

Temple City

Section 8.0 Attachments Reporting Year 2016-2017

City of Temple City

Alternate Compliance Plan

December 15, 2017

Los Angeles River Watershed Trash TMDL
Prepared Pursuant to Resolution No. R15-006

Prepared By:



Executive Summary

This Alternate Compliance Plan has been prepared with specific application to the California Regional Board, Los Angeles Region Resolution R15-006, commonly referred to as the Los Angeles River Trash TMDL Amendment.

As documented in reports annually submitted to the Regional Board, Temple City has demonstrated continued compliance with the Trash TMDL (R07-12) since the original effective date in 2008. The Trash TMDL Amendment, adopted in 2015, provides Los Angeles River MS4 permittees with several options to demonstrate compliance with the final WLA. As described in this Report, Temple City has achieved compliance for the reporting year in accordance with the Amendment.

Background

The Los Angeles Regional Water Quality Control Board (RWQCB) approved the Trash TMDL for the Los Angeles River watershed on September 19, 2001. This TMDL was subsequently rescinded on July 17, 2006. On September 3, 2008 the current Trash TMDL (Resolution 07-012) became effective. This TMDL established a nine-year schedule for reducing trash discharges from sources along the Los Angeles River to meet the numeric target of zero discharged by September 30, 2016.

An Amendment to the Trash TMDL (Resolution No. 15-006) was approved by the Regional Board on June 11, 2016, and was subsequently approved by the State Water Resources Control Board on November 17, 2015, and the USEPA on June 30, 2016. This Amendment provides five approaches for permittees subject to this TMDL to demonstrate compliance with the final zero trash waste load allocation (WLA). These approaches are:

1. 100% of all conveyances discharging to the Los Angeles River are retrofitted with trash “full capture” systems (FCSs).
2. 98% of all catch basins within the agency’s jurisdictional land area in the watershed are retrofitted with FCSs¹. This approach requires a report on the technical infeasibility for the remaining catch basins and a report documenting partial capture devices and institutional control effectiveness.
3. 99% or greater reduction of the baseline load attained through a combination of FCS, partial capture devices, and institutional controls, calculated using a mass balance approach based on a trash daily generation rate (DGR) study. This approach requires all FCSs, partial capture devices, and institutional controls be properly sized, operated, and maintained. Continued DGR studies are also required for compliance reassessment.
4. 97% or greater reduction of the baseline load for two or more consecutive years, attained through a combination of FCS, partial capture devices, and institutional controls, and calculated using a mass balance approach based on a trash daily generation rate (DGR) study. This approach requires an evaluation of institutional control effectiveness and any potential enhancements, and a demonstration that opportunities to implement partial capture devices have been fully exploited. Continued DGR studies are also required for compliance reassessment.
5. A scientifically based alternative as approved by the Regional Board.

¹ 98% of all catch basins within the agency’s jurisdictional land area in the watershed are retrofitted with FCS or, alternatively, 98% of the jurisdiction’s drainage area is addressed by FCS and at least 97% of the catch basins (or, alternatively, drainage area) within the agency’s jurisdiction in the subwatershed (the smaller of the HUC-12 equivalent area or tributary subwatershed) are retrofitted with FCS.

City of Temple City

Resolution No. R15-006

Compliance Approach #3

Alternative approaches #2 through #5 also require responsible jurisdictions to 1) demonstrate that existing studies of institutional controls and partial capture devices are representative and transferable to the implementing area, 2) provide a schedule for periodic effectiveness demonstrations and evaluations and 3) properly size, operate, and maintain FCSs and partial capture devices consistent with sizing, operation, and maintenance schedules used to determine their effectiveness.

Compliance Approach

The completion of Temple City's 2017 DGR study has demonstrated the City is in compliance with Approach #3. For the most recent reporting year of 2016-2017 Temple City reported a 99.06% percent compliance level.

Requirements for Compliance Approach #4 and City Compliance Status

Pursuant to the Amendment to the Los Angeles River Watershed Trash TMDL, responsible jurisdictions may achieve compliance with the final WLA when they:

"...employ institutional controls or a combination of full capture systems, partial capture systems, and institutional controls [which result in a] reduction of trash from the jurisdiction's baseline load...between 99% and 100% as calculated using a mass balance approach, and the [trash capture] devices are properly sized, operated, and maintained."

The City's WLA reduction is between 99% and 100%

City Status: For the most recent reporting year of 2016-2017 Temple City reported a 99.06% compliance level. This was determined through a DGR Study conducted during the summer of 2017, as explained in Attachment A.²

Criterion 2: Evaluation of Institutional Controls

The results obtained during the 2017 DGR study indicated an effective implementation of institutional control measures such as anti-littering and illegal dumping statutes, street sweeping, trash/recycling pick-up, public outreach, and community clean-up programs. Additionally, the newly adopted State Single-Use Plastic Bag Ban coincides with the City's Ordinance that prohibits single-use plastic bags. Details on this measure, as well as a quantification of its potential benefits, is included in Attachment B. Summaries of all remaining implemented Institutional Controls and Potential Enhancements are also included in Attachment B³. The City expects a similar reduction through the continued implementation of its plastic bag ban.

The City has installed structural control inserts in 50 catch basins within the city. Ten Full Capture Systems in combination with ARS (Automatic Retractable Screen), 37 ARS systems with supplemental back-up trash capture baskets, and 3 ARS partial capture systems have been installed within the City's catch basins.

² Attachment A Temple City, Daily Generation Rate Study 2016

³ Attachment B Temple City, Currently Implemented Institutional Controls and Potential Enhancements 2016

Daily Generation Rate

Characterization

The Daily Generation Rate (DGR) method is identified in the 2007 LAR Trash TMDL as a method for measuring the effectiveness of the institutional control measures. This method uses a mass balance approach based on a daily trash generation rate for representative drainage areas in the watershed. The DGR study is broken down into two phases, which consists of: 1) physically collecting the trash, and 2) quantifying the collected materials. Collection routes are selected in different designated land-use areas. Representative study areas are selected to include five priority land-use types:

- Commercial
- High/Low Density Residential
- Industrial
- Public Facilities and Educational Institutions
- Open Space and Recreation

At the conclusion of each route, the trash collected from the streets in the commercial, residential, industrial, public facilities/ educational institutions, and open space/recreation areas is delivered directly to a City facility where the trash is quantified per route.

Quantification

An estimate of the trash produced for each land-use area was calculated by taking the amount of trash collected and extrapolating that value to the remaining number of curb miles for that land-use area. Table 1 lists the DGRs by land use.

Table 1: Daily Generation Rates by Land Use

| Land Usage | 2014 DGR per Curb Mile (lbs/mile) | 2015 DGR per Curb Mile (lbs/mile) | Reduction in DGR per Curb Mile (lbs/mile) from 2014 to 2015 |
|---|---|---|---|
| Commercial | 0.48 | 0.07 | 84.9% |
| Residential | 0.15 | 0.064 | 57.2% |
| Industrial | 0.42 | 0.28 | 33.3% |
| Public Facilities/ Educational Institutions | 0.234 | 0.13 | 43.6% |
| Open Space/ Recreation | 0.35 | 0.09 | 74.3% |

The 2017 DGR study showed an annual trash discharge into the City’s storm drain system of 326 lbs. When accounting for catch basins retrofitted by capture devices, this equated to a 99.06% reduction of trash from the City’s baseline WLA. Together, the mass balance approach coupled with structural catch basin compliance and institutional control measures demonstrate that the City has effectively met the compliance target of the Los Angeles River Trash TMDL.

Continued Compliance

Following the recommendation in Section 2.2 of the June 15, 2015, LARWQCB Staff Report, *Reconsideration of Certain Technical Matters of the Trash TMDLs for the Los Angeles River Watershed and the Ballona Creek Watershed*, the City requests to “reduce the frequency of DGR calculations from annually to once every five years as long as there are no reductions in implementation of partial capture devices and institutional controls over the time period and no significant changes in land use that would render the last DGR calculation unrepresentative of current land uses and trash controls within the agency’s jurisdiction.”

The 2017 DGR Study coupled with structural catch basin compliance and institutional controls demonstrates that the City of Temple City has met the compliance target of the Los Angeles River Final Trash TMDL as amended by R15-006. The City’s continued effort coupled with the current compliance level effectively meets the 100% load reduction.

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Attachment A: Daily Generation Rate Study 2017

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DAILY GENERATION RATE 2017

December 15, 2017

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TEMPLE CITY

DAILY GENERATION RATE 2017

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DAILY GENERATION RATE 2017

Executive Summary

This report summarizes the activities and findings of the Daily Generation Rate (DGR) study conducted in Temple City during the summer of 2017. The DGR was calculated in order to determine the effectiveness of the institutional control measures put in place to comply with this year's Trash Total Maximum Daily Loads (TMDLs) for the Los Angeles River Watershed. The TMDL requires that by 2016 all municipal permittees reduce trash discharges to the LA River to zero. However, the 2015 Los Angeles River Trash TMDL Amendment provides permittees several other options to demonstrate compliance. The City's strategy for compliance is based on Approach #3, which includes all of the following—full exploitation of the capture systems, evaluation of institutional controls, and a waste load allocation (WLA) reduction between 99% and 100%. The results of the study discussed herein indicate that Temple City is in compliance with the Trash TMDL for this year.

TMDL Background

In August 2007, due to levels of trash in the LA River exceeding water quality objectives, the Los Angeles Regional Water Quality Control Board (RWQCB) adopted the LA River Trash Total Maximum Daily Loads (TMDLs). Subsequently, in December 2009 the RWQCB incorporated the LA River Trash TMDL into the Municipal Stormwater Permit, making the numerical trash limits enforceable. The Trash TMDL established a seven year schedule for reducing trash discharges from sources along the Los Angeles River to meet the numeric target of zero trash in the water. The baseline Waste Load Allocation (WLA) or starting point for reductions, assigned to the City by the Trash TMDL is 31,819 pounds—by September 30, 2016, the Trash TMDL required that all Permittees reduce their Waste Load Allocation (WLA) by 100%. However, an Amendment to the Trash TMDL (Resolution No. 15-006), approved by the Regional Board on June 11, 2016, provides alternate approaches to demonstrate compliance.

Daily Generation Rate

The DGR Study consisted of two phases: first the field collection of trash, and then its quantification. Collection routes were outlined in different designated land use areas. Representative study routes within five priority land type uses were selected at random. The land type uses were:

- High/Low density residential
- Commercial
- Industrial
- Open space and recreation
- Public/ Educational Facilities

Field Collection:

Once the land use areas were designated, a manual pick-up was performed. To facilitate the process, a pick-up reaching tool was used. Only pieces of trash larger than a quarter of an inch were collected, since anything smaller is not subject to the trash TMDL.



Picture 1: Trash being collected

Catch basins along the study routes were covered to prevent trash from being swept into them. At the conclusion of each collection route, the trash collected from the commercial, residential, Public Facilities/ Educational Institutions, Open Space/Recreation areas was then delivered a designated area where the trash was quantified. The collected street litter was placed in separate piles to avoid mixing. Detailed maps and street sweeping routes are located on Pages 8-13, and summarized in the following table.

Table 1: Land Usage Miles

| Land Usage | Estimated Total Curb Miles | Designated Curb Miles | Field Collection Dates |
|--|----------------------------|-----------------------|--|
| <i>Commercial</i> | 8 | 1.5 | July 18 th –Aug. 15 th |
| <i>Residential</i> | 120 | 3.5 | July 17 th –Aug. 14 th |
| <i>Industrial</i> | 1 | 1.0 | July 18 th –Aug. 15 th |
| <i>Public Facilities/ Education Institutions</i> | 5 | 0.6 | July 19 th –Aug. 16 th |
| <i>Open Space/ Recreation</i> | 1 | 0.4 | July 20 th –Aug. 17 th |

Quantification:

This phase consisted of the evaluating and weighing the trash which took place at a designated area. The loads of trash were delivered from the routes and separated by individual land use area.

This study uses the definition of litter as defined by the California Government Code Section 68055.1(g):

“Litter means all improperly discarded waste material, including, but not limited to, convenience food, beverage, and other product packages or containers constructed of steel, aluminum, glass, paper, plastic, and other natural and synthetic materials, thrown or deposited on the elands and water of the state, but not including the properly discarded waste of the primary processing of agriculture, mining, logging, sawmilling or manufacturing.”



Picture 2: Sorting trash by composition

The collected trash from each individual land use area was then manually quantified and classified using the following procedures:

1. Gardening gloves were utilized to grab the trash, from only one specific load, and placed onto 5-gallon buckets.
2. The bucket was suspended from a hand-held device that measured total weight. The weight of the bucket was subtracted from the total weight.
3. The trash was sorted into five categories, according to material content/type, and approximately quantified (by %).

Standard safety precautions were followed during the trash weighing process. This was repeated for the remainder of the unloaded trash. Trash collected from each area was quantified separately. All piles were kept separated to avoid combining the trash from the five different areas.

Measuring

A digital scale was used to weigh the trash, and a 5-gallon bucket was used to estimate its volume. Each full bucket of anthropogenic trash was weighed separately, concluding with a final characterization by different type of constituents.

Results

Data collected from the trash sorting is summarized in the following table:

Table 2:

| Land Usage | Designated Curb Miles | Trash (lbs) | Days Since Last Sweeping |
|---|-----------------------|-------------|--------------------------|
| <i>Commercial</i> | 1.5 | 3.5 | 6 |
| <i>Residential</i> | 3.5 | 5.1 | 6 |
| <i>Industrial</i> | 1.0 | 10.8 | 6 |
| <i>Public Facilities/Educational Institutions</i> | 0.6 | 2.3 | 6 |
| <i>Open Space/ Recreation</i> | 0.4 | 3.7 | 6 |
| Total | 7 | 25.3 | |

Characterization

The characterization of trash was done by separating it according to the following constituents.

- Green Waste: Orange rinds, banana peels
- Plastic: bags, bottles, jugs, Styrofoam
- Paper: bags, newspaper, scraps, wrappers
- Glass: bottles, scraps, broken windows
- Metal: aluminum, steel, copper
- Other: cigarette butts, food, cloth, miscellaneous

The estimated composition of the trash loads for each land use is summarized in the following table:

Table 3: Composition

| Land Usage | Green | Plastic | Paper | Glass | Metal | Other |
|---|-------|---------|-------|-------|-------|-------|
| <i>Commercial</i> | 2% | 44% | 44% | 0% | 7% | 3% |
| <i>Residential</i> | 2% | 43% | 46% | 0% | 3% | 6% |
| <i>Industrial</i> | 3% | 40% | 40% | 0% | 7% | 10% |
| <i>Public Facilities/Educational Institutions</i> | 1% | 73% | 21% | 0% | 3% | 2% |
| <i>Open Space/ Recreation</i> | 0% | 50% | 45% | 0% | 1% | 4% |

DGR per Land Use Area

An estimate of the trash produced for each land use area was calculated by taking the amount of trash collected for the study and extrapolating that value to the remaining number of curb miles for that land use area. The DGR was then determined by converting the trash per week (dependent on street sweeper's schedule) to trash collected per day. The final DGR value represents the amount of the trash generated for the entire city per day.

Table 4: DGR

| Land Usage | DGR (lbs/day) |
|---|---------------|
| <i>Commercial</i> | 0.62 |
| <i>Residential</i> | 5.80 |
| <i>Industrial</i> | 0.36 |
| <i>Public Facilities/Educational Institutions</i> | 0.63 |
| <i>Open Space/ Recreation</i> | 0.31 |
| Total | 7.71 |

Trash Discharge Levels

The annual amount of trash that is being discharged into the storm drain system on a yearly basis was determined using the DGR values and the number of rain events during the year.

The stormwater discharge for a given rain event was calculated by multiplying the number of days since the last street sweeping by the DGR. The average number of days between a rain event and last street sweeping was estimated to be 2.2 for all areas since sweeping takes place once per week. The estimated weight of trash draining to catch basins during raining events was obtained by multiplying the average number of days between a rain event and the last street sweeping by the already obtained DGR values. The annual weight of trash draining to the catch basins was estimated by multiplying calculated values by the total number of rain occurrences during the 2016-2017 season (19 rain events recorded¹). These values were the estimated final discharge amount of trash being discharged into the storm drain system. The final discharge was considered to be the worst-case scenario for the maximum annual weight of trash draining to catch basins from rain events. Table 5 shows the calculated values of trash washed into the storm drain system in 2017.

Table 5: Stormwater Discharge

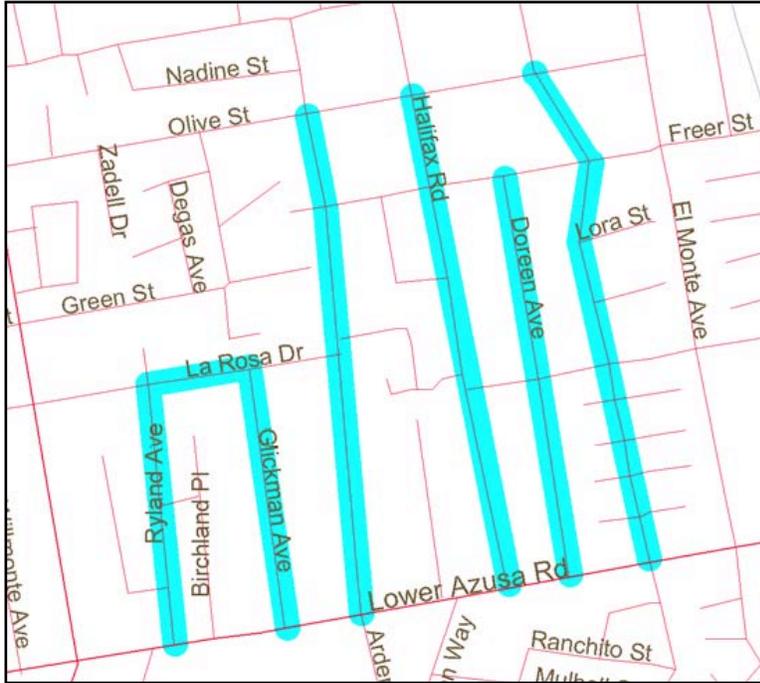
| Land Usage | Discharge (lbs) |
|---|-----------------|
| <i>Commercial</i> | 26.3 |
| <i>Residential</i> | 245.2 |
| <i>Industrial</i> | 15.6 |
| <i>Public Facilities / Educational Institutions</i> | 26.4 |
| <i>Open Space / Recreation</i> | 13.0 |
| Total | 326.1 |

Conclusion

The results of this DGR study provide an estimated daily generation rate of 7.71 pounds of trash per day in the City, yielding a Total Storm Year Trash Discharge of 326.1 pounds for the 2015-2016 season.

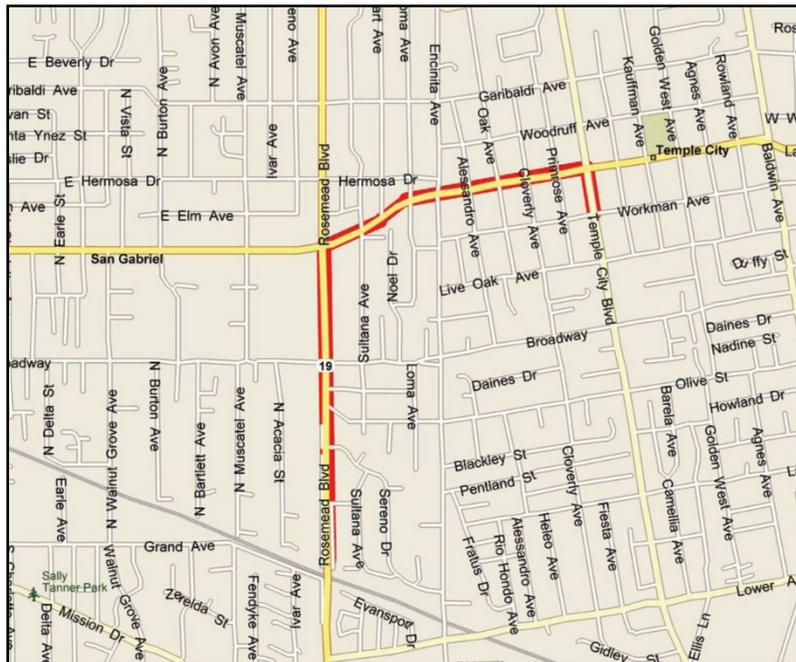
¹ Value obtained from the National Oceanic and Atmospheric Administration (NOAA) National Weather Service. Only rain events greater than 0.25 inch and not within 3 days of another event were considered

Residential Area (Street Sweeping on Tuesday)



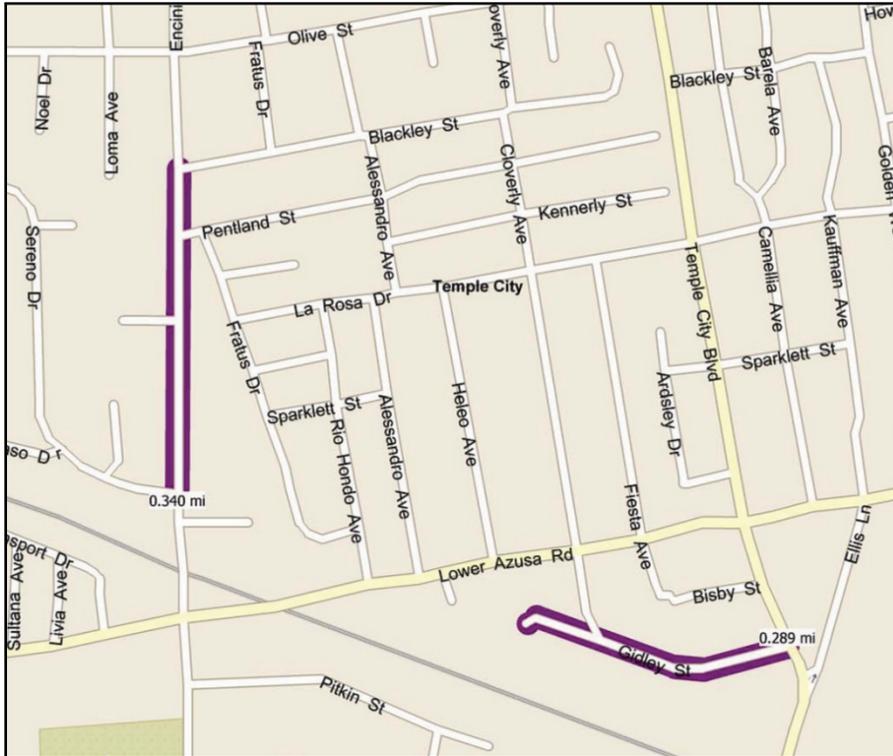
Total representative area:
3.5 curb miles
Only one side: west side, side that is swept on Tuesday.

Commercial Area (Street Sweeping on Wednesday)



Total representative area:
1.5 curb miles
(Only one side of street-east on Rosemead)

Industrial Area (Street Sweeping on Wednesday)

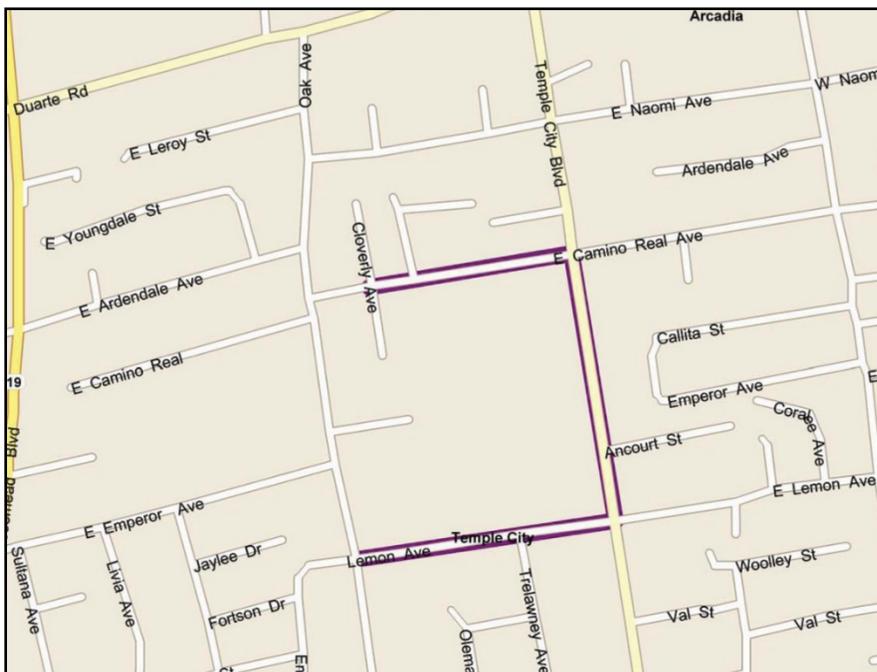


Total representative area:

1 curb mile

(Both sides of street)

Public/ Educational Area (Street Sweeping on Thursday)



Total representative area:

0.6 curb miles

Open Space/ Recreational Area (Street Sweeping on Friday)



**Total representative
area:**

0.4 curb miles

TEMPLE CITY

Attachment B: Currently Implemented Institutional Controls

Attachment B- Currently Implemented Institutional Controls

Currently Implemented Institutional Controls

Compliance Approach #3 requires “institutional controls shall be deemed in compliance with the final WLA when the reduction of trash from the jurisdiction’s baseline load is between 99% and 100%”. Listed below is an inventory of currently implemented institutional controls. The effectiveness of these institutional controls is demonstrated through the City’s 2017 Daily Generation Rate Study.

Littering Ordinances

The Temple City Municipal code has broad provisions prohibiting littering: “A person shall not deposit or throw any litter or trash on any public highway or sidewalk- - .

Catch Basin Cleaning

Temple City contracts with the Los Angeles County to clean its catch basins. All City-owned catch basins are cleaned twice per year and County owned catch basins are cleaned once per year.

Sweeping

The City contracts with Athens Services to provide street sweeping services. Streets are swept once a week on different days throughout Temple City. In addition, some commercial streets are swept three days per week.

Public Outreach

The City has provided and will continue to provide stormwater pollution prevention outreach materials addressing trash pollution through the following: print and social media (brochures, newsletters, bill inserts, and City website), environmental booths during City-sponsored events, and annual business and K-12 school outreach campaigns. During outreach events, staff demonstrates an interactive enviroscape display that allows residents to see how pollutants such as trash, oils, and pet waste drain to our waterways. Stormwater materials are also distributed annually to local businesses and to all K-12 schools during Earth Day.

Recycling/Garbage

Garbage: The City has a franchise agreement with Athens Services to provide trash and recycling service for all residential and commercial customers in Temple City. Trash is collected two days per week.

Recycling: Recyclable items do not need to be sorted or separated from trash. All trash that Athens collects is taken to the Athens Material Recovery Facility where it is sorted. Recyclable items including aluminum, glass, plastic, and paper are separated from the trash for recycling.

Green Waste: Yard/green waste is taken by Athens to a facility where it is converted into mulch. All yard waste including grass clippings, leaves, and small branches must be separated from trash and placed in designated trash barrels with a “yard waste” sticker.

Attachment B- Currently Implemented Institutional Controls**Hazardous Waste Disposal**

Household Hazardous Waste Roundups are one-day events hosted by the Sanitation Districts of Los Angeles County (LACSD) and the Los Angeles County Department of Public Works on Saturdays at various locations around Los Angeles County. A schedule of upcoming roundup events is available on the LACSD website.

S.A.F.E. (Solvents / Automotive / Flammables / Electronics) Collection Centers are permanent facilities that are open every weekend to all Los Angeles County residents. The center nearest to Temple City is located at the Los Angeles-Glendale Treatment Plant at 4600 Colorado Boulevard in Los Angeles.

Bulky Item Collection

Each quarter, the City provides free dumpster bins and manpower to help clean large items that do not fit in conventional trash containers. A different neighborhood is served each quarter. Dumpsters are delivered to ten pre-determined locations throughout the neighborhood.

Trash TMDL Compliance Reporting Forms

| Trash Collection for Calculation of Daily Generation Rate, DGR | | | | | | | | | | |
|--|--|---|------------------------------|----------------------|-----------------------------|---|---|--|--|--|
| Col. 1 | Col. 2 | Col. 3 | Col. 4 | Col. 5 | Col. 6 | Col. 7 | Col. 8 | Col. 9 | Col. 10 | Col. 11 |
| Land Use Category | Total Area within Jurisdiction | Representative Area for DGR Calculation | Date of Last Street Sweeping | Date of DGR Sampling | Length of Collection Period | Trash Collection from Representative Area (lb. or gal.) | Trash Cleaned Out from Catchbasin(s) within the Representative Area (lb. or gal.) | Total Amount of Trash Generated in Representative area | Total Trash Generated within Representative Area | Comments |
| Commercial | 8 | 1.5 | | | | | | | | |
| | | | 07/12/17 | 7/18/17 | 6 | 0.7 | 0 | 0.7 | | Commercial areas are typically swept 3 days per week. Street sweepers were instructed to sweep only on Wednesday during the duration of the DGR Study (7/12/17-8/15/17) so crews could collect trash by hand on Tuesdays. DGR samples evaluated at City Yard where the crew quantified and categorized weekly by hand. |
| | | | 07/19/17 | 7/25/17 | 6 | 0.6 | 0 | 0.6 | | |
| | | | 07/26/17 | 8/1/17 | 6 | 0.9 | 0 | 0.9 | | |
| | | | 08/02/17 | 8/8/17 | 6 | 0.8 | 0 | 0.8 | | |
| | | | 08/09/17 | 8/15/17 | 6 | 0.5 | 0 | 0.5 | 0.62 | |
| | | Total Days: | | | 30 | | | | | |
| High/Low Density Residential | 120 | 3.5 | | | | | | | | |
| | | | 7/11/2017 | 7/17/17 | 6 | 0.6 | 0 | 0.6 | | Residential area swept weekly. DGR sampling collected by hand (Monday), and prior to street sweeping activities (Tuesday). |
| | | | 7/18/2017 | 7/24/17 | 6 | 0.6 | 0 | 0.6 | | |
| | | | 7/25/2017 | 7/31/17 | 6 | 1.0 | 0 | 1.0 | | |
| | | | 8/1/2017 | 8/7/17 | 6 | 1.4 | 0 | 1.4 | | |
| | | | 8/8/2017 | 8/14/17 | 6 | 1.5 | 0 | 1.5 | 5.80 | |
| | | Total Days: | | | 30 | | | | | |
| Industrial | 1 | 1 | | | | | | | | |
| | | | 07/12/17 | 7/18/17 | 6 | 2.1 | 0 | 2.1 | | Industrial areas swept weekly. Street sweepers were instructed to sweep only on Wednesday during the duration of the DGR Study (7/6/16-8/09/16) so crews could collect trash by hand on Tuesdays. DGR samples evaluated at City Yard where the crew quantified and categorized weekly by hand. |
| | | | 07/19/17 | 7/25/17 | 6 | 2.6 | 0 | 2.6 | | |
| | | | 07/26/17 | 8/1/17 | 6 | 1.9 | 0 | 1.9 | | |
| | | | 08/02/17 | 8/8/17 | 6 | 2.6 | 0 | 2.6 | | |
| | | | 08/09/17 | 8/15/17 | 6 | 1.5 | 0 | 1.5 | 0.36 | |
| | | Total Days: | | | 30 | | | | | |
| Public Facilities / Educational Institutions | 5 | 0.6 | | | | | | | | |
| | | | 7/13/2017 | 7/19/17 | 6 | 0.2 | 0 | 0.2 | | Public and Educational facility areas swept weekly. DGR sampling collected by hand (Wednesday) and prior to street sweeping activities (Thursday). |
| | | | 7/20/17 | 7/26/17 | 6 | 0.3 | 0 | 0.3 | | |
| | | | 7/27/17 | 8/2/17 | 6 | 0.2 | 0 | 0.2 | | |
| | | | 8/3/17 | 8/9/17 | 6 | 0.9 | 0 | 0.9 | | |
| | | | 8/10/17 | 8/16/17 | 6 | 0.6 | 0 | 0.6 | 0.63 | |
| | | Total Days: | | | 30 | | | | | |
| Open Space / Recreation | 1 | 0.4 | | | | | | | | |
| | | | 7/14/2017 | 7/20/17 | 6 | 0.9 | 0 | 0.9 | | Open Space & Recreation areas swept weekly. DGR sampling collected by hand (Thursday), and prior to street sweeping activities (Friday). |
| | | | 7/21/2017 | 7/27/17 | 6 | 0.6 | 0 | 0.6 | | |
| | | | 7/28/2017 | 8/3/17 | 6 | 0.1 | 0 | 0.1 | | |
| | | | 8/4/2017 | 8/10/17 | 6 | 0.8 | 0 | 0.8 | | |
| | | | 8/11/2017 | 8/17/17 | 6 | 1.3 | 0 | 1.3 | 0.31 | |
| | | Total Days: | | | 30 | | | | | |
| Total Area | 135 | 7 | | | | | Total Trash (lbs) | 25.3 | | |
| | | | | | | | DGR (lbs/day) | 7.71 | | |
| Notes: | * Total collection period must equal 30 days for each representative land use area. | | | | | | | | | |
| Col. 1 | Land Use Category - Categories based on Baseline Monitoring Program conducted by LACDPW baseline monitoring group. Alternatively, describe land use type as designated by the City. | | | | | | | | | |
| Col. 2 | Total area of said land use within jurisdiction (fill in once in gray-highlighted row for each land use category). Total area may be accounted for using other approved measurement units, e.g. curb miles. | | | | | | | | | |
| Col. 3 | Representative area for DGR calculation (fill in once in gray-highlighted row for each land use category). Representative area may be accounted for using other approved measurement units, e.g. curb miles. Collectively, the areas used for DGR calculation should be representative, proportionally, of the land uses within the jurisdiction and must be approved by the EO prior to the 30-day collection period. | | | | | | | | | |
| Col. 4 | Date of last street sweeping | | | | | | | | | |
| Col. 5 | Date of DGR sampling (direct measurement of deposited trash) - The DGR collection period(s) must fall between June 22nd and September 22nd | | | | | | | | | |

| | | | | | |
|--|---|--|--|--|--|
| Col. 6 | Length of Collection Period in days - The DGR collection period must be 30 days, total, for each representative land use area | | | | |
| Col. 7 | Trash collection from representative area through street sweeping or other method, lb. or gal. | | | | |
| Col. 8 | Trash cleaned out from catchbasins within the representative area (lb. or gal.). Trash accumulated in the CBs during the DGR collection period must be included in the total trash generated. Where CBs are closed off such that no trash can enter them for the purpose of DGR sampling, this value will be zero (0). | | | | |
| Col. 9 | Total amount of trash generated in representative area (sum of Col. 7 and Col. 8), lb. or gal. | | | | |
| Col. 10 | Total Trash Generated within Representative Area (estimated in 30 day period) | | | | |
| Col. 11 | Provide comments, if necessary | | | | |
| Note: Sampling must be conducted during any 30-day period, starting June 22nd through September 22nd of each year. | | | | | |

Part 7.1.C(1)(b)(2)

Institutional Controls

Reporting Year: 2016 - 2017
Date: 12/15/2017

L.A. County MS4 Permit

Total Storm Year Trash Discharge

Reporting Year: 2016-2017

City of Temple City

Prepared by City of Temple City

Annual Report (Dec-2017)

| Rainfall Station | | San Gabriel Fire Dept | | | | | |
|--|---|-----------------------|-----------------------|---------|--|-----------------------------|---|
| Total Trash Discharged by Storm Event | | | | | | | |
| Col. 1 | Col. 2 | Col. 3 | Col. 4 | Col. 5 | Col. 6 | Col. 7 | Col. 8 |
| DGR | Date of Last Street Sweeping | Date of Storm Event | Precipitation Depth * | Days ** | Amount of Trash Recovered from Catchbasins | Storm Event Trash Discharge | Comments |
| 7.7 | 11/16/16 | 11/20/16 | 0.44 | 4 | 0 | 30.8 | * Rainfall data was obtained from the closest National Oceanic and Atmospheric Administration precepitation station. ** The entire City of Temple City is not swept in one day. Approximately equal parts of the City are swept Monday through Friday, with the exception of Commercial area's swept three times per week (Monday, Wednesday, Friday). As such during any given rain event, different parts of the City were swept between 1 to 7 days previously. Accounting for this effect results in fractional days of trash accumulation for a given storm event. Applying the calculated DGR of 7.7 lbs, and accounting for the week-long process to clean all areas of the City, the storm event trash discharge equates to an approximate discharge of 17.2 lbs per rain event. This accounts for a Total Storm Year Trash Discharge of 326 lbs. |
| 7.7 | 11/20/16 | 11/21/16 | 0.27 | 0.9 | 0 | 6.9 | |
| 7.7 | 12/12/16 | 12/15/16 | 0.88 | 3 | 0 | 23.1 | |
| 7.7 | 12/15/16 | 12/16/16 | 0.60 | 0.9 | 0 | 6.9 | |
| 7.7 | 12/18/16 | 12/21/16 | 0.34 | 2.9 | 0 | 22.4 | |
| 7.7 | 12/21/16 | 12/23/16 | 1.24 | 1.6 | 0 | 12.3 | |
| 7.7 | 12/27/16 | 12/30/16 | 0.37 | 2.5 | 0 | 19.3 | |
| 7.7 | 01/01/17 | 01/04/17 | 0.28 | 2.9 | 0 | 22.4 | |
| 7.7 | 01/05/17 | 01/09/17 | 0.51 | 3.7 | 0 | 28.5 | |
| 7.7 | 01/09/17 | 01/11/17 | 0.35 | 1.6 | 0 | 12.3 | |
| 7.7 | 01/11/17 | 01/12/17 | 1.13 | 0.9 | 0 | 6.9 | |
| 7.7 | 01/14/17 | 01/18/17 | 0.32 | 3.3 | 0 | 25.4 | |
| 7.7 | 01/18/17 | 01/19/17 | 0.64 | 0.9 | 0 | 6.9 | |
| 7.7 | 01/19/17 | 01/20/17 | 1.19 | 0.9 | 0 | 6.9 | |
| 7.7 | 01/20/17 | 01/22/17 | 2.20 | 2 | 0 | 15.4 | |
| 7.7 | 01/22/17 | 01/23/17 | 0.42 | 0.9 | 0 | 6.9 | |
| 7.7 | 02/01/17 | 02/06/17 | 0.42 | 4.5 | 0 | 34.7 | |
| 7.7 | 02/07/17 | 02/10/17 | 0.29 | 2.4 | 0 | 18.5 | |
| 7.7 | 02/14/17 | 2/17/2017 | 1.8 | 2.5 | 0 | 19.3 | |
| Total Storm Year Trash Discharge | | | | | | 326.1 | |
| Notations: | | | | | | | |
| Form | Add additional rows for storm events, if necessary | | | | | | |
| Rainfall Station | Name of rainfall station used, indicate only the L.A. County station number | | | | | | |
| Total Storm Year Trash Discharge = Sum of individual storm event discharges for reporting period (October 1 - September 30). | | | | | | | |
| Col. 1 | DGR for Jurisdiction from DGR Sampling Data worksheet | | | | | | |
| Col. 2 | Date of last street sweeping | | | | | | |
| Col. 3 | Date of storm event with 0.25 inch or more of rainfall | | | | | | |
| Col. 4 | Depth of rainfall taken from nearest rainfall station (in.) | | | | | | |
| Col. 5 | Number of days between date of last street sweeping and storm event. For each day of a storm event that generates precipitation greater than 0.25 inch, the Permittee shall calculate a storm event discharge. When more than one storm event occurs prior to the next street sweeping the discharge shall be calculated from the date of the last storm event discharge calculation. | | | | | | |
| Col. 6 | Amount of trash recovered from catchbasins, if any (lb. or gal.) | | | | | | |
| Col. 7 | Storm Event Discharge = Col. 1 x Col. 5 - Col. 7 [trash discharged by the storm event], lb | | | | | | |
| Col. 8 | Provide comments, if necessary | | | | | | |

| Col. 1 | Col. 2 | Col. 3 | Col. 4 | Col. 5 | Col. 6 | Col. 7 | Col. 8 | Col. 9 | Col. 10 |
|------------------|-------------------------------|---------------------|-----------------------|-------------------------------------|--------------------------------|------------------------------|---------------------------|------------|----------|
| Reporting Period | Institutional Control Measure | | | Structural Control | | Required Trash Abatement (%) | Total Combined Compliance | Compliance | Comments |
| | Total Trash Discharged (lbs.) | Effluent Limitation | Equivalent Compliance | Total # CBs served by FCDs and PCDs | % of CBs served by FCDs / PCDs | | | | |
| 31-Oct-11 | | | | | | | | | |
| 31-Oct-12 | | | | | | | | | |
| 31-Oct-13 | | | | | | | | | |
| 31-Oct-14 | | | | | | | | | |
| 31-Oct-15 | | | | | | | | | |
| 31-Oct-16 | | | | | | | | | |
| 31-Oct-17 | 326 | 318 | 98.98% | 44 | 8.36% | 99.00% | 99.06% | | |

Notations:

Form Structural Control Measure: Report compliance using land area served by FCD/PCDs or number of catchbasins served by FCD/PCDs.

Column 1: Reporting Period: Part 7.1.(C)(1) of Order No. 01-182 as amended by Order No. R4-2009-0130

Column 2: As calculated pursuant to Part 7.1.(B)(1)(b)(2) of Order No. 01-182 as amended by Order No. R4-2009-0130
 Alternative approaches per Part 7.1.(B)(1)(b)(3) must be approved in advance by the Executive Officer

Column 3: Effluent Limitation per Part 7.1, Appendix 7-1, Table 1a or 1b, of Order No. 01-182 as amended by Order No. R4-2009-0130

Column 4: Compliance = 1-(Col. 2 / Baseline Waste Load Allocation)

Column 5: Total number of catchbasins, total number of (CBs) served by FCD/PCDs within jurisdiction

Column 6: Percentage of CBs served by FCD/PCDs within jurisdiction

Column 7: Required Trash Abatement: Part 7.1, Appendix 7-1 of Order No. 01-182 as amended by Order No. R4-2009-0130

Column 8: Total Combined Compliance = (Col. 6) + (1.0-Col.6)*(Col.4)

Column 9: FCD Compliance: Yes, if Col. 8 is greater than Col. 7

Column 10: Provide comments, if necessary

Certified Full Capture Systems Database

| Col. 1 | Col. 2 | Col. 3 | Col. 4 | Col. 5 | Col. 6 | Col. 7 | Col. 8 | Col. 9 | Col. 10 | Col. 11 |
|----------------------------|--------------|----------------------|-----------|-------------------|-----------------------|-------------------------|--------------|----------|------------------|---|
| Certified FCD(s) Installed | FCD Location | Nearest Cross Street | FCD Owner | FCD Maintained By | FCD Installation Date | CB ID No. Served by FCD | CB Type | CB Owner | CB Maintained By | Frequency of FCD Maintenance and other O&M comments |
| ARS & CPS | 5525 | Santa Anita Ave | | LACFCD | unknown | 1919 | Curb Opening | LACFCD | LACFCD | Annually |
| ARS | 5381-5405 | Santa Anita Ave | | LACFCD | unknown | 1918 | Curb Opening | LACFCD | LACFCD | Annually |
| ARS & CPS | 5317 | Santa Anita Ave | | LACFCD | unknown | 1918 | Curb Opening | LACFCD | LACFCD | Annually |
| ARS & CPS | 5131 | Santa Anita Ave | | LACFCD | unknown | 1919 | Curb Opening | LACFCD | LACFCD | Annually |
| ARS & CPS | 5005 | Santa Anita Ave | | LACFCD | unknown | 1918 | Curb Opening | LACFCD | LACFCD | Annually |
| ARS | 10660 | Daines Dr | | UNK | unknown | 1918 | Curb Opening | UNK | UNK | Annually |
| ARS | 10659 | Daines Dr | | LACDPW | unknown | 1972 | Curb Opening | LACDPW | LACDPW | Annually |
| ARS | 5612 | Baldwin Ave | | LACFCD | unknown | 1919 | Curb Opening | LACFCD | LACFCD | Annually |
| ARS | 5468 | Baldwin Ave | | LACFCD | unknown | 1919 | Curb Opening | LACFCD | LACFCD | Annually |
| ARS | 5406 | Baldwin Ave | | LACFCD | unknown | 1917 | Curb Opening | LACFCD | LACFCD | Annually |
| ARS | 5303 | Baldwin Ave | | LACFCD | unknown | 1918 | Curb Opening | LACFCD | LACFCD | Annually |
| ARS | 5200-5298 | Baldwin Ave | | LACFCD | unknown | 1918 | Curb Opening | LACFCD | LACFCD | Annually |
| ARS | 5209 | Baldwin Ave | | LACFCD | unknown | 1918 | Curb Opening | LACFCD | LACFCD | Annually |
| ARS | 5140 | Baldwin Ave | | LACFCD | unknown | 1918 | Curb Opening | LACFCD | LACFCD | Annually |
| ARS | 5108 | Baldwin Ave | | LACFCD | unknown | 1918 | Curb Opening | LACFCD | LACFCD | Annually |
| ARS | 5109 | Baldwin Ave | | LACFCD | unknown | 1918 | Curb Opening | LACFCD | LACFCD | Annually |
| ARS | 5009 | Baldwin Ave | | LACFCD | unknown | 1918 | Curb Opening | LACFCD | LACFCD | Annually |

Certified Full Capture Systems Database

| Col. 1 | Col. 2 | Col. 3 | Col. 4 | Col. 5 | Col. 6 | Col. 7 | Col. 8 | Col. 9 | Col. 10 | Col. 11 |
|----------------------------|--------------|----------------------|-----------|-------------------|-----------------------|-------------------------|--------------|----------|------------------|---|
| Certified FCD(s) Installed | FCD Location | Nearest Cross Street | FCD Owner | FCD Maintained By | FCD Installation Date | CB ID No. Served by FCD | CB Type | CB Owner | CB Maintained By | Frequency of FCD Maintenance and other O&M comments |
| ARS | 4917 | Baldwin Ave | | LACFCD | unknown | 1918 | Curb Opening | LACFCD | LACFCD | Annually |
| ARS | 5410 | Rosemead Blvd | | CITY | unknown | 1918 | Curb Opening | CITY | CITY | Annually |
| ARS | 9040 | Broadway | | LACFCD | unknown | 1918 | Curb Opening | LACFCD | LACFCD | Annually |
| ARS | 9170 | Broadway | | LACFCD | unknown | 1918 | Curb Opening | LACFCD | LACFCD | Annually |
| ARS | 9159 | Broadway | | LACFCD | unknown | 1919 | Curb Opening | LACFCD | LACFCD | Annually |
| ARS | 9111 | Broadway | | LACFCD | unknown | 1919 | Curb Opening | LACFCD | LACFCD | Annually |
| ARS | 9055 | Broadway | | LACFCD | unknown | 1919 | Curb Opening | LACFCD | LACFCD | Annually |
| ARS | 5770 | Rosemead Blvd | | CITY | unknown | 1919 | Curb Opening | CITY | CITY | Annually |
| ARS | 9177 | Hermosa Dr | | LACFCD | unknown | 1919 | Curb Opening | LACFCD | LACFCD | Annually |
| ARS | 9133 | Hermosa Dr | | LACFCD | unknown | 1919 | Curb Opening | LACFCD | LACFCD | Annually |
| ARS | 9057 | Hermosa Dr | | LACFCD | unknown | 1919 | Curb Opening | LACFCD | LACFCD | Annually |
| ARS | 9045 | Hermosa Dr | | LACFCD | unknown | 1919 | Curb Opening | LACFCD | LACFCD | Annually |
| ARS | 5910 | Rosemead Blvd | | LACFCD | unknown | 1919 | Curb Opening | LACFCD | LACFCD | Annually |
| ARS | 5915 | Rosemead Blvd | | LACFCD | unknown | 1919 | Curb Opening | LACFCD | LACFCD | Annually |
| ARS | 8927 | Hermosa Dr | | LACFCD | unknown | 1919 | Curb Opening | LACFCD | LACFCD | Annually |
| ARS | 5900-5910 | Reno Ave | | LACFCD | unknown | 1919 | Curb Opening | LACFCD | LACFCD | Annually |
| ARS | 5915 | Reno Ave | | LACFCD | unknown | 1919 | Curb Opening | LACFCD | LACFCD | Annually |

Certified Full Capture Systems Database

| Col. 1 | Col. 2 | Col. 3 | Col. 4 | Col. 5 | Col. 6 | Col. 7 | Col. 8 | Col. 9 | Col. 10 | Col. 11 |
|----------------------------|--------------|----------------------|-----------|---------------------------|-----------------------|-------------------------|--------------|---------------------------|---------------------------|---|
| Certified FCD(s) Installed | FCD Location | Nearest Cross Street | FCD Owner | FCD Maintained By | FCD Installation Date | CB ID No. Served by FCD | CB Type | CB Owner | CB Maintained By | Frequency of FCD Maintenance and other O&M comments |
| ARS | 8898 | Elm Ave | | CITY (lid reads "LACDPW") | unknown | 1919 | Curb Opening | CITY (lid reads "LACDPW") | CITY (lid reads "LACDPW") | Annually |
| ARS | 8914-8998 | Hermosa Dr | | LACFCD | unknown | 1919 | Curb Opening | LACFCD | LACFCD | Annually |
| ARS | 5701 | Rosemead Blvd | | CITY | unknown | 1919 | Curb Opening | CITY | CITY | Annually |
| ARS | 8969-8999 | Las Tunas Dr | | UNK | unknown | 1919 | Curb Opening | UNK | UNK | Annually |
| ARS | 5507 | Rosemead Blvd | | CITY | unknown | 1919 | Curb Opening | CITY | CITY | Annually |
| ARS | 8939-8999 | Broadway | | UNK (lid read | unknown | 1971 | Curb Opening | UNK (lid read | UNK (lid read | Annually |
| ARS | 5419 | Rosemead Blvd | | CITY (lids read | unknown | 1971 | Curb Opening | CITY (lids read | CITY (lids read | Annually |
| ARS & CPS | 9173 | Camino Real | | CITY (lid read | unknown | 1972 | Curb Opening | CITY (lid read | CITY (lid read | Annually |
| ARS & CPS | 9170 | Camino Real | | LACFCD | unknown | 1972 | Curb Opening | LACFCD | LACFCD | Annually |
| ARS & CPS | 8971 | Callita St | | LACFCD | unknown | 1972 | Curb Opening | LACFCD | LACFCD | Annually |
| ARS | 8952-8998 | Callita St | | LACFCD | unknown | 1972 | Curb Opening | LACFCD | LACFCD | Annually |
| ARS | 6570 | Rosemead Blvd | | CITY (lid read | unknown | 1972 | Curb Opening | CITY (lid read | CITY (lid read | Annually |
| ARS & CPS | 6300-6306 | Lemon Ave | | LACFCD | unknown | 1972 | Curb Opening | LACFCD | LACFCD | Annually |
| ARS & CPS | 6311 | Lemon Ave | | LACFCD | unknown | 1972 | Curb Opening | LACFCD | LACFCD | Annually |
| ARS & CPS | 6311 | Lemon Ave | | LACFCD | unknown | 1972 | Curb Opening | LACFCD | LACFCD | Annually |

Certified Full Capture Systems Database

| Col. 1 | Col. 2 | Col. 3 | Col. 4 | Col. 5 | Col. 6 | Col. 7 | Col. 8 | Col. 9 | Col. 10 | Col. 11 |
|----------------------------|---|----------------------|-----------|-------------------|-----------------------|-------------------------|--------------|----------|------------------|---|
| Certified FCD(s) Installed | FCD Location | Nearest Cross Street | FCD Owner | FCD Maintained By | FCD Installation Date | CB ID No. Served by FCD | CB Type | CB Owner | CB Maintained By | Frequency of FCD Maintenance and other O&M comments |
| ARS | 8639 | Longden Ave | | LACFCD | unknown | 1972 | Curb Opening | LACFCD | LACFCD | Annually |
| 40 PCS 10 FCS | | | | | | | | | | |
| Notations: | | | | | | | | | | |
| Form | Insert additional rows, as necessary | | | | | | | | | |
| Column 1: | Indicate certified full capture device (FCD) installed | | | | | | | | | |
| Column 2: | Name FCD street location and indicate whether: WS - west side; ES - east side; NS - north side; SS - south side | | | | | | | | | |
| Column 3: | Name the nearest cross street location of the FCD | | | | | | | | | |
| Column 4: | FCD Owned by: Co - County of L.A.; Flood - L.A. County Flood Control District; Ci - City; Ca - Caltrans; Pr - Private; Oth - Others | | | | | | | | | |
| Column 5: | FCD Maintained by: Co - County of L.A.; Flood - L.A. County Flood Control District; Ci - City; Ca - Caltrans; Pr - Private; Oth - Others | | | | | | | | | |
| Column 6: | Provide the date when FCD was installed | | | | | | | | | |
| Column 7: | Indicate County or City assigned catch basin (CB) identification (ID) numbers | | | | | | | | | |
| Column 8: | Type of CB based on Standard Plan for Public Works Construction from Greenbook Committee, Public Works Standards, Inc. (i.e., 300-2; 301-2; 302-2; 303-2; etc.) | | | | | | | | | |
| Column 9: | CB Owned by: Co - County of L.A.; Flood - L.A. County Flood Control District; Ci - City; Ca - Caltrans; Pr - Private; Oth - Others | | | | | | | | | |
| Column 10: | CB maintained by: Co - County of L.A.; Flood - L.A. County Flood Control District; Ci - City; Ca - Caltrans; Pr - Private; Oth - Others | | | | | | | | | |
| Column 11: | Indicate frequency of FCD maintenance (e.g. inspection & cleanout: 1x/3 mo., 1x/6 mo., 1x Nov., 1x Jan., 1x Aug., etc.) | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |