Additions to Part 5, incorporated into existing Part 5 alphabetically:

PART 5 - DEFINITIONS

"Baseline Waste Load Allocation" means the Waste Load Allocation assigned to a Permittee before reductions are required. The progressive reductions in the Waste Load Allocations are based on a percentage of the Baseline Waste Load Allocation. The Baseline Waste Load Allocation for each jurisdiction was calculated based on the annual average amount of trash discharged to the storm drain system from a representative sampling of land use areas, as determined during the Baseline Monitoring Program. The Baseline Waste Load Allocations are incorporated into the Basin Plan at Table 7-2.2.

"Daily Generation Rate (DGR)" means the estimated amount of trash deposited within a representative drainage area during a 24-hour period, derived from the amount of trash collected from streets and catch basins in the area over a 30-day period.

"Drainage" includes all drainage into the MS4, including urban runoff (non-storm water) and storm water.

"Full Capture System" means any single device or series of devices, certified by the Executive Officer, 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. The Rational Equation is used to compute the peak flow rate:

Where:

$$Q = C \times I \times A,$$

Q = design flow rate (cubic feet per second, cfs);

C = runoff coefficient (dimensionless);

I = design rainfall intensity (inches per hour, as determined per the Los Angeles County rainfall isohyetal maps relevant to the Los Angeles River watershed),¹ and A = sub-drainage area (acres).

"Partial Capture Device" means any structural trash control device that has not been certified by the Executive Officer as meeting the "full capture" performance requirements.

"Institutional Controls" means programmatic trash control measures that do not require construction or structural modifications to the MS4. Examples include street sweeping, public education, and clean out of catch basins that discharge to storm drains.

¹ The isohyetal map may be updated annually by the Los Angeles County hydrologist to reflect additional rain data gathered during the previous year. Annual updates published by the Los Angeles County Department of Public Works are prospectively incorporated by reference into this Order.

Addition of New Part 7:

PART 7 - TOTAL MAXIMUM DAILY LOAD PROVISIONS

The provisions of this Part implement and are consistent with the assumptions and requirements of Waste Load Allocations from TMDLs for which some or all of the Permittees in this Order are responsible.

1. TMDL for Trash in the Los Angeles River Watershed

- A. <u>Waste Load Allocations</u>: Each Permittee identified in Appendix 7-1 shall comply with the interim and final effluent limitations set forth in Appendix 7-1 hereto.²
- B. <u>Compliance</u>:
 - (1) Permittees may comply with the effluent limitations using any lawful means. Such compliance options are broadly classified as *full capture*, *partial capture*, or *institutional controls*, as described below, and any combination of these may be employed to achieve compliance:
 - (a) <u>Full Capture Systems</u>:
 - The Basin Plan authorizes the Executive Officer to certify *full capture systems*, which are systems that meet the operating and performance requirements as described in this Order, and the procedures identified in "Procedures and Requirements for Certification of a Best Management Practice for Trash Control as a Full Capture System." (See Appendix 7-2.)³
 - Permittees are authorized to comply with their effluent limitations through certified *full capture systems* provided the requirements of paragraph 3), immediately below, and any conditions in the certification, continue to be met.
 - 3) Permittees may comply with their effluent limitations through progressive installation of *full capture systems* throughout their jurisdiction until all areas draining to the Los Angeles River system are addressed. For purposes of this Permit, attainment of the effluent limitations shall be conclusively presumed for any drainage area to the Los Angeles River (or its tributaries) where

² The interim and final effluent limitations set forth in Appendix 7-1 are equivalent to the Compliance Points identified in Table 7-2.3 of the Basin Plan.

³ The Regional Board currently recognizes eight *full capture systems*. These are: Vortex Separation Systems (VSS) and seven other Executive Officer certified *full capture systems*, including specific types or designs of trash nets; two gross solids removal devices (GSRDs); catch basin brush inserts and mesh screens; vertical and horizontal trash capture screen inserts; and a connector pipe screen device.

certified *full capture systems* treat all drainage from the area, provided that the *full capture systems* are adequately sized, and maintained, and that maintenance records and performance data are maintained-up-to-date and available for inspection by the Regional Board.

- i. A Permittee relying entirely on *full capture systems* shall be deemed in compliance with its final effluent limitation if it demonstrates that all drainage areas under its jurisdiction are serviced by appropriate certified *full capture systems* as described in paragraph (a)(3).
- ii. A Permittee relying entirely on *full capture systems* shall be deemed in compliance with its interim effluent limitations:
 - 1. By demonstrating that *full capture systems* treat the percentage of drainage areas in the watershed that corresponds to the required trash abatement.
 - 2. Alternatively, a Permittee may propose a schedule for jurisdictionwide installation of *full capture* systems, targeting first the areas of greatest trash generation (based upon the information on drainage area and litter generation rates by land use provided in Appendices I and III of the Los Angeles River Trash TMDL Staff Report) for the Executive Officer's approval. The Executive Officer shall not approve any such schedule that does not result in timely compliance with the final effluent limitations. A Permittee shall be deemed in compliance with its interim effluent limitations provided it is fully in compliance with any such approved schedule.
- (b) <u>Partial Capture Devices and Institutional Controls</u>: Permittees may comply with their interim and final effluent

limitations through the installation of *partial capture* devices and the application of *institutional controls*.⁴

- Trash discharges from areas serviced solely by partial capture devices may be estimated based on demonstrated performance of the device(s) in the jurisdictional area.⁵ That is, trash reduction is equivalent to the partial capture devices' trash removal efficiency multiplied by the percentage of drainage area serviced by the devices.
- 2) Except as provided in subdivision 3), below, trash discharges from areas addressed by *institutional controls* and/or *partial capture devices* (where site-specific performance data is not available) shall be calculated using a mass balance approach, based on the daily generation rate (DGR) for a representative area.⁶ The DGR shall be determined from direct measurement of trash deposited in the drainage area during any thirty-day period between June 22nd and September 22nd exclusive of rain events⁷, and shall be re-calculated as the total amount of trash collected during this period divided by 30 (the length of the collection period).

DGR = (Amount of trash collected during a 30day collection period⁸) / (30 days)

The DGR for the applicable area of the jurisdiction shall be extrapolated from that of the representative drainage area. A mass balance equation shall be used to estimate the amount of trash discharged during a storm event.⁹ The *Storm Event Trash Discharge* for a given rain event in a Permittee's drainage area shall be calculated by multiplying the number of days since the last street sweeping by the DGR and subtracting the amount of any trash recovered in the catch basins.¹⁰ For each day of a

 ⁴ While interim effluent limitations may be complied with using partial capture devices, compliance with final effluent limitations cannot be achieved with the exclusive use of partial capture devices.
 ⁵ Performance shall be demonstrated under different conditions (e.g. low to high trash loading).

⁶ The area should be representative of the land uses within the jurisdiction and shall be approved by the Executive Officer prior to the 30-day collection period.

⁷ Provided no special events are scheduled that may affect the representative nature of that collection period.

⁸ Between June 22nd and September 22nd

⁹ Amount of trash shall refer to the uncompressed volume (in gallons) or drip-dry weight (in pounds) of trash collected.

¹⁰ Any negative values shall be considered to represent a zero discharge.

storm event that generates precipitation greater than 0.25 inches, the Permittee shall calculate a *Storm Event Trash Discharge*.

Storm Event Trash Discharge = [(Days since last street sweeping*DGR)] - [Amount of trash recovered from catch basins]¹¹

The sum of the *Storm Event Trash Discharges* for the storm year shall be the Permittee's calculated annual trash discharge.

Total Storm Year Trash Discharge = \sum Storm Event Trash Discharges from Drainage Area

- 3) The Executive Officer may approve alternative compliance monitoring approaches for calculating total storm year trash discharge, upon finding that the program will provide a scientifically-based estimate of the amount of trash discharged from the MS4.
- (c) Combined Compliance Approaches:

Permittees may comply with their interim and final effluent limitations through a combination of *full capture systems*, *partial capture devices*, and *institutional controls*. Permittees relying on a combination of approaches shall demonstrate compliance with the interim and final effluent limitations as specified in (a)(3) in areas where *full capture systems* are installed and as specified in (b)(2) in areas where *partial capture devices* and *institutional controls* are applied.

- Permittees that are not in compliance with the applicable interim and/or final effluent limitations as identified in Appendix 7-1 shall be in violation of this permit.
 - (a) Permittees relying on *partial capture devices* and/or *institutional controls* that have violated their interim or final effluent limitations as identified in Appendix 7-1 shall be presumed to have violated the applicable limitation for each day of each storm event that generated precipitation greater than 0.25 inches during the applicable storm year, except those storm days on which they establish that their cumulative Storm Event Trash Discharges have not exceeded the applicable effluent limitation.

¹¹ When more than one storm event occurs prior to the next street sweeping the discharge shall be calculated from the date of the last assessment.

- (b) For Permittees relying on full capture systems who have failed to demonstrate that the *full capture systems* for any drainagedrainage area are adequately sized, and maintained, and that maintenance records and performance data are maintained up-to-date and available for inspection by the Regional Board, and that they are in compliance with any conditions of their certification, shall be presumed to have discharged trash in an amount that corresponds to the percentage of the baseline waste load allocation represented by the drainagedrainage area in question.
 - A permitteePermittee may overcome this presumption by demonstrating (using any of the methods authorized in this Part 7.1.B(1)(b)-) that the actual or calculated discharge for that drainagedrainage area is in compliance with the applicable interim or final effluent limitations as specified in Appendix 7-1.
- (3)___Any Permittee that fails to demonstrate that it is in compliance with the interim and final effluent limitations as specified in this Part 7.1 shall be presumed to have violated the applicable interim and/or final effluent limitations.
- (4)(3) Each Permittee shall be held liable for violations of the interim or final effluent limitations assigned to its jurisdiction. Any Permittee whose compliance strategy includes full or partial capture devices, that demonstrates that it has failed to comply with the effluent limitations in Appendix 7-1 because the Los Angeles County Flood Control District (District) has without good cause denied entitlements or other necessary authority for the timely installation and/or maintenance of such devices in parts of the MS4 physical infrastructure that are under the authority of the District, may be held jointly and severally liable with the District for violations of the interim or final effluent limitations assigned to that jurisdiction. The District's liability, however, shall be limited to violations related to the drainage areas within the jurisdiction where the District has authority over the relevant portions of the MS4 physical infrastructure. In determining whether the District's action was without good cause, the burden shall be on the Permittee making the claim, and the Regional Board will consider the mission and responsibilities of the District, and any reasons the District may present for its decision. Nothing in this Order, or a determination as to good cause in an order to enforce the terms of this Order, shall affect the right of either the District or the jurisdiction to seek indemnity or other recourse from the other as they deem appropriate. Any Permittee that establishes that it lacks authority over the MS4

physical infrastructure because it is under the authority of the Los Angles County Flood Control District shall be held jointly and severally liable with the Los Angeles County Flood Control District for violations of the interim or final effluent limitations assigned to that jurisdiction unless the Permittee and the Flood Control District submit a duly executed agreement (the terms of which has been approved by the Executive Officer to ensure it is consistent with the requirements of this Order) that allocates between them all responsibility for compliance with these provisions, and further provided that the Permittee is in compliance with its respective obligations under the agreement.

- C. <u>Monitoring and Reporting Requirements (pursuant to Water Code</u> section 13383)
 - (1) Within 60 days of adoption of Part 7, Section 1 (Los Angeles River Trash TMDL) and on October 31, 2010 and every year thereafter, each Permittee identified in Appendix 7-1 shall submit a TMDL Compliance Report detailing compliance with the interim and final effluent limitations. Reporting shall include the information specified below. The report shall be submitted on a reporting form to be specified by the Executive Officer. The report shall be signed under penalty of perjury by the Director of Public Works or other agency head (or their delegee) that is responsible for ensuring compliance with this permit. Permittees shall be charged with and shall demonstrate compliance with the relevant effluent limitations beginning with their October 31, 2010 TMDL Compliance Report.

(a) <u>Reporting Compliance based on Full Capture Systems</u>: Permittees identified in Appendix 7-1 shall provide information on the number and location of full capture installations, the sizing of each full capture installation, the drainage areas addressed by these installations, and compliance with the applicable interim or final effluent limitation, in their TMDL Compliance Report. The Regional Board will periodically audit sizing, performance, and other data to validate that a system satisfies the criteria established for a *full capture system* and any conditions established by the Executive Officer in the certification.

- (b) <u>Reporting Compliance based on Partial Capture</u> Systems and/or Institutional Controls:
- Using Site-Specific Performance Data: Permittees identified in Appendix 7-1 shall provide (i) site-specific performance data for the applicable device(s), (ii) information on the number and location of such installations, and the drainage areas addressed by these installations, and (iii) calculated compliance

with the applicable effluent limitations, in their TMDL Compliance Report.

- (2) Using Direct Measurement of Trash Discharge: Permittees identified in Appendix 7-1 shall provide an accounting of DGR and trash removal via street sweeping, catch basin clean outs, etc., in a database to facilitate the calculation of discharge for each rain event. The database shall be maintained and provided to the Regional Board for inspection upon request. Permittees identified in Appendix 7-1 shall provide the annual DGR, calculated storm year discharge, and compliance with the applicable effluent limitation, in their TMDL Compliance Report.
- (c) <u>Reporting Compliance based on Combined Compliance</u> <u>Approaches:</u>

Permittees identified in Appendix 7-1 shall provide the information specified in subsection (a) for areas where full capture systems are installed and that specified in subsection (b)(1) or (b)(2), as appropriate, for areas where partial capture devices and institutional controls are applied. Permittees shall also provide information on compliance with the applicable effluent limitation based on the combined compliance approaches, in their TMDL Compliance Report

(2) Violation of the reporting requirements of this Part shall be punishable pursuant to inter alia Water Code subdivision (a)(1) of section 13385.1 and/or subdivision (a)(3) of section 13385. Appendix 7-1

Interim and Final Effluent Limitations for Trash for Permittees Identified as Responsible Jurisdictions in the Los Angeles River Watershed Trash TMDL

(gallons of uncompressed trash)												
Permittees	2010	2011	2012	2013	2014	2015	2016 ¹⁴					
	(50%)	(40%)	(30%)	(20%)	(10%)	(3.3%)	(0%)					
Alhambra	19952	15961	11971	7981	3990	1317	0					
Arcadia	25054	20043	15032	10022	5011	1654	0					
Bell	8013	6410	4808	3205	1603	529	0					
Bell Gardens	6750	5400	4050	2700	1350	446	0					
Bradbury	2139	1711	1283	855	428	141	0					
Burbank	46295	37036	27777	18518	9259	3055	0					
Calabasas	11253	9002	6752	4501	2251	743	0					
Carson	3416	2733	2050	1366	683	225	0					
Commerce	29367	23493	17620	11747	5873	1938	0					
Compton	26596	21276	15957	10638	5319	1755	0					
Cudahy	2968	2374	1781	1187	594	196	0					
Downey	19532	15625	11719	7813	3906	1289	0					
Duarte	6105	4884	3663	2442	1221	403	0					
El Monte	21104	16883	12662	8442	4221	1393	0					
Glendale	70157	56126	42094	28063	14031	4630	0					
Hidden Hills	1832	1465	1099	733	366	121	0					
Huntington Park	9580	7664	5748	3832	1916	632	0					
Irwindale	6176	4941	3706	2470	1235	408	0					
La Cañada Flintridge	16748	13398	10049 🦼	6699	3350	1105	0					
Los Angeles	687423	549938	412454	274969	137485	45370	0					
Los Angeles County	155112	124089	93067	62045	31022	10237	0					
Lynwood	14101	11280	8460	5640	2820	931	0					
Maywood	3065	2452	1839	1226	613	202	0					
Monrovia	23344	18675	14006	9337	4669	1541	0					
Montebello	25185	20148	15111	10074	5037	1662	0					
Monterey Park	19450	15560	11670	7780	3890	1284	0					
Paramount	13726	10981	8236	5490	2745	906	0					
Pasadena	55999	44799	33599	22400	11200	3696	0					
Pico Rivera	6977 🥄	5581	4186	2791	1395	460	0					
Rosemead	13653	10922	8192	5461	2731	901	0					
San Fernando	6974	5579	4184	2789	1395	460	0					
San Gabriel	10172	8137	6103	4069	2034	671	0					
San Marino 🦯	7196	5756	4317	2878	1439	475	0					
Santa Clarita	451	360	270	180	90	30	0					
Sierra Madre	5806	4644	3483	2322	1161	383	0					
Signal Hill	4717	3774	2830	1887	943	311	0					
Simi Valley	69	55	41	27	14	5	0					
South El Monte	8000	6400	4800	3200	1600	528	0					
South Gate	21952	17562	13171	8781	4390	1449	0					
South Pasadena	7454	5963	4472	2981	1491	492	0					
Temple City	8786	7029	5272	3514	1757	580	0					
Vernon	23602	18881	14161	9441	4720	1558	0					
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 Table 1a: Los Angeles River Watershed Trash Effluent Limitations¹² per Storm Year¹³

 (gallons of uncompressed trash)

 ¹² Effluent limitations are expressed as allowable trash discharge relative to baseline Waste Load Allocations specified in Table 7-2.2 of the Basin Plan.
 ¹³ Storm year is defined as October 1 to September 30 herein.
 ¹⁴ Permittees shall achieve their final effluent limitation of zero trash discharge for the 2015-2016 storm

year and every year thereafter.

(pounds of drip-dry trash)											
Permittees	2010	2011	2012	2013	2014	2015	2016 ¹⁷				
	(50%)	(40%)	(30%)	(20%)	(10%)	(3.3%)	(0%)				
Alhambra	34381	27504	20628	13752	6876	2269	0				
Arcadia	46518	37214	27911	18607	9304	3070	0				
Bell	12669	10135	7601	5067	2534	836	0				
Bell Gardens	11686	9348	7011	4674	2337	771	0				
Bradbury	6080	4864	3648	2432	1216	401	0				
Burbank	85195	68156	51117	34078	17039	5623	0				
Calabasas	26115	20892	15669	10446	5223	1724	0				
Carson	5104	4083	3062	2042	1021	337	0				
Commerce	42741	34192	25644	17096	8548	2821	0				
Compton	43178	34542	25907	17271	8636	2850	0				
Cudahy	5031	4024	3018	2012	1006	332	0				
Downey	34254	27403	20552	13701	6851	2261	0				
Duarte	11844	9475	7106	4737	2369	782	0				
El Monte	34134	27307	20480	13653	6827	2253	0				
Glendale	146749	117399	88049	58700	29350	9685	0				
Hidden Hills	5411	4328	3246	2164	1082	357	0				
Huntington Park	15465	12372	9279	6186	3093	1021	0				
Irwindale	8956	7164	5373	3582	1791	591	0				
La Cañada Flintridge	36874	29499	22124	14749	7375	2434	0				
Los Angeles	1286250	1029000	771750	514500	257250	84893	0				
Los Angeles County	325903	260722	195542	130361	65181	21510	0				
Lynwood	23234	18587	13940	9293	4647	1533	0				
Maywood	5275	4220	3165	2110	1055	348	0				
Monrovia	50494	40395	30296	20198	10099	3333	0				
Montebello	41854	33483	25112	16741	8371	2762	0				
Monterey Park	35228	28182	21137	14091	7046	2325	0				
Paramount	22245	17796	13347	8898	4449	1468	0				
Pasadena	103757	83006	62254	41503	20751	6848	0				
Pico Rivera	11275	9020	6765	4510	2255	744	0				
Rosemead	23689	18951	14213	9476	4738	1563	0				
San Fernando	11539	9231	6923	4615	2308	762	0				
San Gabriel 🦯	18219	14575	10931	7287	3644	1202	0				
San Marino	14574	11659	8744	5829	2915	962	0				
Santa Clarita	1163	930	698	465	233	77	0				
Sierra Madre	12596	10077	7558	5038	2519	831	0				
Signal Hill	7110	5688	4266	2844	1422	469	0				
Simi Valley	172	138	103	69	34	11	0				
South El Monte	12160	9728	7296	4864	2432	803	0				
South Gate	36167	28933	21700	14467	7233	2387	0				
South Pasadena	14179	11343	8507	5671	2836	936	0				
Temple City	15910	12728	9546	6364	3182	1050	0				
Vernon	33407	26726	20044	13363	6681	2205	0				
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 Table 1b: Los Angeles River Watershed Trash Effluent Limitations¹⁵ per Storm Year¹⁶ (pounds of drip-dry trash)

 ¹⁵ Effluent limitations are expressed as allowable trash discharge relative to baseline Waste Load Allocations specified in Table 7-2.2 of the Basin Plan.
 ¹⁶ Storm year is defined as October 1 to September 30 herein.
 ¹⁷ Permittees shall achieve their final effluent limitation of zero trash discharge for the 2015-2016 storm

year and every year thereafter.