

Los Angeles River Watershed Trash TMDL

Prepared Pursuant to Resolution No. R15-006

Prepared By:



Revised: 05/11/2017

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 This TMDL was subsequently rescinded on July 17, 2006.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.

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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 are) within the agency's jurisdiction in the subwatershed (the smaller of the HUC-12 equivalent area or tributary subwatershed) are retrofitted with FCS.

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

Past field observations have shown minimal anthropogenic trash build up on City streets. Therefore, Temple City has relied primarily on the DGR studies to demonstrate compliance. The completion of Temple City's 2016 DGR study has demonstrated the City is in compliance with Approach #4. For the most recent reporting year of 2015-2016 Temple City reported a 98.84% percent compliance level. In addition to the DGR studies, trash capture devices (see below) have been installed in 50 catch basins, thereby resulting in even greater trash reduction.

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:

"...responsible jurisdictions...request that the Executive Officer make a determination that a 97% to 98% reduction of the baseline load as calculated using a mass balance approach, constitutes full compliance with the final WLA if all the following criteria are met:..."

Criterion 1: Two or more years of data showing Permittee compliance above 97%

City Status: For the most recent reporting year of 2015-2016 Temple City reported a 98.84% percent compliance level. This was achieved with 1) the institutional controls listed in the following section as verified by a DGR study² and 2) the installation of 50 catch basins covered by full trash capture systems.

Criterion 2: Evaluation of Institutional Controls

The results obtained during the 2016 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.

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

² Attachment A Temple City, Daily Generation Rate Study 2016

The City has installed structural control inserts in 50 catch basins within the city. Ten (10) Full Capture Systems in combination with ARS (Automatic Retractable Screen), Thirty-seven (37) ARS systems with supplemental back-up trash capture baskets, and three (3) ARS partial capture systems have been installed within the City's catch basins.

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: 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 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 2016 DGR study showed an annual trash discharge into the City's storm drain system of 368 lbs. This equated to a 98.84% reduction of trash from the City's baseline WLA in 2016. 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

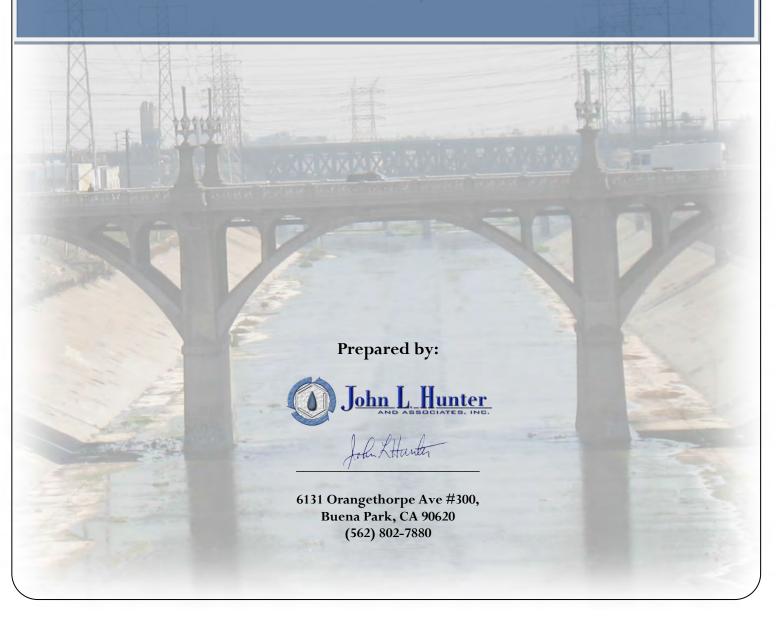
Following the recommendation in Section 2.2 of the June 15, 2015, LARWQCB Staff Report, Reconsideration of Certain Technical Matters of the Trash TMDLs for the Los Angeles River Watershed and the Ballona Creek Watershed, the City requests to "reduce the frequency of DGR calculations from annually to 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 2016 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 ammended by R15-006. The City's continued effort coupled with the current compliance level effectively meets the 100% load reduction.

CITY OF TEMPLE CITY

Attachment A: Daily Generation Rate Study 2016

DAILY GENERATION RATE 2016 December 15, 2016



DAILY GENERATION RATE 2016

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DAILY GENERATION RATE 2016

Executive Summary

This report summarizes the activities and findings of the Daily Generation Rate (DGR) study conducted in Temple City during the summer of 2016. 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 #4, which includes all of the following—full exploitation of the partial capture systems, evaluation of institutional controls, and a waste load allocation (WLA) reduction above 97% for two or more years. 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 207,514 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

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
Commercial	8	1.5	July 12th-Aug. 9th
Residential	120	3.5	July 11th-Aug. 8th
Industrial	1	1.0	July 12th-Aug. 9th
Public Facilities / Education Institutions	5	0.6	July 13th-Aug. 10th
Open Space / Recreation	1	0.4	July 14 th –Aug. 11 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.

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
Commercial	1.5	2.3	6
Residential	3.5	8.7	6
Industrial	1.0	16.1	6
Public Facilities/Educational Institutions	0.6	3.3	6
Open Space / Recreation	0.4	0.8	6
Total	7	31.2	

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
Commercial	0%	48%	48%	0%	4%	0%
Residential	2%	40%	52%	1%	4%	1%
Industrial	3%	45%	44%	1%	3%	4%
Public Facilities/Educational Institutions	1%	39%	35%	0%	4%	4%
Open Space/ Recreation	0%	50%	48%	0%	2%	0%

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)
Commercial	0.41
Residential	9.94
Industrial	0.54
Public Facilities/Educational Institutions	0.92
Open Space / Recreation	0.07
Total	11.88

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 3.5 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 2015-2016 season (9 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 2016.

Table 5: Stormwater Discharge

Land Usage	Discharge (lbs)
Commercial	12.7
Residential	308.2
Industrial	16.6
Public Facilities/Educational Institutions	28.3
Open Space / Recreation	2.1
Total	368 ⁷

Conclusion

The results of this DGR study provide an estimated daily generation rate of 11.60 pounds of trash per day in the City, yielding a Total Storm Year Trash Discharge of 368 pounds for the 2015-2016 season. The baseline waste load allocation for Temple City is 31,819 pounds, this accounts for a WLA reduction level was 98.84%.

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 where considered

Residential Area (Street Sweeping on Tuesday)



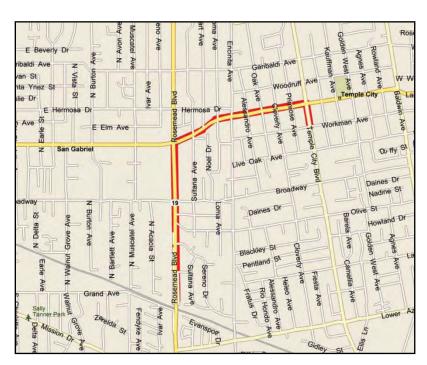
Total representative area:

3.5 curb miles

Only one side: west side, side that is swept on Tuesday.

Collection dates: Mondays, July 11th, 18th and 25th August 1st and 8th

Commercial Area (Street Sweeping on Wednesday)



Total representative area:

1.5 curb miles

(Only one side of street-east on Rosemead)

Collection dates: Tuesdays, July 12 th , 19 th and 26 th August 2 nd and 9 th

Industrial Area (Street Sweeping on Wednesday)



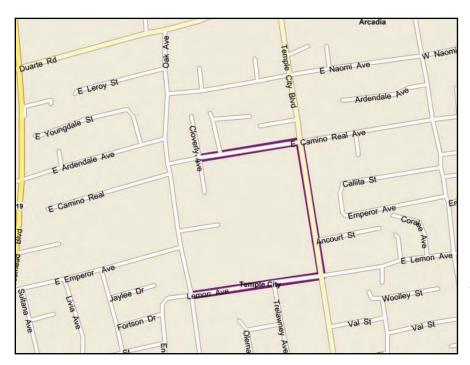
Total representative area:

1 curb mile

(Both sides of street)

Collection dates: Tuesdays, July 12th, 19th and 26th August 2nd and 9th

Public/ Educational Area (Street Sweeping on Thursday)



Total representative area: 0.6 curb miles

Collection dates: Wednesday, July 13th, 20th and 27th August 3rd and 10th

Open Space/ Recreational Area (Street Sweeping on Friday)



Total representative area:

0.4 curb miles

Collection dates: Thursdays, July 14^{th} , 21^{st} and 28^{th} August 4^{th} and 11^{th}

Attachment B: Currently Implemented Institutional Controls and Potential Enhancements

Attachment B-

Currently Implemented Institutional Controls and Potential Enhancements

Currently Implemented Institutional Controls

Compliance Approach #4 requires "an evaluation of institutional controls in the jurisdiction demonstrating continued effectiveness and any potential enhancements". Listed below is an inventory of currently implemented institutional controls. The effectiveness of these institutional controls is demonstrated through the City's 2016 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 and County owned catch basins within the city are designated priority C and 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.

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.

Attachment C-

Currently Implemented Institutional Controls and Potential Enhancements

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 Plan 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.

Potential Enhancements

Compliance Approach #4 requires "an evaluation of institutional controls in the jurisdiction demonstrating continued effectiveness and any potential enhancements". Listed is an inventory of Potential Enhancements that may be elected by the city as reasonable to sustain compliance with the Final WLA. The city may consider additional enhancements such as:

Targeting residential areas when implementing institutional measures.
Developing an educational or outreach campaign focusing on keeping your neighborhood clean.
Installing additional trash receptacles to help discourage littering.
Developing a program that targets alley clean-up.
Increasing the frequency of sweeping in residential areas.
Further outreach to raise awareness about the recycling services available to businesses.
Increased citations for illegal dumping at industrial facilities.
Increasing the permit costs or including an additional environmental fee to use the public park
facilities for organized activities such as children's summer camp, tennis lessons/tournaments
and recreational softball leagues.
Further outreach to raise awareness about the recycling services available to residents.
Developing a program that targets alley clean-up.

Trash TMDL Compliance Reporting Forms

Certified Full Capture Systems Database

Part 7.1 C(1)(a) -Monitoring and Reporting Requirements L.A. County MS4 Permit City Of Temple City

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	СВ Туре	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

Part 7.1 C(1)(a) -Monitoring and Reporting Requirements L.A. County MS4 Permit City Of Temple City

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	СВ Туре	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

Part 7.1 C(1)(a) -Monitoring and Reporting Requirements L.A. County MS4 Permit City Of Temple City

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	СВ Туре	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 reads "LACFCD")	unknown	1971	CURB OPENING	UNK (lid reads "LACFCD")	UNK (lid reads "LACFCD")	Annually
ARS	5419	Rosemead Blvd		CITY (lids read "State of CA")	unknown	1971	CURB OPENING	CITY (lids read "State of CA")	CITY (lids read "State of CA")	Annually
ARS & CPS	9173	Camino Real		CITY (lid reads "LA Co. Road Dept")	unknown	1972	CURB OPENING	CITY (lid reads "LA Co. Road Dept")	CITY (lid reads "LA Co. Road Dept")	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 reads "SD")	unknown	1972	CURB OPENING	CITY (lid reads "SD")	CITY (lid reads "SD")	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

Part 7.1 C(1)(a) -Monitoring and Reporting Requirements L.A. County MS4 Permit

Certified Full Capture Systems Database

Date: 12/15/2016 Reporting Year: 2015-2016 Prepared by JLHA

City Of Temple City Col 4 Col 3 Col 6

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	СВ Туре	CB Owner	CB Maintained By	Frequency of FCD Maintenance and other O&M comments
ARS & CPS	6311	Lemon Ave		LACFCD	unknown	1972	CURB OPENING	LACFCD	LACFCD	Annually
ARS	8639	Longden Ave		LACFCD	unknown	1972	CURB OPENING	LACFCD	LACFCD	Annually
ARS	40									
ARS & CPS	10									
Notations:										
Form	onal rows, a	s necessary								
Column 1:	Il capture de	vice (FCD) installed								
Column 2:	VS - west sid	le; ES - east side; N	IS - north	side; SS - south	side					
Column 3:	cross street I	ocation of the FCD								
Column 4:	Flood Contro	l District; Ci - City; (Ca - Caltr	ans; Pr - Private;	Oth - Others					
Column 5:	y Flood Cont	rol District; Ci - City	; Ca - Ca	ltrans; Pr - Privat	e; Oth - Others	S				
Column 6:	ite when FCI	O was installed								
Column 7:	l catch basin	(CB) identification	(ID) numl	bers						
Column 8:	n Greenbook	Committee, Public	Works S	tandards, Inc. (i.e	., 300-2; 301-2; 30	2-2; 303-2; etc.)				
Column 9:	lood Control	District; Ci - City; C	a - Caltra	ns; Pr - Private;	Oth - Others					
Column 10:	Flood Contr	ol District; Ci - City;	Ca - Cal	trans; Pr - Private	e; Oth - Others					

Part 7.1 C(1)(a) -Monitoring and Reporting Requirements L.A. County MS4 Permit

Certified Full Capture Systems Database

Date: 12/15/2016 Reporting Year: 2015-2016

Prepared by JLHA

City Of Temple City

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	СВ Туре	CB Owner	CB Maintained By	Frequency of FCD Maintenance and other O&M comments
Column 11:	Column 11: on & cleanout: 1x/3 mo., 1x/6 mo., 1x Nov., 1x Jan., 1x Aug., etc.)									

Col. 2 Col. 3

Col. 4

Col. 5

Col. 6

Col. 7

Col. 1

Date: 12/15/2016 Reporting Year: 2015-2016 Prepared by JLHA

Col. 10

Reporting Period	Total Area	Total Area served by FCDs	Percentage of Area served by FCDs	Total # CBs	Total # CBs served by FCDs and PCDs	Percentage of CBs served by FCDs and PCDs	Required Trash Abatement (%)	Compliance	Comments	
31-Oct-16				50	10 FCD; 40 PCD	90.61%	100%	YES	The City has installed 10 full capture catch basin inserts out of 50 catch basins. The City installed 40 ARS partial capture devices which are assigned 86 percent efficiency. Together, these capture devices account for 90.61 percent of the catch basins draining to the Los Angeles River.	
Notations:										
Form			J		•	•	s 2 through 4)	or number of o	catchbasins served by FCDs/PCDs (Columns 5 through 7).	
Column 1:					l reporting perion. 0. 01-182 as a		dor No. D4 20	00 0120		
Column 2:	•	Ū	risdiction (squ			mended by On	uei No. 114-20	09-0130		
Column 3:		•	` .		ified full captur	e devices (sau	are kilometers)		
Column 4:		,		,	served by FCD	` '		,		
Column 5:	Total nu	Total number of catchbasins (CBs) within jurisdiction								
Column 6:	Total nu	Total number of catchbasins (CBs) served by FCDs/PCDs within jurisdiction								
Column 7:	Percent	age of CBs	served by FCI	Ds/PCDs v	vithin jurisdictio	n (Col. 6/Col.	5)			
Column 8:	Require	d Trash Aba	atement: Part	7.1, Apper	dix 7-1 of Orde	er No. 01-182 a	as amended by	Order No. R4	-2009-0130	
Column 9:	Complia	nce: Yes, if	Col. 4 or Col.	7 is greate	er than Col. 8; I	No, if Col. 4 or	Col. 7 is less t	han Col. 8		
Column 10:	Provide	Provide comments, if necessary								

Col. 8

Col. 9

Part 7.1.C(1)(b)(2) Partial Capture / Institutional Controls Date: 12/15/2016
L.A. County MS4 Permitndividual Storm Event and Total Storm Year Trash Discharge Peporting Year: 2015-2016
City of Temple City Prepared by JLHA
Annual Report (Dec-2016)

Rainfall	San Gabriel Fi	re Dept and Pas	sadena 1.8 E							
0 1 1	0.10	0.10		1	sh Discharged					
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			
11.88	10/01/15	10/05/15	0.5	4	0	47.5	Like most cities, the entire City of Temple City is not			
11.88	01/04/16	01/05/16	2.07	1	0	11.9	swept in one day. Approximately equal parts of the City			
11.88	01/04/16	01/06/16	0.82	2	0	23.8	are swept Monday through Friday (i.e. once/week), with the exception of Commericial area's swept three times			
	01/25/16	01/31/16	0.25	6	0	71.3	per week (Monday, Wednesday, Friday). Thus, during			
11.88	02/12/16	02/17/16	0.46	5	0	59.4	any given rain event, different parts of the City were			
	03/04/16	03/06/16	0.62	2	0	23.8	swept between 1 to 7 days previously. Rainfall data was			
11.88	03/04/16	03/07/16	0.28	3	0	35.6	obtained from the closest National Oceanic and			
11.88	03/04/16	03/11/16	0.36	7	0	83.1	Atmospheric Administration preceipitation station. In cases where rainfall station data was missing for a			
11.88	05/05/16	05/06/16	1.76	1	0	11.9	particular storm, the next closest rainfall station was			
							used. Applying the calculated DGR of 11.88 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 40.9 lbs per rain event. This accounts for a Total Storm Year Trash Discharge of 368 lbs.			
Total Sto	orm Year Trash	Discharge				368				
Notations	<u>s:</u>									
Form	Add additional	rows for storm	events, if neces	ssary						
Rainfall Station	Name of rainfa	II station used, i	indicate only th	e L.A. Co	unty station nu	mber				
Total Stor	rm Year Trash I	Discharge = Sur	m of individual s	storm eve	ent discharges t	for reporting pe	eriod (October 1 - September 30).			
Col. 1	DGR for Jurisd	liction from DGF	R Sampling Dat	a worksh	eet					
Col. 2	Date of last str	eet 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	than 0.25 inch,	the Permittee s	shall calculate a	a storm e	vent discharge.	When more tl	y of a storm event that generates precipitation greater han one storm event occurs prior to the next street scharge calculation.			
Col. 6	Amount of tras	h recovered from	m catchbasins,	if any (lb	. or gal.)					
Col. 7		ischarge = Col.				the storm eve				
Col. 8		ents, if necessa								

,	•				Trash Colle	ection for Calcu	ulation of Daily	Generation Ra	te, DGR
Col. 1	Col. 2	Col. 3	Col. 4	Col. 5	Col. 6	Col. 7	Col. 8	Col. 9	Col. 10
							Trash Cleaned		
							Out from		
						Trash Collection	Catchbasin(s)	Total Trash	
		Representative				from	within the	Generated within	Total Trash
	Total Area within	Area for DGR	Date of Last	Date of DGR	Length of	Representative	Representative	Representative	Generated within
Land Use Category	Jurisdiction	Calculation	Street Sweeping	Sampling	Collection Period	Area (lb. or gal.)	Area (lb. or gal.)	Area	Representative Area
Commercial	8	1.5	107/00/10	74040	10	10.0	10		
			07/06/16	7/12/16	6	0.3	0	0.3	
			07/13/16	7/19/16	6	0.6	0	0.6	
			07/20/16	7/26/16	6	0.5	0	0.5	
			07/27/16	8/2/16	6	0.4	0	0.4	
			08/03/16	8/9/16	6	0.6	0	0.6	0.41
Hink/Lan. Danait.	400	Total Days:			30				
High/Low Density Residential	120	3.5							·
			7/5/2016	7/11/16	6	2.0	0	2.0	
			7/12/2016	7/18/16	6	3.5	0	3.5	
			7/19/2016	7/25/16	6	1.8	0	1.8	
			7/26/2016	8/1/16	6	1.1	0	1.1	
			8/2/2016	8/8/16	6	0.3	0	0.3	9.94
		Total Days:			30				
Industrial	1	1							
			07/06/16	7/12/16	6	4.1	0	4.1	
			07/13/16	7/19/16	6	3.0	0	3.0	
			07/20/16	7/26/16	6	3.1	0	3.1	
			07/27/16	8/2/16	6	3.4	0	3.4	
			08/03/16	8/9/16	6	2.5	0	2.5	0.54
		Total Days:			30				
Public Facilities / Educational Institutions	5	0.6							
			7/7/2016	7/13/16	6	0.6	0	0.6	
			7/14/2016	7/20/16	6	1.1	0	1.1	
			7/21/2016	7/27/16	6	1.0	0	1.0	
			7/28/2016	8/3/16	6	0.4	0	0.4	
			8/4/2016	8/10/16	6	0.3	0	0.3	0.92
		Total Days:			30				
Open Space / Recreation	1	0.4							
			7/8/2016	7/14/16	6	0.3	0	0.3	
			7/15/2016	7/21/16	6	0.3	0	0.3	
			7/22/2016	7/28/16	6	0.1	0	0.1	
			7/29/2016	8/4/16	6	0.1	0	0.1	
			8/5/2016	8/11/16	6	0.0	0	0.0	0.07

Partial Capture and Institutional Controls Worksheet - DGR Sampling Data

					Trash Colle	ection for Calcu	lation of Daily	Generation Ra	te, DGR		
Col. 1	Col. 2	Col. 3	Col. 4	Col. 5	Col. 6	Col. 7	Col. 8	Col. 9	Col. 10		
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 Trash Generated within Representative Area	Total Trash Generated within Representative Area		
Commercial	8	1.5									
		Total Days:			30						
Total Area	135	7					Total Trash (lbs)	31.2			
							DGR (lbs/day)		11.88		
Notes:	* Total collectio	n period must e	qual 30 days for	each represen	tative land use a	rea.					
Col. 1	Land Use Cate	gory - Categorie	es based on Bas	eline Monitoring	g Program condu	icted by LACDF	W baseline mo	nitoring group. A	Iternatively, descrit		
Col. 2	Total area of sa	id land use with	nin jurisdiction (fi	ll in once in gra	y-highlighted rov	v for each land u	use category). T	otal area may b	e accounted for usi		
Col. 3	Representative	area for DGR o	alculation (fill in	once in gray-hi	ghlighted row for	each land use	category). Repr	esentative area	may be accounted		
	units, e.g. curb	miles. Collective	ely, the areas us	ed for DGR cal	culation should b	oe representativ	e, proportionally	, of the land use	es within the jurisdic		
Col. 4	Date of last stre	et sweeping									
Col. 5	Date of DGR sa	ampling (direct r	neasurement of	deposited trash	n) - The DGR col	lection period(s) must fall betwe	en June 22nd a	nd September 22n		
Col. 6	Length of Colle	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	Trash collection from representative area through street sweeping or other method, lb. or gal.									
Col. 8	Trash cleaned	out from catchba	asins within the	representative a	area (lb. or gal.).	Trash accumula	ated in the CBs	during the DGR	collection period m		
	Where CBs are	closed off such	that no trash ca	n enter them fo	or the purpose of	DGR sampling	, this value will b	oe zero (0).			
Col. 9	Total amount of	f trash generate	d in representati	ve area (sum o	f Col. 7 and Col.	8), lb. or gal.					
Col. 10	Total Trash Ger	nerated within F	Representative A	rea (estimated	in 30 day period)					

Institutional Controls Summary Compliance Report

Date: 12/15/2016 Reporting Year: 2015-2016 Prepared by JLHA

		Total Storm Year Trash	Discharge by Reporting F	Period
Col. 1	Col. 2	Col. 3	Col. 4	Col. 5
	Total Trash Discharge	ed Effluent Limitation	(lb.	
Reporting Period	(lb. or gal.)	or gal.)	Compliance	Comments
31-Oct-10	1,260	15,910	YES	
31-Oct-11	5,627	12,728	YES	
31-Oct-12	1,501	9,546	YES	
31-Oct-13	1,898	6,364	YES	
31-Oct-14	928	3,182	YES	
31-Oct-15	401	1,050	YES	
				*This year's study indicates that the City is within a 98.84 percent compliance level. See attached
31-Oct-16	368	0	Yes	Alternative Compliance Plan.

Baseline Waste Load Allocation 31,819

Notations:

Form Continue to add to this form for each annual reporting period

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 - Yes, if total storm year trash discharge is less than or equal to applicable Interim or Final Effluent Limitation

Column 5: Provide comments, if necessary