and illegal dumping activity through

1. The City of Fremont Municipal Code Solid Waste Ordinance—see Title IV, Chapter 2, Article 2, §4- 2200, 2201, 2210, 2213; Article 3, § 4-2300, 2302, 2303; Article 4, §4-2401.

   The full text of this ordinance may be found at
   http://www.codepublishing.com/CA/Fremont/?Fremont04/Fremont0402.html

2. The City of Fremont Stormwater Management and Control Ordinance—see Title VIII, Art 2, §8-11200 and §8-11205.

   The full text of the ordinance may be found at
   http://www.codepublishing.com/CA/Fremont/?Fremont08/Fremont0811.html

Title I, Chapter 4, "Administrative Remedies" of the Fremont Municipal Code allows assigned City of Fremont staff to enforce anti-littering and illegal dumping violations.

The full text of this ordinance may found at
http://www.codepublishing.com/CA/Fremont/?Fremont01/Fremont0104.html

Additionally, the City of Fremont stormwater program enforcement response plan (ERP) provides guidance to City inspection staff in taking consistent enforcement actions needed to achieve effective and timely compliance with the City's stormwater ordinance and other enforcement authorities allowed by the local agency's municipal code. See Attachment CR-5 for the full text of the City of Fremont ERP.

Members of the public use the City of Fremont "Report a Concern" webpage to report illegal dumping and illicit discharge through an email and phone messaging system at
http://www.fremont.gov/forms.aspx?FID=44

Percent Reduction from Enhancements

The City of Fremont will receive a two percent reduction credit for implementing specific enhanced control measures described in *Description of Enhanced Level of Implementation* section above. The two percent reduction credit will be applied to the baseline trash load to urban creeks from the municipal separate storm sewer system (MS4) owned and operated by the City of Fremont. This two percent reduction credit was obtained from the *Trash Load Reduction Tracking Method Report* (BASMAA 2012b) and is presented in the Trash Load Reduction Summary Table included in Table 5-1.

CR-6: Improved Trash Bin/Container Management

Receptacles used to place/store trash or recyclables prior to collection by a public agency or private waste hauler reduce the potential for littering and trash loading to stormwater conveyance systems and receiving waters (City of Los Angeles 2004). For the purposes of assigning trash load reduction credits, receptacles fall into the following two categories:

- **Private Trash/Recycling Bins**: A receptacle for placing trash or recyclables generated from a household, business, or other location that is serviced by a trash hauler. Bins are specifically designed, heavy-duty plastic wheeled containers with hinged lids; or large multi-yard metal or plastic containers rectangular in shape.
- **Public Area Trash Containers**: A receptacle for placing incidental trash generated in public spaces that provides people with a convenient and appropriate place to dispose of trash. The design and size of public area trash containers vary widely, depending on their setting and use.

The effectiveness of bins/containers and bins in reducing trash in the environment is likely dependent upon: the location and density of the receptacles, size of the bin/container in relationship to the size needed to service users, frequency of maintenance, and the ability of the bin/container to capture and contain the trash deposited.

Baseline Level of Implementation

The baseline trash load described in Section 2.0, assumes that the City of Fremont has not implemented enhanced trash bin/container management practices prior to effective date of the MRP. The Fremont Municipal Code establishes the requirements for solid waste containers, maintenance, and their removal.

Chapter 2: Solid Waste, Recyclables, and Yard Waste Management, of the Fremont Municipal Code adopted in February 1995 addresses trash bin/container management.

Chapter 2, Article 3, § 4-2200 of the Fremont Municipal Code requires appropriate trash service for private properties.

The full text of this ordinance may be found at
http://www.codepublishing.com/CA/Fremont/?Fremont04/Fremont0402.html

Chapter 3, Article 5, § 4-3500 – 3503 of the Fremont Municipal Code identifies that “The violation of any of the provisions of this chapter shall also be deemed a nuisance, and civil action to abate, enjoin, or otherwise compel the cessation of such nuisance may be taken by the city attorney.

The full text of this ordinance may be found at
http://www.codepublishing.com/CA/Fremont/?Fremont04/Fremont0403.html

Enhanced Level of Implementation

The City of Fremont ***has implemented*** the following improved trash bin/container management practices prior to July 1, 2014.

Environmental Services staff will continue to enforce the requirements of the Fremont Municipal Code to ensure that businesses and households have sufficient trash collection frequencies and that the trash bins/containers are of an adequate size to hold the quantity of trash generated to prevent unintended releases of trash. The City will continue to:

- include language in its contract with its Franchise Waste Hauler that incorporates requirements for ensuring container lids are properly closed after emptying and for cleaning up litter in the vicinity of any solid waste storage bins.
- follow up with property owners and enforce on any issues where bin sizing, placement, collection frequency, and failure to comply with municipal code are noted.

Percent Reduction from Enhancements

The City of Fremont will receive a three percent reduction credit for implementing specific enhanced control measures described in *Description of Enhanced Level of Implementation* section above. The three percent reduction credit will be applied to the baseline trash load to urban creeks from the municipal separate storm sewer system (MS4) owned and operated by the City of Fremont. This percent reduction credit was obtained from the *Trash Load Reduction Tracking Method Report* (BASMAA 2012b) and is presented in the Trash Load Reduction Summary Table included in Table 5-1.

QF-5: Full-Capture Treatment Devices

As defined by the Municipal Regional Stormwater Permit (MRP), a full-capture system or device is any single device or series of devices that traps all particles retained by a 5 mm mesh screen and has a design treatment capacity of not less than the peak flow rate (Q) resulting from a one-year, one-hour, storm in the sub-drainage area. A list of the full-capture systems and devices recognized by the San Francisco Bay Regional Water Quality Control Board (Water Board) is included in *Trash Load Reduction Tracking Method Report* (BASMAA 2012b). Trash loads reduced via publically or privately owned and operated devices within a Permittee's jurisdictional area that have been recognized by the Water Board as full-capture may be used to demonstrate attainment of trash load reduction goals.

Baseline Level of Implementation

Prior to adoption of the MRP, some Permittees installed and maintained full capture devices. To avoid penalizing these early implementers, an applicable control measure implemented within a Permittee's jurisdictional area prior to the effective date of the MRP will be credited equally to a control measure implemented after the effective date. Therefore, the baseline level of implementation is no trash full-capture devices have been installed.

Enhanced Level of Implementation

A total of 41 trash full-capture treatment devices will be installed in the City of Fremont prior to July 1, 2014. A list of these full-capture devices is included in Table QF-5-1. All devices listed within this table are enhanced trash control measures. Table QF-5-1 also includes the area treated and the calculated trash load reduced from each full-capture treatment device. These calculations are consistent with the approach described in the *Trash Load Reduction Tracking Method Report* (BASMAA 2012b).

Percent Reduction from Enhancements

The total estimated annual volume of trash that will be reduced by July 1, 2014 because of implementing full capture devices is 1,325 gallons. This volume is equal to approximately a 2.4 percent reduction in the baseline trash load to urban creeks from the municipal separate storm sewer system (MS4) owned and operated by the City of Fremont. Both values provided within this section are included in Trash Load Reduction Summary Table included in Table 5-1.

Table QF-5-1. Trash full-capture treatment devices within the jurisdictional boundaries of the City of Fremont that are planned for installation by July 1, 2014.

Device ID	Public or Private	Device Name	Location (Cross Streets)	Installation Date/Anticipated Installation Date	Total Area Treated (acres)	Trash Load Reduced
1 – 40	Public	Inlet Filters	TBD	January 2013	116.2	540
41	Public	CDS Type Unit	Los Cerritos Community Park & Center near Alder Avenue	January 2013	181	785

QF-6: Creek/Channel/Shoreline Cleanups

Creek/channel/shoreline cleanups have been successful in removing large amounts of trash from San Francisco Bay area creeks and waterways; and increasing citizen's awareness of trash issues within their communities. Creek/channel/shoreline cleanups are conducted as single-day events or throughout the year by volunteers and municipal agencies. Since volunteers and municipal agencies have the common goal of clean creeks and waterways, their efforts sometimes overlap. This is apparent with some municipal agencies using volunteers to help assess and clean designated trash hot spots during single-day volunteer events.

Baseline Level of Implementation

Trash reduced via creek/channel/shoreline cleanups was not accounted for in the City of Fremont's baseline trash load described in Section 2.0. Therefore, implementation of any of the control measures described in this section is considered an enhancement and can be used to demonstrate progress towards load reduction goals.

Enhanced Level of Implementation

Prior to July 1, 2014, the City of Fremont will conduct MRP-required[5] and the following non MRP-required creek/channel/shoreline cleanups[6] listed below. Both types of cleanups will be conducted each year and the volume of trash removed will be tracked to demonstrate trash loads reduced.

Single Day Efforts:

- Coastal Cleanup Day (third Saturday in September)
- Mission Creek and Stiver's Lagoon
- Make A Difference Day—Lake Elizabeth and Stiver's Lagoon
- Earth Day Cleanups
- Designated Hot Spot Location Cleanups

The City has been sponsoring cleanup sites for these events for the past several years and will continue to do so in the future. Based on previous collection efforts, we estimate 5,680 gallons of debris will be collected annually from these events.

Percent Reduction from Enhancements

The total estimated annual volume of trash that will be reduced by July 1, 2014 because of implementing creek/channel/shoreline cleanups is 5,680 gallons. This volume is equal to approximately a 10.4 percent reduction in the baseline trash load to urban creeks from the municipal separate storm sewer system (MS4) owned and operated by the City of Fremont. Both values provided within this section are included in Trash Load Reduction Summary Table included in Table 5-1.

[5] Creek/channel/shoreline cleanups conducted in accordance with Permit Provision C.10.b.
[6] All "other" creek/channel/shoreline cleanups conducted by a municipality that are not required by Provision C.10.b.

5.0 SUMMARY OF TRASH CONTROL MEASURE ENHANCEMENTS

The City of Fremont is committed to reducing the potential for trash impacts in local water bodies in the San Francisco Bay Area. The planned enhanced trash control measures described in Section 3.0 are also listed in Table 5-1. The enhancements are intended to comply with the 40% trash load reduction goal in MRP provision C.10.

Please refer to Table 5-1 on the following page.

Table 5-1. Planned enhanced trash control measure implementation within the jurisdictional boundaries of the City of Fremont and associated trash loads reduced.

Trash Control Measure	Summary Description of Control Measure	% Reduction (Credits)	Trash Load Reduced	Cumulative % Reduction (Compared to Baseline)
Single-use Carryout Plastic Bag Ordinance (CR-1)	City of Fremont plans to adopt Tier 1 & 2 of proposed Alameda County plastic ban (January 1, 2013)	10	5,474	10
Polystyrene Foam Food Service Ware Ban (CR-2)	City of Fremont adopted Tier 1 & 2 polystyrene ban (January 1, 2011)	8	4,379	18
Public Education and Outreach Programs (CR-3)	City of Fremont will continue public outreach and education programs that emphasize anti-litter behavior	8	4,379	26
Activities to Reduce Trash from Uncovered Loads (CR-4)	City of Fremont has prescriptive contract and municipal code language to reduce trash from uncovered loads	1	547	27
Anti-Littering and Illegal Dumping Enforcement Activities (CR-5)	City of Fremont has an established structure to investigate and enforce anti-littering and illegal dumping	2	1,095	29
Improved Trash Bin/Container Management (Municipally or Privately-Controlled) (CR-6)	Anti-littering and illegal dumping investigation and enforcement program; illegal dumping hotline; continue enforcement; collect evidence to attempt to identify offenders	3	1,642	32
Full-capture Treatment Devices (QF-5)	The City of Fremont plans to install 41 full-capture treatment devices (1 large and 40 small) by July 1, 2014.	NA	1,325	34.4
Creek/Channel/Shoreline Cleanups (Volunteer and/or Municipal) (QF-6)	The City of Fremont plans to continue creek/channel/shoreline cleanups throughout the year	NA	5,680	44.8

5.1 Annual Reporting and Progress Towards Trash Load Reduction Goal(s)

Consistent with MRP Provision C.10.d (i), the City of Fremont intends to report on progress towards MRP trash load reduction goals on an annual basis beginning with the Fiscal Year 2011-2012 Annual Report. Annual reports will include:

1. A brief summary of all enhanced trash load reduction control measures implemented to-date;
2. The dominant types of trash likely removed via these control measures;
3. Total trash loads removed (credits and quantifications) via each control measure implementation; and
4. A summary of progress towards trash load reduction goals.

Similar to other MRP provision, annual reporting formats will be consistent region-wide. Annual reports are intended to provide a summary of control measure implementation and assess progress toward MRP trash reduction goals. For more detailed information on specific control measures, the City of Fremont will retain supporting documentation on trash load reduction control measure implementation. These records should have a level of specificity consistent with the trash load reduction tracking methods described in the *BASMAA Trash Load Reduction Tracking Method Technical Report* (BASMAA 2012b).

5.2 Considerations of Uncertainties

Baseline trash loading and load reduction estimates are based on the best available information at the time this Short-Term Plan was developed. As with any stormwater loading and reduction estimate, a number of assumptions were used during calculations and therefore uncertainty is inherent in the baseline trash load estimate presented in Section 2.0 and the load reduction estimate presented in this section. For these reasons, the baseline loading estimates presented in this plan should be considered first-order estimates. During the implementation of this Short-Term Plan and subsequent plans, additional information may become available to allow the calculation of a more robust baseline load.

6.0 IMPLEMENTATION SCHEDULE

Implementation of enhanced trash control measures by the City of Fremont is currently planned to occur in a timeframe consistent with MRP requirements. A preliminary implementation schedule for all planned enhancements is described in Table 6-1. This schedule provides a timeframe for reducing trash discharged from the City of Fremont's MS4 by 44.8%.

Based on new information that becomes available during the implementation of this Short-Term Plan (e.g., revisions to baseline loading estimates or load reduction credits of quantification formulas, etc.), or if circumstances arise during implementation of the Plan that were not anticipated at the time of submission, the City of Fremont may choose to amend or revise this Plan and/or the associated implementation schedule. If revisions or amendments occur, a revised Short-Term Plan and implementation schedule will be submitted to the Water Board via the City of Fremont's annual reporting process.

Table 6-1. Preliminary implementation schedule for enhanced trash control measures in the City of Fremont.

Trash Control Measure	Beginning Date of Implementation
Single-use Carryout Plastic Bag Ordinance (CR-1)	January 1, 2013
Polystyrene Foam Food Service Ware Ban (CR-2)	January 1, 2011
Public Education and Outreach Programs (CR-3)	January 1, 2014
Activities to Reduce Trash from Uncovered Loads (CR-4)	Pre-MRP
Anti-Littering and Illegal Dumping Enforcement Activities (CR-5)	Pre-MRP
Improved Trash Bin/Container Management (Municipally or Privately-Controlled) (CR-6)	Pre-MRP
Full-capture Treatment Devices (QF-5)	January 1, 2013
Creek/Channel/Shoreline Cleanups (Volunteer and/or Municipal) (QF-6)	Pre-MRP

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StopWaste.Org Proposed Single-Use Bag Reduction Ordinance FAQ's

December 5, 2011

What does the proposed ordinance do and when does it go into effect?

The proposed Single-Use Bag Reduction Ordinance would ban single-use plastic carryout bags in Alameda County at some stores (see below for opt-out provision and exceptions) as of Jan 1, 2013. Recycled content paper bags may be provided but only if the retailer charges a minimum price of $0.10 for each bag. The ordinance does not ban single-use bags used to transport produce, bulk food or meat from within a store to the point of sale.

Reusable bags may also be provided but only if the retailer charges a minimum price of $0.10 for each bag. The $0.10 price will go up to $0.25 per single use bag on January 1, 2015 unless the Alameda County Waste Management Authority Board finds before then that this increase is not necessary to sufficiently discourage single-use bag use.

Which retailers are required to participate?

Stores with sales of packaged food, including drug stores, large stores selling packaged food, pharmacies, supermarkets, grocery stores, convenience food stores, and liquor stores.

The proposed ordinance affects approximately 1900 retailers countywide. Stores must keep records for 18 months on sales of recycled paper bags and reusable bags.

Which retailers are not required to participate?

- Restaurants
- Take-out food establishments
- Retail stores not selling packaged food
- Charitable thrift stores

Retail establishments would be able to provide recycled content paper bags at no cost to customers participating in the WIC and Supplemental Food programs.

A store may provide a reusable bag at no charge if distributed as part of an infrequent and limited time promotional program.

Why not include all retailers in the county?

The proposed ordinance includes the stores that traditionally distribute a high volume of single-use bags. Starting with these stores allows for a program that can be fully funded within StopWaste.Org's current budget and provides an opportunity to gauge the effectiveness of the ordinance. StopWaste.Org can include additional stores in the future.

Are local jurisdictions required to participate?

The proposed ordinance intends to preserve local control while capturing the benefits of working together at a larger scale. Local jurisdictions will be able to "opt-out" of the proposed Single-Use Bag Reduction Ordinance by resolution of their governing Board any time prior to March 2, 2012.

How will the Single-Use Bag Reduction Ordinance be enforced?

Enforcement will be administered and coordinated by StopWaste.Org with information provided by local jurisdiction field inspectors from various departments (watershed, department of health, public works, toxics, etc.).

EXHIBIT C

PERFORMANCE STANDARDS

C.1 OVERALL PERFORMANCE STANDARDS

Contractor shall perform or cause to be performed all services in a timely, thorough and workman-like manner that constitutes litter free, reliable, courteous and high-quality service. Contractor shall at all times perform its duties using best industry practices for comparable operations.

MSW, Organic Waste and Recyc1ables collected from within the City shall not be mixed in Contractor's collection equipment with any such waste or Recyc1ables collected from another municipality without prior approval from City.

C.2 COLLECTION SCHEDULE

C.2.1 General

Hours of collection are limited to 6:00 a.m. to 6:00 p.m. for residential collection, or from businesses located in close proximity to residential areas. Exceptions may be authorized by the City Representative as needed in cases of conflicts with public works projects or public events. All collection activities shall occur as scheduled in the Service Schedule submitted by Contractor pursuant to Section 7.1 (a). All collection activities will be coordinated with other City services such as street sweeping, paving and repairs to streets, etc.

C.2.2 Holidays

Contractor shall not provide collection services on holidays. Holidays are defined as Labor Day, Thanksgiving, Christmas and New Years Day. Contractor shall service accounts that fall on Holidays on the next working day. Accounts scheduled for subsequent collection days will be collected one day later culminating with the accounts scheduled for Friday collection being collected on the Saturday following the Holiday.

C.3 COLLECTION OF MSW, RECYCLABLES, AND ORGANIC WASTE FROM SINGLE-FAMILY DWELLINGS

C.3.1 Generally

Contractor shall collect MSW, Recyclables, and Organic Waste from Single-Family Dwellings in the City from the curb or alley on a weekly basis. MSW shall be collected from SFDs on the same day as Recyclables and Organic Waste.

C.3.2 Overage Bags

Contractor shall collect MSW overages from SFD provided that such overage is set out by the customer in accordance with the requirements of City's integrated waste management program.

Contractor shall make "Bag-It" bags readily available to SFD Customers through distribution to easily accessible outlets as mutually agreed upon by Contractor and City. Bags shall be made available for purchase at Contractor's Fremont office and by mail or telephone. Contractor shall maintain a sufficient inventory of Bag-It bags to accommodate collection of overages, and shall report the status of such inventory to City.

C.3.3 Used Motor Oil and Filters Amendment 2

Contractor shall make collect used motor oil and filters from SFD Customers by providing suitable one gallon containers and oil filter collection bags, approved by the City Representative, to residents requesting this service. The used oil and filters shall be collected from the curbside at the same time as the other Recyc1ables. Contractor shall replace the residents' container and f1lter bag at each occurrence of collection. The Contractor shall maintain a sufficient inventory of containers and bags to accommodate collection of these materials.

C.4 COLLECTION OF MSW AND RECYCLABLES FROM MFDs AND BUSINESSES

C.4.1 MFDs

Contractor shall collect all MSW and Recyc1ables from MFDs with Bins sized to service the needs, of the Customer, at a frequency as required by the Customer, but no less often than weekly.

C.4.2 Businesses

Contractor shall collect all MSW from Business Customers with Containers sized to appropriately service the needs of the Customer, at a frequency as required by the Customer.
Collection of Bins shall be no less often than weekly. Roll-off and compactor service Customers will be collected on a mutually agreed to schedule. For those customers that desire monthly, instead of weekly, Roll-off Box service, the minimum monthly haul requirement for compacted MSW loads is one load per month. The minimum monthly haul requirement for non-compacted MSW loads is two loads per month.

All levels of Business MSW collection service shall include 96 gallon mixed recyclables cart service collected every other week.

C.4.3 Pick Up Area for MFD and Business Customers

In determining the pick up area for Businesses and MFDs, Contractor shall work with the Customer to ensure that the flow of traffic is not impeded and that the pick up area does not result in aesthetic

degradation of an area. The designated Collection location, if disputed by the Business Customer or Contractor, shall be determined by the City Representative. If in the City Representative's opinion the existing Collection location is inappropriate, the City Representative may require the Business Customer and/or Contractor to relocate the location of the Bin or Roll-off Box(s).

C.5 COLLECTION FROM CITY OWNED AND OPERATED SITES AND FACILITIES

Contractor shall collect all MSW, Organic Waste and Recyc1ables from sites and facilities owned and/or operated by City, including, without limitation, parks, office and other municipal buildings, libraries, and various centralized locations where street sweepers will deposit dirt and other debris swept from the City streets. Such collection shall be conducted in accordance with a mutually agreed upon service schedule, but no less often than weekly. Contractor shall provide these services without charge to City. Amendment 3

C.6 COLLECTION OFMSW FROM CITY STREET RECEPTACLES

Contractor shall collect all MSW from City Street Receptacles. This service shall be performed at least weekly, and more often if necessary to prevent overflowing. Contract shall also include monitoring, maintenance, and replacement of the Containers.

Contractor shall:

- Clean litter spilled from the containers.
- Replace damaged liners as needed.
- Conduct two high pressure washings of each container, inside and out, per year and including the sidewalk or area within a radius of ten (10) feet of each container.
- Repaint all metal surfaces of each container every two years.
- Replace, clean and paint containers to maintain clean appearances, as needed.
- Purchase, install and service ten (10) new City Street Receptacles per year.
- Contractor may choose to pay a lump sum annually for ten litter containers at a rate of $800 per container. This amount shall be adjusted by CPI at the same time the customer rates are adjusted.

C.7 BULKY GOODS COLLECTION

Contractor shall collected Bulky Goods from residents in SFD on demand, in accordance with Section 4.8.2. Contractor shall make good faith efforts to maximize the Recycling of Bulky Goods. BFI has entered into an agreement with Goodwill Industries of the Greater East Bay inc. for processing, reuse and marketing of the Bulky Goods in the City. If unforeseen issues arise between Contractor and any partnering agency, which terminates the partnership, Contractor shall make good faith efforts to contact and form partnerships with other non-profit organizations to continue this plan.

Outlined below is a summary of Contractor's Bulky' Goods collection and marketing plan:

- Fremont single-family residents have the opportunity to schedule two bulky collections per year, January through April of the following year.

- BFI will schedule the bulky goods collection on the regular collection day within 4 weeks following the request.

- BFI will collect all the bulky collection materials from the route sheets printed out daily.

- BFI will store materials identified by customers as donations in the BFI yard, at 42600 Boyce Road.

- Goodwill Industries of the Greater East Bay Inc. will visit the BFI yard on a regular basis to sort and select the recyclable and reusable items.

- Maintenance schedule for collection equipment will be the same as MSW collection vehicles.

- BFI will maintain one back-up rear-load vehicle in the fleet and one flatbed vehicle. Should the need arise BFI will rely upon BFI's regional fleet of equipment for several more vehicles.

- The initial location for processing and marketing of bulky goods selected for reuse will take place at Goodwill Industries of the Greater East Bay's facility at 1301 30th Avenue, Oakland CA 94601

- Materials brought back to the BFI's facility that are not desired by Goodwill Industries of the Greater East Bay Inc. will be designated for disposal and will be transported directly to the Designated Disposal Facility. .

- Marketing of the materials will include these types of recyclable and reusable materials as designated by Goodwill Industries of the Greater East Bay Inc.; clothing, toys, housewares, linens, wood furniture, tables, chairs, working computers, undamaged monitors, cell phones, books, working small appliances, working vcrs and working stereos.

(See Attached list of donation materials used by BFI Customer Service Representatives when scheduling a bulky collection.)

C.8 SPECIAL SERVICES

Items for Disposal, other than MSW, MSW in excess of the Customer's standard service, or Bulky Goods, shall be collected by Contractor at an extra charge if arrangements for pickup are made in advance. Such rates shall be determined according to Exhibit A and paid in advance and shall be separate from the regularly scheduled service rates. Contractor may not charge a fee for estimation of such special services rates.

To arrange for a special pickup, the Customer must call the local office of Contractor Monday through Friday between the hours of 8:00 am and 6:00 pm to arrange for a mutually acceptable time and day for the collection of such objects or materials. Contractor shall then pick up the objects or-materials at the agreed upon day and time. This day and time shall be within the week following the date when the customer first ca11ed for this service, except when a Customer requests service at a later date or a holiday is observed during that week. If a holiday is observed during the week the request was received, pickup shall be within two weeks following the date when the Customer first called this service.

C.9 GENERAL REQUIREMENTS

C.9.1 Care of City and Private Property

Contractor's employees shall use reasonable care in handing Containers and enclosures; all damage thereto caused by the negligence or carelessness of Contractor's employees shall be promptly adjusted with the owner thereof. All Containers after emptying thereof by Contractor's employees shall be returned to within five (5) feet of the location from which they were picked up by Contractor's employees, upright with lids properly secured; Contractor's employees shall use all reasonable means to insure the Containers are not deposited in manner that blocks any driveway, sidewalk, or street. Contractor shall ensure that its employees close all gates opened by them in making collections, unless otherwise directed by the Customer, and avoid crossing landscaped areas and climbing or jumping over hedges and fences. City will refer complaints about damage to private property to Contractor. Contractor shall repair all damage to private property caused by its employees. Contractor shall respond to damage claims within one (1) working day and shall resolve damage claims within ten (10) days.

C.9.2 Noise

All Collection operations shall be conducted as quietly as possible and shall conform to applicable Federal, State, County and City noise level regulations, including the requirement that the noise level during the stationary compaction process not exceed 60 decibels with the exception of 65 decibels for one-minute duration. City may conduct random checks of noise emission levels to ensure such compliance. Contractor shall promptly resolve any complaints of emission levels to ensure such compliance. Contractor shall promptly resolve any complaints of noise by implementing noise mitigation measures to the satisfaction of the City Manager.

C.9.3 Record of Non-Collection

When any MSW or other waste deposited for Collection is not collected by Contractor for sufficient reason, Contractor shall leave a multi-lingual tag (English, Spanish, and any other languages specified by the City Representative) at least 2" x 6" in size, provided at Contractor's cost, on which Contractor has provided Contractor's phone number and indicated the reasons for Contractor's refusal to collect the waste, giving reference to the section of the Fremont Municipal Code or to the section of this Agreement which has been violated, and which gives grounds for Contractor's refusal. This information shall either be in writing or by means of a check system. At City's request, a copy of any non-collection tag, along with the name and address of the party tagged shall be delivered to the City Representative, within 24 hours of such request.

The log book required by Section 4.12.2 shall contain a record of the non-collection, including the names and addresses of the parties involved, date of tagging, and reason for non-collection.

C.10 LITTER ABATEMENT

C.10.1 Minimization of Spills

Contractor shall use due care to prevent MSW or other waste, Recyclables, or Organic Waste from being spilled or scattered during the Collection or transportation process. If any material is spilled during Collection, Contractor shall promptly clean up all spilled materials; each Collection vehicle shall carry a broom and shovel at all times for this purpose.

Contractor shall not transfer loads from one vehicle to another on any public street, unless it is necessary to do so because of mechanical failure or an accident has rendered the Collection vehicle inoperable or unsafe to operate.

C.10.2 Clean-Up

During the Collection and transportation process, Contractor shall clean up litter in the immediate vicinity of any Container storage area (including the areas where Containers are delivered for collection) of any materials that escape from the collection vehicle or Containers as a result of Contractor's service. In the event that litter not caused by Contractor's service is in the vicinity of the Container storage area, Contractor shall clean-up the litter, whether or not Contractor has caused the litter. Contractor shall discuss the spillage directly with the customer responsible and shall report such instances to City. Contractor shall work with the Customer to resolve the spillage problem. City will attempt to rectify such situations with the customer if Contractor has already attempted to do so without success.

C.10.3 Covering of Loads

All loads shall be covered or otherwise secured to prevent spillage. No material shall be transported in vehicle hoppers.

C.10.4 Oil or Other Vehicle Fluid Spills

Contractor is responsible for cleaning-up all oil or vehicle fluid spills immediately and must notify City within 24 hours of each such spill. All vehicles must carry an acceptable absorbent material to use in the event of spills. Repair for damages caused by oil or other vehicle fluid spills shall be at Contractor's expense. Contractor will follow the spill procedures below:

1. Driver will determine cause and source of spill

2. Each driver or shop employee is responsible for having enough absorbent in their vehicle to contain or prevent any hydraulic fluid or oil from entering a storm drain or sewer and to clean up small spills as they occur.

3. Driver will contain or stop the leak and clean it up without endangering self.

4. Driver will immediately notify dispatch or supervisor.

5. Driver will not leave the spill until either a supervisor or spill response personnel arrive at the scene.

6. Driver will keep all people, Carts, or other vehicles from walking or driving through the spill.

7. Driver or spill response personnel will take all action necessary to prevent the spill from entering the storm drain system through any storm drain inlets, grates, or other entry points.

C.11 VEHICLES AND EQUIPMENT

C.11.1 General

Contractor shall provide and maintain a fleet of collection vehicles sufficient in number and capacity to efficiently perform the work required by the Agreement in strict accordance with its terms. Contractor shall have available on collection days sufficient back-up vehicles and qualified operators for each type of collection vehicle used (i.e., residential, commercial, and special and bulk collection vehic1es) to respond to complaints and emergencies. Contractor shall furnish City a written inventory of all vehicles, including collection vehicles, used in providing service, and shall update the inventory annually. The inventory shall list all vehicles by manufacturer, ID number, date of acquisition, type, capacity and decibel rating.

All Collection vehicles servicing the residential routes shall be brand new (as of the Commencement Date), fully automated trucks upon, to accommodate the efficient collection of single stream Recycling, Organic Waste and MSW. Contractor may arrange with City for use of other types of trucks for collections in hard to serve areas that may not be able to accommodate the larger automated trucks.

Contractor agrees that fifty percent (50%) of the collection vehicles used for Businesses and MFDs will be no more than eight (8) years old. Upon the approval of the City Representative, a vehicle that has been refurbished and rebuilt may be included in the count of vehicles that are 8 years or newer.

Contractor shall arrange to store all vehicles and other equipment in safe and secure locations(s) in accordance with City's applicable zoning regulations. City reserves the right to inspect any and all of Contractor's vehicles and equipment at any time without prior notice, to determine compliance with sanitation requirements, Applicable Law, and this Agreement.

C.11.2 Specifications

All vehicles used by Contractor in providing MSW, Recyc1ables, and Organic Waste collection services shall be registered with the California Department of Motor Vehicles and shall meet or exceed all legal standards. Contractor agrees to maintain all of its collection vehicles in compliance with the provisions of the California Vehicle code, including but not limited to, Sections 27000(b), 23114, 23115, 42030, and all Vehicle Code sections regarding smog equipment requirements.

C.11.3 Vehicle Identification

Contractor's name, local telephone number, and a unique vehicle identification number designed by Contractor for each vehicle shall be prominently displayed on all vehicles, in letters and numbers no less than two and one-half (2-1/2) inches high. City may request that Contractor include 3 City's logo on its vehicle. At City's request, Contractor shall work cooperatively with City to develop an acceptable presentation of the logo on the collection vehicles.

C.11.4 On-board Computer

Contractor shall continue to research and test the use of an on-board processing system and weighing system on the commercial collection vehicles and shall report its findings to City within thirty days of completion of the test. The on-board processing system shall allow the driver to weigh and record the quantity of MSW collected from each Customer using a sca1e and computer. The on-board processing system shall record the net weight, time, and date of the dumped containers.

C.l1.5 Cleaning and Maintenance

Contractor shall maintain all of its vehicles and equipment used in providing service under this Agreement in a safe, neat, clean and operable condition at all times, and well and uniformly painted, to the satisfaction of the City Representative.

Vehicles used in the collection of MSW, Recyclables and Organic Waste shall be thoroughly washed at a minimum of one (1) time per week, and thoroughly steam cleaned on a regular basis so as to present a clean appearance and minimize odors. All vehicles shall be painted on a regular schedule to maintain a clean, professional appearance, although City may require the painting of any vehicle which does not present a satisfactory appearance, as deemed by the City

Representative, at any time. All graffiti shall be removed immediately. Contractor shall make vehicles available to the County Health Department for inspection at any frequency it requests.

Contractor shall (i) inspect each vehicle daily to ensure that all equipment is operating properly; and (ii) perform all scheduled maintenance functions in accordance with the manufacturer's specifications and schedule. Contractor shall keep accurate records of all vehicle maintenance, recorded according to date and mileage and shall make such records available to City upon request. Vehicles which are not operating properly shall be taken out of service until they are repaired and do operate properly.

Contractor shall repair, or arrange for the repair of, all of its vehicles and equipment, including leaks, dents or other body damage, for which repairs are needed because of accident, breakdown or any other cause so as to maintain all equipment in a neat, safe and operable condition. If an item of repair is covered by a warranty, Contractor shall obtain warranty performance. Contractor shall maintain accurate records of repair, which shall include daze/mileage, nature of repair and the signature of a maintenance supervisor that the repair has been properly performed.

C.II.5 Operation

Vehicles shall be operated in compliance with the California Vehicle Code, and all applicable safety and local ordinances.

Contractor shall not load vehicles in excess of the manufacturer's recommendations or limitations imposed by state or local weight restrictions on vehicles.

Collection vehicles shall not be operated in a manner that will cause a break in vehicle traction and/or leave skid marks on the streets. Contractor shall use all reasonable means to avoid damage to City streets, curbs, sidewalks and other City infrastructure. Any occurrence of damage to City property or infrastructure, shall be reported immediately to City. Contractor shall use all reasonable means to minimize any backing of collection vehicles.

C.12 COLLECTION CONTAINERS

C.12.1 General

Contractor shall provide all Containers for storage of MSW, Organic Waste and Recyclables. All such Containers shall be designed and constructed to be water tight and prevent the leakage of liquids. All Containers with a capacity of one cubic yard or more shall meet applicable federal regulations on solid waste bin safety. All Containers shall be painted Contractor's standard color and shall prominently display the name and telephone number of Contractor as well as the Container size. City may request that Contractor include City's logo on the Containers. At City's request, Contractor shall work cooperatively with City to develop an acceptable presentation of the logo on the Containers. Contractor is to provide all Containers to Customers at no charge. Replacement containers shall be provided free of charge to Customers if the previous Container is rendered unserviceable by means other than the Customer's action. Provisions to lock Containers shall be provided at customer request, at rates defined in Exhibit A.

C.12.2 Single-Family Dwellings

Contractor shall make available 20-, 32-,64-, and 96-gallon wheeled Carts to SFDs. Contractor shall inform Customers of available Container sizes and the price for service of each Container prior to the Commencement Date, and provide Customers with an opportunity to select a Container size. If the Customer doesn't make an election, Contractor shall initially deliver a 64-gallon Container. In the event the Customer needs in excess of 64 gallons, Contractor shall provide additional capacity as needed by the Customer in increments of 32 gallons at the Customer's request and shall charge the Customer for the additional service. Contractor shall also furnish containers suitable for use in the kitchen for intermediate food waste storage.

C.12.3 Multi-Family Dwellings

Minimum container shall be sized to provide at least 40 gallons for each dwelling unit.

C.12.4 Businesses

Containers provided to Businesses for MSW shall include bins as small as 1 cubic yard to roll-off containers up to 40 cubic yards.

C.12.5 Cleaning, Painting, Maintenance Amendment 2

All Containers shall be maintained in a functional condition. All graffiti shall be removed immediately.

C.12.6 Repair and Replacement

Contractor shall repair or replace all Containers damaged by collection operations or leaking due to routine use at no cost to City or Customers. Contractor shall also replace any Container at the Customer's request at no cost to the Customer one time per year. Additional replacements provided at the request of the Customer will be subject to a service charge according to Exhibit A.

C.13 PERSONNEL

C.13.1 General

Contractor shall furnish such qualified drivers, mechanical, supervisory, clerical and other personnel as may be necessary to provide the Collection services required by this Agreement in a safe and efficient manner.

All of Contractor's employees must be able to read, write and speak English with sufficient proficiency to enable them to successful meet and adhere to all of the terms of this Agreement.

C.13.2 Driver Qualifications

All drivers shall be trained and qualified in the operation of collection vehicles and must have in effect a valid license, of the appropriate class with appropriate endorsements, issued by the California Department of Motor Vehicles. All drivers shall also complete Contractor's in-house training program which includes education on the use of all vehicles in the collection fleet, collection programs, and route information as well as customer service practices and safety information. If any employee is found not to be operating collection vehicles in the safe manner required by this Agreement, Contractor shall take all appropriate corrective measures including but not limited to a formal progressive step disciplinary program.

C.13.3 Safety Training

Contractor shall provide suitable operational and safety training for all of its employees who utilize or operate vehicles or equipment for collection of MSW, Recyclables, or Organic Waste or who are otherwise directly involved in such collection. Contractor shall train its employees involved in collection to identify, and not to collect, Hazardous Waste or Infectious Waste.

C.13.4 Employee Appearance and Conduct

All employees, while engaged in collecting or gathering MSW, Organic Waste, or Recyclables within City, shall be attired in suitable and acceptable uniforms, which are subject to approval by City. Contractor shall require its drivers, and all other employees who come into contact with the public, to wear a uniform with an identification badge, name tag, or other means of identifying the employee, as approved by City. Contractor shall use its best efforts to assure that all employees present a neat appearance and conduct themselves in a courteous manner.

Contractor shall regularly train its employees in customer courtesy, shall prohibit the use of loud or profane language, and shall instruct collection crews to perform the work as quietly as possible. If any employee is found not to be courteous or not to be performing services in the manner required by this Agreement, Contractor shall take all appropriate corrective measures including but not limited to a formal progressive step disciplinary program.

C.13.6 Provision of Field Supervision

Contractor shall designate a minimum of two (2) qualified employee as supervisors of field operations. The field supervisors shall devote whatever time is necessary, but not less than fifty percent (50%) of their time in the field checking on collection operations, including responding to complaints.

C.14 SERVICE COMPLAINTS

Contractor shall be responsible for the prompt and courteous attention to, and prompt and reasonable resolution of, all Customer complaints. Contractor shall respond to all complaints from Customers within twenty-four (24) hours, weekends and holidays excluded. If a complaint involves a failure to collect MSW from premises, Contractor shall collect the MSW in question

within such twenty-four (24) hour period, provided it has been delivered for collection in accordance with City's Municipal Code.

C.15 REPORT ACCUMULATION OF MSW: UNAUTHORIZED DUMPING

Contractor shall direct its drivers to note (1) the addresses of any premises at which they observe that MSW is accumulating and is not being delivered for collection; and (2) the address, or other location description, at which MSW has been dumped in an apparently unauthorized manner. Contractor shall deliver the address or description to the City Representative within three (3) working days of such observation.

C.16 OVERFLOWING MSW CONTAINERS

Contractor shall notify Customers that recurrently set out MSW in volumes greater than can be contained in the Customer's MSW container(s) of their need to subscribe to a service level adequate to meet their need.

C.17 REPORT UNSAFE CONDITIONS

Contractor shall direct its drivers noticing conditions of City property or infrastructure that present a danger or need of attention to notify their supervisor or dispatcher who in turn shall pass the information on to City.

C.18 PROCESSING FACILITY

The following covenants apply to operations by Contractor at the Newby Island Recyclery, for so long as any Recyclables collected pursuant to this Agreement are processed at that facility.

C.18.1 Overall Performance Standards

All services are to be completed in a timely, professional, and workman-like manner.

C.18.2 Processing Schedule

Hours of Receiving

The Recyclables Processing Facility hours for receiving Recyclables shall be, at a minimum, 6:00 a.m. to 6:00 p.m., Monday through Saturday except holidays.

Hours of Processing

The Recyclables Processing Facility shall be available to the extent necessary to process all the Recyclables collected on a daily basis.

Holidays

Contractor shall not be required to provide processing services on Holidays, currently defined as Labor Day, Thanksgiving, Christmas and New Years Day.

C.18.3 General Operations Standards

Contractor shall comply with these Processing performance obligations throughout the term of this Agreement, and shall operate the facility in accordance with accepted practice for comparable facilities, sound management and operations practice, the facility's operation and maintenance manual, plans and specifications, permits, Applicable Law (including OSHA standards), and covenants, conditions and restrictions pertaining to the property.

Contractor shall be responsible for maintaining and renewing all necessary permits, licenses, and clearances necessary to operate project including any approvals necessary to transport Recyclables generated in Fremont to Santa Clara County for the purposes of processing. Contractor shall maintain and renew permits; provided, however, Contractor shall not be responsible for any delays in maintaining or renewing, or failure to maintain or renew, the permits, if Contractor has exercised due diligence in maintaining and/or renewing the permits, and such failure is caused by any action or inaction of the issuing or renewing authority.

Contractor shall observe the following standards regarding the operations of the Recyclables Processing Facility:

- Achieve maximum delivery vehicle turnaround time of 20 minutes based on peak arrival rates for self-haul vehicles.
- Contain receiving areas to accommodate recyclables collection vehicles and self-haul vehicles (automobiles, small trucks, and small trailers).
- Contain a finished products storage area.
- Meet all applicable regulations, industrial codes, and all applicable standards of technical societies, either as stated or as in standard industry practice.
- Contractor shall have the responsibility for the sale of recovered materials and collection of payment thereof.
- Process the recyclable materials to market specifications.
- Process Organic Waste materials to market specifications

Contractor shall conduct facility operations in a safe manner, in accordance with applicable law, requirements of insurance carried, and standard industry practices in the waste management/ materials recovery industry.

C.18.4 Weighing

Contractor shall develop and manage system of weighing materials received from collection vehicles and self-haul vehicles, verifying residence of self-haulers, collecting fees, and tracking recovery of incoming materials and disposition of residue. Contractor shall record tonnages of material received, At a minimum, the recorded data must indicate for each delivery, the source, method of delivery, truck number if applicable, time of delivery, tonnage delivered, vehicle license number, person receiving the delivery, payment received, how payment was made, and hauler (ie., City personnel, industrial self haul, commercial hauler, resident self-haul, etc.).

Contractor shall install and maintain State certified motor vehicle scales in accordance with applicable law.

Substitute Scales. To the extent that all the scales are inoperable, being tested, or otherwise unavailable, Contractor shall substitute portable scales until the permanent scales are replaced or repaired. Contractor shall arrange for scale to be repaired or temporarily substitute scales to be used as soon as possible, and in any event, within 48 hours after failure of the permanent scales.

Estimates. Pending substitution of portable scales, City and Contractor shall estimate the quantity of materials being delivered to the processing facility and residue and recovered materials being transported from the processing facility, on the basis of delivery truck and transfer trailer volumes, tare weight, broker's weigh records, and data obtained, through historical information from the processing facility and purchasers of recovered materials. City and Contractor shall estimate the quantity of recovered materials on the basis of data obtained from recycling outlets such as preprocessor, material brokers, or end users. These estimates shall take the place of actual weighing and shall be the basis for records while scales are inoperable. If City and Contractor cannot agree on the estimated quantities, the estimate will be the average of City's and Contractor's respective estimates.

C.18.5 Maintenance Standards

Contractor shall maintain the facility and site in good working order and repair, including maintaining spare parts inventory and performing periodic maintenance in accordance with the operations and maintain manual, manufacturer's recommendations, accepted practice for comparable facilities, and sound management and operations practice. Contractor shall maintain the aesthetic appearance of the facility and site in a clean and neat manner in accordance with the plans and specifications, with due regard for reasonable control of odors, dust, and noise.

Building office areas shall be cleaned daily. Work areas within the building and structures shall be swept daily and washed twice a week. The receiving area and access ramps shall be cleaned and swept at the end of each operating day. The tipping floor and interior walls of the receiving and processing building shall be thoroughly cleaned on a regular schedule. Surfaces of exterior buildings and structures shall be repainted or refurbished by Contractor so that they present a proud and an acceptable appearance in the opinion of the City Representative. Contractor shall regularly maintain all landscaped areas within the facility site so that they present a neat and attractive appearance to the satisfaction of the City Representative.

C.18.6 Personnel

Contractor shall engage and train qualified and competent employees, including managerial, supervisory, clerical, maintenance, and operating personnel, in numbers necessary and sufficient for facility operations and to perform Contractor's obligation under this Agreement. Contractor shall train such staff to perform their work in a safe and efficient manner in accordance with the health and safety plan in the facility's operation and maintain manual and ensure that each staff person treats permitted users of the facility, self-haulers, and other members of the public with courtesy. Contractor shall use reasonable business efforts to engage employees who are local residents.

C.18.7 Recovery Standards

Contractor shall use reasonable business efforts to maximize the recovery of delivered materials in a manner acceptable to receive diversion credit under AD 939.

C.18.8 Right to Enter and Inspect Facility

City and its designated representatives shall have the right, but not the obligation to enter, observe, and inspect the processing facility during the receiving hours; meet with the facility manager or his or her representative at any time, and meet with other employees upon request, which request shall not be unreasonably denied. Upon City request, Contractor shall make personnel available to accompany City employees on inspections. Contractor shall ensure that its employees cooperate with City and respond to City's reasonable inquiries. Contractor shall make operational and business records other than financial records available to City during receiving hours upon City request.

C.18.9 Tours of Facility

Upon seventy-two (72) hours notice from City, Contractor shall provide tours of the facility. Such tours shall not unreasonably disrupt facility operations. City shall not be charged for labor, overhead, overtime, or any other costs associated with such tours. As part of such tours, Contractor shall prepare (subject to City's approval of text and formal) and shall distribute an educational brochure, printed on recycled paper, on conservation, recycling, and general solid waste management programs.

C.18.10 Transportation of Residue

Contractor shall transport and deliver all residue to an acceptable disposal facility within 48 hours after its delivery to the faci1ity and in no event longer than required by applicable law. Contractor shall select routes from the facility to the disposal facility which minimize inconvenience and disturbance to the public and comply with permits and applicable law. Contractor shall enclose or cover all vehicles transferring residue from the facility to prevent spillage.

Attachment CR-5

Enforcement Response Plan for the Municipal Stormwater Program
City of Fremont
April 1, 2010

Description and Purpose of Enforcement Response Plan

This enforcement response plan (ERP) provides guidance to City inspection staff in taking consistent enforcement actions needed to achieve effective and timely compliance with the City's stormwater ordinance and other enforcement authorities allowed by the local agency's municipal code. The ERP was developed to comply with the following sections of the municipal regional stormwater permit (MRP):

- Industrial and Commercial Site Controls – ERP (Provision C.4.c);
- Illicit Discharge Detection and Elimination – ERP (Provision C.5.b);
- Construction Site Control – ERP (Provision C.6.b).

As shown in Appendix A, these different MRP sections contain similar, but not identical requirements for developing and implementing an ERP. This ERP outlines the procedures to be followed by City staff when issuing initial & escalating enforcement actions with regard to stormwater violations. This ERP integrates the requirements from these three different MRP provisions into one ERP to facilitate consistent enforcement response within the City.

The selection of an appropriate enforcement action and the escalation of enforcement are based on the seriousness of the violation, the violator's response to the agency's previous attempts to achieve compliance and the past history of the violator. The ERP includes suggested amounts of time to allow for the correction of violations based on the goal stated in the MRP[1]. The ERP Enforcement Actions Overview table serves as a minimum standard when selecting the level of enforcement action to be taken against the violator. The nature of a specific violation may require tailoring of the timeframes for correction and/or the use of temporary measures to promptly address a violation before a permanent solution may be implemented. However, due to the circumstances of the violation, a City inspector may initiate an enforcement action(s) at any level he or she feels is warranted and require remedial actions be implemented to the City's satisfaction in a timeframe more stringent than outlined in the Enforcement Actions Overview Table. All enforcement actions are documented in the enforcement document itself (except verbal warnings) or/and in the inspection report for the site or incident. All enforcement actions require closure by either achieving compliance or by referring the violation to the appropriate agency, such as the San Francisco Bay Regional Water Quality Control Board, the Alameda County District Attorney Environmental Crimes Unit or other relevant agencies for additional enforcement. This ERP describes when the City may refer such violations.

The City has authority to enforce municipal stormwater control requirements under the following sections of its municipal code:

Fremont Municipal Code: Title 8, Chapter 11: Storm Water Management & Discharge Control
Fremont Municipal Code: Title 8, Chapter 4: Grading, Erosion & Sediment Control
Fremont Municipal Code: Title 3, Chapter 12: Hazardous Material Management
Fremont Municipal Code: Title 4, Chapter 1: Weed & Waste Abatement
Fremont Municipal Code: Title 4, Chapter 2: Solid Waste Recyclables & Yard Waste Management

[1] The MRP states that violations must be corrected in a timely manner with a goal of correction before the next rain event, but not longer than 10 business days after discovery unless agency staff document reasons why a longer period is needed in the agency's database or equivalent

Enforcement Actions[2] Overview (continued)

Types of Enforcement Actions and Their Use

This ERP describes a range of enforcement options available for use to encourage prompt correction of violations and the prevention of conditions that pose a threat to cause future violations. There are administrative and judicial (civil and criminal) remedies in the stormwater ordinance and other parts of the agency's code that provide a range of discretionary options for responding appropriately to a given violation depending on the magnitude of the violation, the duration and history of non-compliance, the good faith efforts of the violator to achieve compliance, and whether the violation may interfere with the agency's compliance with the MRP.

Type of Enforcement		*Section*
Administrative Penalties	*Misdemeanor Code Fines* *Infractions Code Fines*	*§8-11306 Fremont Municipal Code* *§8-11306/1-4140/4-9120 Fremont Municipal Code*
Administrative Remedies	*Illicit Discharge prohibition* *Illicit Connection prohibition* *Reduction of Pollutants in SW* *Watercourse Protection* *BMP compliance* *Emergency Inspections* *Appeals*	*§8-11200 Fremont Municipal Code* *§8-11204 Fremont Municipal Code* *§8-11205 Fremont Municipal Code* *§8-11207 Fremont Municipal Code* *§8-11205 Fremont Municipal Code* *§8-11318 Fremont Municipal Code* *§8-11314 Fremont Municipal Code*
Administrative Enforcement Powers	*Cease and Desist Order* *Notice to Clean* *Authority to Arrest*	*§8-11328 Fremont Municipal Code* *§8-11328 Fremont Municipal Code* *§8-11330 Fremont Municipal Code*
Abatement/Costs Recovery	*Sampling Authorization/Costs* *City Abatement* *Emergency Abatement* *Voluntary Abatement* *Notice of Lien* *Nuisance Abatement*	*§8-11304 Fremont Municipal Code* *§8-11313/4-9150 Fremont Municipal Code* *§8-11301 Fremont Municipal Code* *§8-11312 Fremont Municipal Code* *§8-11323/8-11324/4-9205 Fremont Municipal Code* *§4-9110 Fremont Municipal Code*
Citation	*Administrative Citation* *Criminal Citation* *Misdemeanors*	*§8-11306/1-4140 Fremont Municipal Code* *§8-11310 Fremont Municipal Code* *§8-11306 Fremont Municipal Code*
Civil and Criminal Penalties		*§8-11310 Fremont Municipal Code* *§8-11327 Fremont Municipal Code*

Enforcement Actions Overview

The following table lists and describes available enforcement actions, provides examples of their use, and lists suggested time schedules for compliance.

Enforcement Actions	Use	Examples			Time Schedule to Achieve Compliance
		Industrial/Commercial Business	Illicit Discharge	Construction Site	
Warning Verbal	For threatened violations or minor discharges not entering the storm drain system due to inadequate housekeeping, lack of appropriate BMPs to prevent pollution, or threatened non-stormwater discharges not allowed by the City.	Inappropriate storage of material out-of-doors that may contribute to pollutants in stormwater during rainfall, such as lids on dumpster being left open.	A wash area is present where washwaters may flow to the storm drain system based on the configuration, operational procedures, or evidence of a possible discharge. Overflowing drip pan where the discharge does not reach the storm drain.	Lack of an updated erosion control plan that reflects current conditions at a construction site. Minor maintenance issues with BMPs	Before the next rainfall event, but not longer than 10 business days, unless more timely compliance is feasible or other exceptions apply.

Enforcement Actions[2] Overview (continued)

Enforcement Actions	Use	Examples			Time Schedule to Achieve Compliance
		Industrial/Commercial Business	Illicit Discharge	Construction Site	
Warning Letter	Issue for minor violations or if the response to a verbal warning is inadequate. A written warning may also be issued if there are numerous minor violation that the inspector feels need to be documented. The Warning Letter shall list all violations, specify required corrective actions and provide a timeline for compliance.	Use of best management practices that are almost effective, but do not achieve the maximum extent practicable standard, for the pollutant generating activity they are intended to control.	A non-stormwater discharge that is not specifically allowed by the City, but might be if adequate documentation and procedures had been followed to verify the adequate control of pollutants and obtain necessary approvals.	Not issued for construction sites	Before the next rainfall event, but not longer than 10 business days, unless more timely compliance is feasible or other exceptions apply.
Notice of Violation	Issue for major violations or if the response to written warning is inadequate. The Notice of Violation shall list all violations, specify required corrective actions and provide a timeline for compliance.	Use of best management practices that are ineffective for the pollutant generating activity they are intended to control.	Discharge of non-stormwater discharges that contain soap or other pollutants.	Not issued for construction sites	Before the next rainfall event, but not longer than 10 business days, unless more timely compliance is feasible or other exceptions apply. If more time is needed than provided above an explanation of why this is need shall be documented. Illicit discharges shall be terminated immediately. However, a long-term remedies may be required

Enforcement Actions[2] Overview (continued)

Enforcement Actions	Use	Examples			Time Schedule to Achieve Compliance
		Industrial/Commercial Business	Illicit Discharge	Construction Site	
Notice to Comply	Issue for major violations or if the response to a verbal warning is inadequate. The Notice to Comply shall list all violations, specify required corrective actions and provide a timeline for compliance.	Not issued during industrial/commercial business inspections	Discharge of non-stormwater discharges that contain soil, landscape material, soap or other pollutants found on the construction site.	Lack of having a copy of the Stormwater Pollution Prevention Plan at the construction site. Inadequate use of BMPs to control sediment runoff from a construction site.	Before the next rainfall event, but not longer than 10 business days, unless more timely compliance is feasible or other exceptions apply. If more time is needed than provided above an explanation of why this is need shall be documented. All illicit discharges shall be terminated immediately. However, a long-term remedies may be required

Enforcement Actions[2] Overview (continued)

Enforcement Actions	Use	Examples			Time Schedule to Achieve Compliance
		Industrial/Commercial Business	Illicit Discharge	Construction Site	
Administrative Citations	Pursue for serious violations, lack of compliance to pervious enforcement actions or intentional non-compliance actions and repeated violations	Use of best management practices that are ineffective for the pollutant generating activity they are intended to control.	Illicit discharge of hazardous materials of wastes. Intentional illicit discharges	Inadequate use of BMPs to control sediment runoff from a construction site.	Before the next rainfall event, but not longer than 10 business days, unless more timely compliance is feasible or other exceptions apply. If more time is needed than provided above an explanation of why this is need shall be documented. All illicit discharges shall be terminated immediately. However, a long-term remedies may be required If compliance is not achieved, increasing dollar amounts shall be issued in the form of additional citations. A stop work order may be issued for construction sites and violations may be referred to the RWQCB, Fish & Game, DTSC or the county D.A.

Enforcement Actions[2] Overview (continued)

Enforcement Actions	Use	Examples			Time Schedule to Achieve Compliance
		Industrial/Commercial Business	Illicit Discharge	Construction Site	
Stop Work Order	Pursue for the most serious violations including where the response to the notice to comply is inadequate. Also issued for repeated serious violations	Not issued during industrial/commercial business inspections	Excessive sediment discharge for a construction site. Discharge of hazardous materials or wastes from the site.	No erosion control material either installed or on-site by October 1st of each year. Lack of compliance with previous enforcement orders	The time schedule for compliance will need to be determined based on case-specific information. This information will be documented as required by the MRP.
Legal Action	Pursue for the most serious violations including where the response to previous enforcement actions is inadequate. These types of violations are referred to city attorney or County District Attorney for civil and criminal prosecution.	Lack of use of best management practices for pollutant generating activity, such as storing wastes in a way that allows pollutants to be mobilized by rainfall and stormwater runoff.	Discharge of hazardous materials of wastes to the City's storm drain system or watercourse	Violations that affect the agency's ability to comply with the MRP's requirements.	The time schedule for compliance will need to be determined based on case-specific information. This information will be documented as required by the MRP.

Escalation of Enforcement Actions

This ERP incorporates a progressive enforcement response policy that is designed to maintain a fair and equitable system for enforcement to ensure that enforcement actions are proportionate to the violations, to provide maximum flexibility and effectiveness of enforcement actions, and to provide a system of escalating enforcement actions to encourage prompt compliance. The stormwater ordinance and other municipal codes allow for a degree of enforcement flexibility and a range of enforcement options that are needed to most efficiently gain compliance. An enforcement action may be upgraded or escalated depending on the circumstances of the case. However, due to the circumstances of the violation, a City inspector may initiate an enforcement action(s) at any level he or she feels is warranted and require remedial actions be implemented to the City's satisfaction in a timeframe more stringent than outlined in the Enforcement Actions Overview Table.

Escalation enforcement action can be triggered by the following:

- Failure to correct the violation within the time frame required.
- Failure to remediate the violation to the City's satisfaction.
- Additional violations at the same site
- Seriousness of the violation. Example: An intentional discharge of non storm water to the storm drain system may result in an Administrative Citation instead of a verbal warning or notice of violation.
- Continued non-compliance.
- Past history of non compliance or responses to pervious violations.

The City may also use other city departments such as Fire, Engineering and Code Enforcement to issued additional enforcement actions based on their specific municipal codes as applied to a storm water violation.

The City may refer some storm water violations to the appropriate agency, such as the San Francisco Bay Regional Water Quality Control Board, the Alameda County District Attorney's Office of Consumer & Environmental Protection or other relevant agencies for additional or escalating enforcement pursue for the most serious violations including where the response to previous enforcement is inadequate.

Remedial/Cleanup Costs and Recovery

Remedial or clean-up actions are required by any enforcement action when applicable, such as an illicit discharge. The burden of any remedial action is that of the violator, or property owner if the violator can not be identified. As part of the enforcement action, the City can implement any of the following scenarios:

- Requiring the violator or property owner to remediate the situation themselves, if capable and if the remedial action does not pose an undo health & safety risk or have them contract with a professional company to provide the remedial service**.**
- The City will use city crews to provide the remedial action and recover the costs from the violator or property owner.
- The City will employ a profession company or Union Sanitary District to provide the remediation and recover the costs from the violator or property owner.

Roles and Responsibilities

The Environmental Services Department is the lead city department responsible for compliance with the MRP. Enforcement responsibilities overlap with other city departments and Union Sanitary District. The City has contracted with Union Sanitary District to provide commercial and industrial inspections, respond to illicit discharges and act as a back-up to erosion and sediment discharge violations. The following is a breakdown of the departments and personnel that can issue enforcement actions and their respective enforcement responsibilities.

Environmental Services:

- Environmental Specialist
  Commercial, Industrial & Residential Illicit Discharges and Illegal Dumpling – Verbal Warning, Warning Letter, Notice of Violation, Administrative Citations (which can escalate) and may refer to the appropriate agency such as the RWQCB, California Department of Fish & Game or the Alameda County District Attorney Environmental Crimes Unit.

  Construction Site Controls – Verbal Warning, Notice to Comply, Administrative Citations (which can escalate), Stop Work Order and may refer to the appropriate agency such as the RWQCB, California Department of Fish & Game or the Alameda County District Attorney Environmental Crimes Unit.

Engineering:

- Construction Inspector
  Construction Site Controls – Verbal Warning, Notice to Comply may refer to the Environmental Services for escalating enforcement actions.

- City Engineer
  Construction Site Controls – Stop Work Order may refer to the Environmental Services for escalating enforcement actions.

Building:

- Building Inspector
  Construction Site Controls – Verbal Warning, Notice to Comply may refer to the Environmental Services for escalating enforcement actions.

Code Enforcement:

- Code Enforcement Officer
  Commercial, Industrial & Residential Illicit Discharges and Illegal Dumping – Verbal Warning, Notice of Violation, Administrative Citations (which can escalate) and may refer to Environmental Services.

Fire Department – HazMat Division:

- HazMat Inspector & Program Manager
  Commercial, Industrial & Residential Potential and Illicit Discharges – Verbal Warning, Notice of Violation, Administrative Citations (which can escalate) and may refer to Environmental Services or the appropriate agency such as the RWQCB, California Department of Fish & Game or the Alameda County District Attorney Environmental Crimes Unit.
  .

Unions Sanitary District:

- Environmental Compliance Inspector
  Commercial, Industrial & Residential Potential and Illicit Discharges – Verbal Warning, Warning Letter, Notice of Violation, Administrative Citations (which can escalate) and may refer to Environmental Services or the appropriate agency such as the RWQCB, California Department of Fish & Game or the Alameda County District Attorney Environmental Crimes Unit.

  Construction Site Controls – Verbal Warning, Notice to Comply, Administrative Citations (which can escalate) and may refer to Environmental Services or the appropriate agency such as the RWQCB, California Department if Fish & Game or the Alameda County District Attorney Environmental Crimes Unit.

Joint Compliance Inspections

In some situations it is appropriate to have joint compliance inspections with other agencies because the nature of the violation or because the violations are ongoing or repeated violations and may benefit from the enforcement options provided by other environmental statutes. Using the results of a joint compliance inspection, the regulatory agencies will be able to decide how to most efficiently achieve compliance. The decision to conduct a joint inspection with other agencies is determined by the inspector or manager of Environmental Services and is based on weather this will result in accelerated compliance with all violations being achieved and/or to have the referred agency initiate escalating enforcement actions of their own based on the joint inspection. Such inspections are reserved for sites which have serious violations such as the following:

- Serious or large illicit discharges to the storm drain or water bodies which may contain, but not limited to the following: Both hazardous and non hazardous materials/wastes, sediment, cement, slurries, sewage, etc.
- Non compliance with construction or industrial NOI requirements or individual NDPES permit requirements..
- Non compliance with construction BMPs.
- Repeated illicit discharges or other violations.
- Refusal by the violator to comply with any enforcement actions taken by the City.

Referral to Other Agencies

When the City's escalating enforcement actions prove to be inadequate, the violator can be referred to other agencies such as the Regional Water Control Board, the Alameda County District Attorney Environmental Crimes Unit, California Department of Fish & Game or other relevant agencies for additional enforcement. The City may possibly refer violators to the U.S. Environmental Protection Agency, if the Regional Water Board staff is unable to provide effective assistance. Referrals to other agencies shall be originate from either Environmental Services staff or Union Sanitary District, which performs Commercial/Industrial and illicit discharge inspections and enforcement. Such referrals are reserved for sites or incidents which have serious violations such as the following:

- Serious or large illicit discharges to the storm drain or water bodies which may contain, but not limited to the following: Both hazardous and non hazardous materials/wastes, sediment, cement, slurries, sewage, etc.
- Non compliance with construction or industrial NOI requirements or individual NPDES permit requirements.
- Non compliance with construction BMPs.
- Repeated illicit discharges or other violations.
- Refusal by the violator to comply with any enforcement actions taken by the City.

The City has referred both commercial/Industrial, construction sites and illicit discharges the RWQCB, California Department of Fish & Game and the Alameda County District Attorney Environmental Crimes Unit in the past and will continue to do so if additional escalating enforcement is required to achieve compliance.

This appendix should be deleted if your agency does not want to have one combined ERP that meets all of the MRP's ERP requirements.

Appendix A
Comparison of Municipal Regional Stormwater Permit's Enforcement Response Plan Requirements

Task Description	Provision C.4 Industrial/Commercial	Provision C.5 Illicit Discharge Detection/Elimination	Provision C.6 – Construction Site Control
Overall Description	Develop and implement ERP that serves as inspection staff's reference document to take consistent actions to achieve timely and effective compliance.	Develop and implement an ERP that will serve as guidance for inspection staff to take consistent actions to achieve timely and effective abatement of illicit discharges.	Develop and implement ERP that serves as inspection staff's reference document to take consistent actions to achieve timely and effective compliance. {identical to Prov. C.4)
Required Enforcement Actions/Recommended Responses	Include timeframes for correction of various field violation scenarios and provide guidance on appropriate use of various enforcement tools, such as verbal and written notices, citations, cleanup requirements, administrative and criminal penalties.	Include timeframes for correction of various types and degree of violations. ERP will provide guidelines on when to employ the range of regulatory responses from warnings, citations and cleanup and cost recovery, to administrative or criminal penalties.	Include timeframes for correction of problems for various field violation scenarios.
Timely Correction of Violations	States violations as a goal should be corrected before the next rain event, but no longer than 10 business days after discovery unless reasons are recorded in Permittee's database or equivalent. Include appropriate time periods for each level of corrective action. Describe permittee's procedures for follow up inspections, enforcement actions, and referral to another agency.	Goal of correcting violations before the next rain event but not longer than 10 business days after discovery unless rationale is recorded in database or equivalent. Immediate correction can be temporary and short-term if a long-term, permanent correction will involve significant resources and construction time. An example of replumbing a wash area is described.	All violations much be corrected in a timely manner with goal of correcting them before the next rain event but no longer than 10 business days after the violations are discovered. If more than 10 business days are required for compliance, a rationale shall be recorded in database or equivalent.
Escalation of Enforcement/Referrals	Enforce stormwater ordinances as necessary to achieve compliance. Where enforcement tools are inadequate, refer the case to the Water Board, district attorney or other relevant agencies for additional enforcement.	If corrective actions are not implemented promptly or if there are repeat violations, permittees shall escalate responses as needed to achieve compliance, including referral to other agencies where	Take progressively stricter responses to achieve compliance. ERP shall include structures for progressively stricter responses & various violation scenarios that evoke progressively stricter responses, such as a stop work order.

Task Description	Provision C.4 Industrial/Commercial	Provision C.5 Illicit Discharge Detection/Elimination	Provision C.6 – Construction Site Control
		necessary.	
Recordkeeping	Maintain adequate records to demonstrate compliance and appropriate follow-up enforcement responses. Lists specific information that should be tracked regarding business inspections; list includes type of enforcement and problem resolution.	All incidents or discharges reported to the complaint/spill system that might pose a threat to water quality shall be logged to track follow up and response through problem resolution. Data collected shall be sufficient to demonstrate escalating responses to repeated problems, and inter/intra-agency coordination, where appropriate. Specific spill and discharge complaint tracking information requirements are listed in Provision C.5.f.ii.	Specific information required for each inspection and problems found and resolved is listed in Provision C.6.e.ii.(4).
Reporting	Lists information for inclusion in the annual report including number and percent of violations resolved within 10 working days or otherwise resolved in a longer but still timely manner. Frequency and types/categories of violations observed. Frequency and type of enforcement. Summary of types of violations by business category.	Number of discharges reported; number of discharges reaching storm drains and/or receiving waters; number and percentage of discharges resolved in a timely manner; and summary of major types of discharges and complaints.	Reporting of inspection results is required in Provision C.6.e.iii. Agencies must report the number and percentage of each type of enforcement action listed in its ERP.
Time Frame for Development and Implementation of ERP	April 1, 2010	April 1, 2010	April 1, 2010