## VIA CERTIFIED MAIL, RETURN RECEIPT

April 2, 2019

Mr. Andrea Polidori South Coast Air Quality Management District 21865 E. Copley Drive Diamond Bar, CA 91765

REFERENCE: ADDITIONS & MODIFICATIONS TO RULE 1180 FENCELINE

MONITORING PLAN - SCAOMD PARTIAL APPROVAL DATED

MARCH 19, 2019

TESORO REFINING & MARKETING COMPANY LLC

CARSON OPERATIONS (FACILITY ID - 174655), A/N 606198

WILMINGTON OPERATIONS (FACILITY ID - 800436), A/N 606200

Dear Mr. Polidori:

This letter is in response to the SCAQMD partial approval of the Rule 1180 Refinery Fenceline Monitoring Plan (Plan) for Tesoro Refining & Marketing Company LLC, Los Angeles Refinery - Carson and Wilmington Operations (Tesoro LAR) dated March 19, 2019. The Plan was initially submitted on August 1, 2018. Based on SCAQMD review and comments, a revised Plan was submitted on December 7, 2018, which was published for public comment on December 11, 2018. This letter addresses additions and modifications to the Plan outlined in the SCAQMD partial approval letter.

The signed (wet-ink) Tesoro certification as acceptance to additions and modifications indicated in the partial approval letter is provided in **Attachment 1**. In accordance with Rule 1180, Tesoro LAR is required to commence fenceline air monitoring by April 2, 2020, one year after signed certification of the partial approval.

- 1. As indicated in Exhibit A of the partial approval letter, Tesoro LAR have modified the Plan to include the following to enhance the spatial fenceline coverage at both Carson and Wilmington operations (see **Attachment 2**):
  - a. Paths C6 & C7 on Southern fenceline of Carson Operations to include FTIR and UV-DOAS
  - b. Monitoring Path C11 on Western fenceline of Carson Operations to include FTIR and UV-DOAS
  - c. Monitoring Paths W15, W16, & W17 on Southern fenceline of Wilmington Operations to include FTIR and UV-DOAS (although Wilmington FCCU operations have been decommissioned, effective October 2, 2018)
  - d. Monitoring Paths W20 & W21 on Northern fenceline of Wilmington Operations, next to Kinder Morgan, to include FTIR and UV-DOAS

Tesoro Refining & Marketing Company LLC Los Angeles Refinery – Carson & Wilmington Operations Additions & Modifications to Rule 1180 Fenceline Monitoring Plan Outlined in SCAQMD Partial Approval Letter Dated March 19, 2019 April 2, 2019 Page 2 of 3

- 2. All monitoring paths; C1-C12 and W13-W21, will have both FTIR and UV-DOAS open-path measurement technologies.
- 3. The updated illustration (see **Attachment 2**) contains path identification for Carson Operations as C1 through C12 and Wilmington Operations as W13 through W21.
- 4. The Plan has been updated to include four-point hydrogen sulfide (H2S)/ black carbon (BC) monitors at Carson Operations and three-point H2S/BC monitors at Wilmington Operations (see updated illustration in **Attachment 2**).
- 5. **Table 1** included in **Attachment 3** summarizes the GPS coordinates and heights above ground level for all proposed fenceline air monitoring equipment.
- 6. **Table 2** included in **Attachment 4** summarizes approximate minimum detection limits (MDLs) and upper detection limits (UDLs) by instrument for all the monitoring paths. Detection limits are approximate. While they are based on the theoretical capabilities of the instruments, they are supported by manufacturers' lab tests and real-industry applications. Actual detection limits will depend on atmospheric conditions and site installation.
- 7. The FTIR and UV-DOAS instruments operating along one-way paths of up to 600-650 meters are expected to achieve similar MDLs and similar accuracy as one-way paths of about 500 meters, assuming the infrastructure is stable and atmospheric conditions are as expected. If there are performance issues with FTIR and UV-DOAS instruments operating along one-way paths of up to 600-650 meters, then the field operator, in consultation with the manufacturer, will make minor adjustments and/or modifications so that those instruments have similar performance to the FTIR and UV-DOAS instruments operating along one-way paths of about 500 meters. The minimum detection limit (MDL) for each target chemical measured by OP-FTIR is calculated using the classical least squares (CLS) statistical analysis (TO-16). The MDL is the 3-sigma value computed from the standard deviation of the fit between the reference absorbance spectrum and the measurement absorbance spectrum.
- 8. **Attachment 1** contains three different illustrations using different color schemes indicating the facility fenceline boundary and monitoring paths.
- 9. **Table 3** included in **Attachment 5** summarizes the complete list of sensitive receptors (schools, residences, daycare centers, hospitals, nursing homes, and recreational areas. Illustration in **Attachment 5** shows the location of several types of sensitive receptors with respect to the refinery, including schools and childcare facilities, adult health facilities, recreation areas, and residential areas.

Tesoro Refining & Marketing Company LLC
Los Angeles Refinery – Carson & Wilmington Operations
Additions & Modifications to Rule 1180 Fenceline Monitoring Plan
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Air dispersion modeling runs using AERMOD and HARP2 were completed to calculate pollutant maximum one-hour average and annual average (over 5 years) concentrations at the Tesoro Carson and Wilmington Operations. Modeling was completed using AERMOD (Version 18081) and the California Air Resources Board's HARP2 ADMRT modeling software. AERMOD and HARP2 modeling set-up included emissions profile from the 2015 Annual Emissions Report (AER) for SO<sub>2</sub>, NOx, and VOC and AB2588 Quadrennial emissions profile for TACs. The emissions profile included fugitive emissions quantification for both Carson and Wilmington Operations.

The maximum 1-hour impact and annual average impact GLC isopleth and concentration Google Earth overlays for each Rule 1180 pollutant for Carson and Wilmington Operations were included in the Plan submitted on December 7, 2018.

Please contact Parvez Abbas at 310.847.5266 or myself at 310.847.5645 with any questions or comments.

Sincerely,

ecc:

Environmental Manager

2019-04-02 Tesoro LAR Rule 1180 Fenceline Monitoring Plan

Brad Levi, Tesoro (with attachments)

Wayne Nastri, SCAQMD (with attachments)

Parvez Abbas, Tesoro (with attachments)

Olga Pikelnaya, SCAQMD (with attachments)

Payam Pakbin, SCAQMD (with attachments)

Kevin Durkee, SCAQMD (with attachments)

Denis Kurt, Tesoro (with attachments)

Adrian Rosu, Tesoro (with attachments)

Susan Stark, Tesoro (with attachments)





Office of the Executive Officer Wayne Nastri 909.396.2100, fax 909.396.3340

Via email and U.S. Mail

March 19, 2019

Robert T. Nguyen Tesoro Refining & Marketing Company LLC, Los Angeles Refinery 2350 E. 223rd Street, Carson, California 90810

SCAQMD Partial Approval of the Fenceline Monitoring Plan for the Tesoro
Los Angeles Refining and Marketing Company LLC, Los Angeles Refinery, Carson
and Wilmington Operations (Facility ID 174655 – Carson Operations;
Facility ID 800436 – Wilmington Operations)
SCAQMD Rule 1180

On August 1, 2018, the Tesoro Los Angeles Refining and Marketing Company LLC, Los Angeles Refinery (Tesoro) submitted to the South Coast Air Quality Management District (SCAQMD) a draft fenceline air monitoring plan for their Carson and Wilmington facilities pursuant to SCAQMD Rule 1180, and as required by the Health and Safety Code section 42705.6. SCAQMD staff reviewed the plan and provided the refinery with comments. On December 07, 2018 Tesoro submitted a revised fenceline air monitoring plan (Plan), which was published for public comment on December 11, 2018. The public comment period closed on January 11, 2019. Based on the comments received and additional staff review, SCAQMD is pleased to inform you that sections 1, 2.1 through 2.2.2, and 2.2.4 of Tesoro's Plan (which applies to both the Carson and Wilmington facilities) have been approved, provided that Tesoro agrees to the additions and modifications outlined below and shown in Exhibit A:

- 1. Include additional air monitoring equipment (i.e., OP-FTIR and UV-DOAS) to achieve adequate spatial coverage at both the Carson and Wilmington facilities, as illustrated in Exhibit A, and:
  - a. Add one set of rotating (or two sets of fixed) open-path monitoring instruments along the Southern boundary of the Carson refinery.
  - b. Provide a monitoring solution to close the gap between proposed paths 8 and 9 of the Carson refinery.
  - c. Add one set of rotating (or two sets of fixed) open-path monitoring instruments along the Southern boundary of the Wilmington refinery.
  - d. Add one set of rotating (or two sets of fixed) open-path monitoring instruments along the Northern boundary of the Wilmington refinery.

- 2. Utilize UV-DOAS and OP-FTIR technologies along all fenceline air monitoring paths for both refineries.
- 3. Revise the Plan to ensure consistency between the path numbers identified in the text, and those illustrated in the figures and tables.
- 4. Include one additional set of point monitors, consisting of a hydrogen sulfide (H<sub>2</sub>S) instrument and a black carbon (BC) instrument, at both the Carson and Wilmington refineries, as illustrated in Exhibit A. With this addition, a total of seven sets of point monitors (each comprised of a H<sub>2</sub>S and BC instruments) will be installed at the refinery fenceline, as illustrated in Exhibit A.
- 5. Provide GPS coordinates and heights above ground level for all proposed fenceline air monitoring equipment (e.g., open path monitors, reflectors, and point monitors).
- 6. Revise Table 9 to provide estimated detection limits for the shortest and the longest pathlengths proposed in the Plan.
- 7. Provide a contingency plan to install additional UV-DOAS and OP-FTIR systems in case the detection capabilities of the UV-DOAS and/or OP-FTIR systems (e.g. detection limits for one or more of all measured pollutants) are found to be inadequate during the first 6 months of operation. SCAQMD is concerned that the length of paths 6, 10, and 13 are longer than the 500 meter maximum recommended in the Rule 1180 Guidelines.
- 8. Use a different color scheme to differentiate the Carson and Wilmington refinery fenceline boundaries from other features on all relevant maps.
- 9. Expand Table 3 to include a complete list of sensitive receptors (e.g., schools, residences, daycare centers, hospitals, nursing homes and recreational areas) and further discuss the potential impact of fugitive emissions on these receptors. SCAQMD received a public comment stating that Tesoro did not identify a number of neighboring schools, please review the list of schools and revise as needed.

SCAQMD will continue to work with Tesoro to finalize and approve the remaining elements of their Plan (namely, Section 2.2.3 – Operations and Maintenance and Failure Activities; Section 3 – Quality Assurance; Section 4 – Data Display to the Public; and Section 5 – Notification System; Quality Assurance Project Plan (QAPP) and Standard Operating Procedures (SOP) for air monitoring equipment). The SCAQMD intends that all elements of the Plan will be in operation by the January 1, 2020 deadline in Health and Safety Code section 42705.6 for the fenceline air monitoring system.

Please have your authorized person sign in the space allocated below to agree with the conditions put forward in this letter, and return the signed copy to SCAQMD within fourteen (14) days from the date of this letter. Partial approval of Tesoro's Plan will take effect on the date this letter is signed by Tesoro. In accordance with Rule 1180, Tesoro must commence fenceline air monitoring no later than one year from the date of Plan approval, and Health and Safety Code section 42705.6 requires installation and operation by January 1, 2020. Your partial approval will become effective on the date of Tesoro's signed certification below.

## Tesoro certification:

I understand, accept, and agree to the conditions of the partial approval of Tesoro's Plan.

Vice President Position

4-2-2019

Should you have any questions regarding this approval letter, please contact Dr. Andrea Polidori at (909) 396-3283, or via email at apolidori@aqmd.gov.

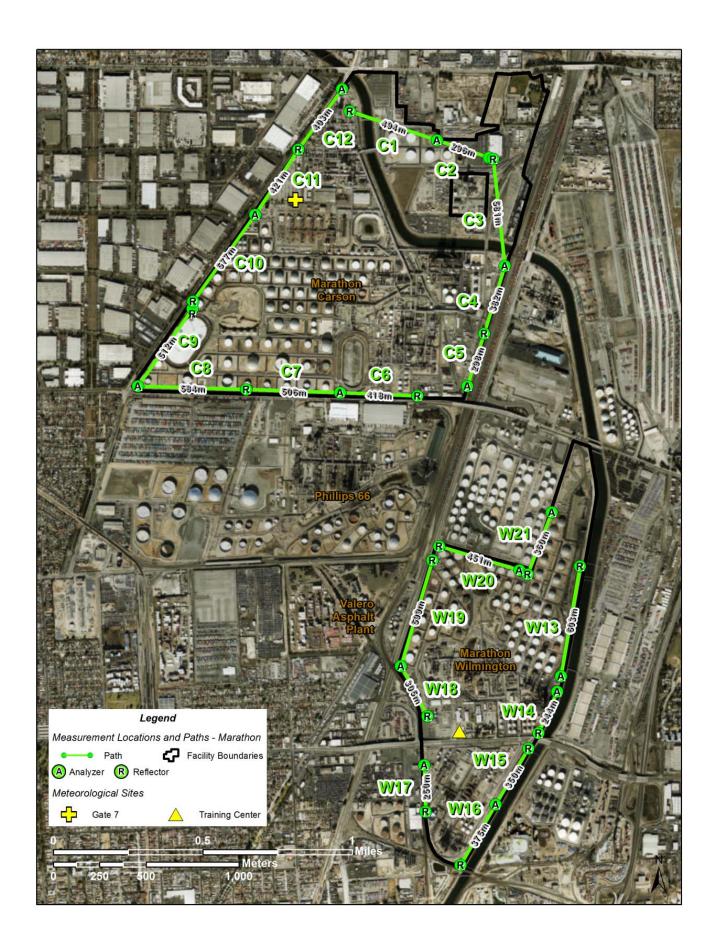
Sincerely,

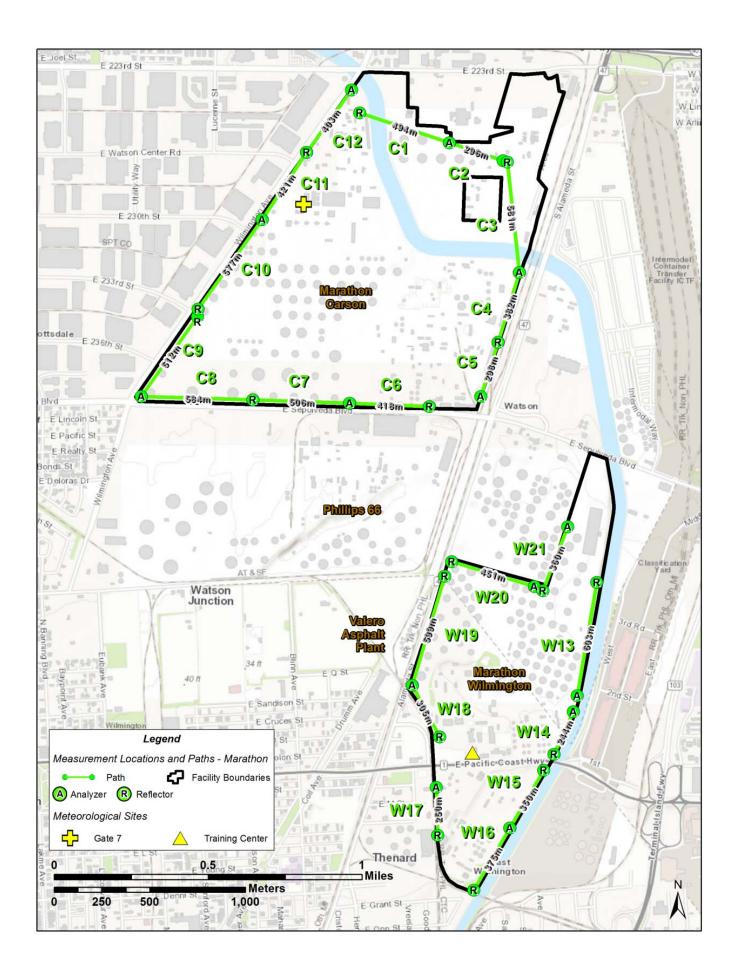
Executive Officer South Coast Air Quality Management District

Attachment WN:MMM:JCL;AP:OP:ld

Exhibit A - Tesoro







Attachment 3
Table 1 - Summary of Path, Elevations, and Coordinates

Table 1 - Summary of Paths, Elevations, and Coordinates

				I abic	1 Summa	i y or i a	iiis, Lievati	ons, and Coordinates				
Path ID	Type - Analyzer	DESCRIPTION	Analyzer Elev (ft)	A-Lat	A-Long	Path ID	Type- Reflector	DESCRIPTION	Reflecto r Elev (ft)	R-Lat	R-Long	Path Length (m)
C1	A1	PATH 1-2 SKID	12	33.82089	-118.23733	1	R	PATH 1 REFLECTORS	39	33.82226	-118.24241	494
C2	A1	PATH 1-2 SKID	12	33.82089	-118.23733	2	R	PATH 2 REFLECTORS	25	33.82008	-118.23427	296
С3	A2	PATH 3-4 SKID	12	33.81481	-118.23328	3	R	PATH 3 REFLECTORS	25	33.82001	-118.23404	581
C4	A2	PATH 3-4 SKID	12	33.81481	-118.23328	4	R	PATH 4 REFLECTORS	20	33.81150	-118.23443	382
C5	А3	PATH 5 SKID	12	33.80893	-118.23537	5	R	PATH 5 REFLECTORS	20	33.81150	-118.23443	298
C6	A4	PATH 6-7 SKID	12	33.80854	-118.24279	6	R	PATH 6 REFLECTORS	45	33.80843	-118.23828	418
C7	A4	PATH 6-7 SKID	12	33.80854	-118.24279	7	R	PATH 7 REFLECTORS	20	33.80865	-118.24826	506
C8	A5	PATH 8-9 SKID	16	33.80873	-118.25456	8	R	PATH 8 REFLECTORS	20	33.80865	-118.24826	584
С9	A5	PATH 8-9 SKID	16	33.80873	-118.25456	9	R	PATH 9 REFLECTORS	20	33.81254	-118.25144	512
C10	A6	PATH 10-11 SKID	27	33.81716	-118.24785	10	R	PATH 10 REFLECTORS	20	33.81290	-118.25142	577
C11	A6	PATH 10-11 SKID	27	33.81716	-118.24785	11	R	PATH 11 REFLECTORS	25	33.82036	-118.24538	421
C12	A7	PATH 12 SKID	12	33.82333	-118.24288	12	R	PATH 12 REFLECTORS	25	33.82036	-118.24538	403
W13	A8	PATH 13 SKID	12	33.79485	-118.22972	13	R	PATH 13 REFLECTORS	20	33.80022	-118.22869	603
W14	A9	PATH 14 SKID	12	33.79409	-118.22993	14	R	PATH 14 REFLECTORS	20	33.79208	-118.23100	244
W15	A10	PATH15-16 SKID	12	33.78858	-118.23345	15	R	PATH 15 REFLECTORS	20	33.79132	-118.23157	350
W16	A10	PATH 15-16 SKID	12	33.78858	-118.23345	16	R	PATH 16 REFLECTORS	20	33.78563	-118.23544	375
W17	A11	PATH 17 SKID	12	33.79046	-118.23763	17	R	PATH 17 REFLECTORS	20	33.78820	-118.23752	250
W18	A12	PATH 18-19 SKID	12	33.79524	-118.23906	18	R	PATH 18 REFLECTORS	20	33.79283	-118.23747	305
W19	A12	PATH 18-19 SKID	12	33.79524	-118.23906	19	R	PATH 19 REFLECTORS	25	33.80044	-118.23730	599
W20	A13	PATH 20 SKID	12	33.80000	-118.23222	20	R	PATH 20 REFLECTORS	20	33.80112	-118.23690	451
W21	A14	PATH 21 SKID	12	33.80284	-118.23038	21	R	PATH 21 REFLECTORS	25	33.79980	-118.23173	360

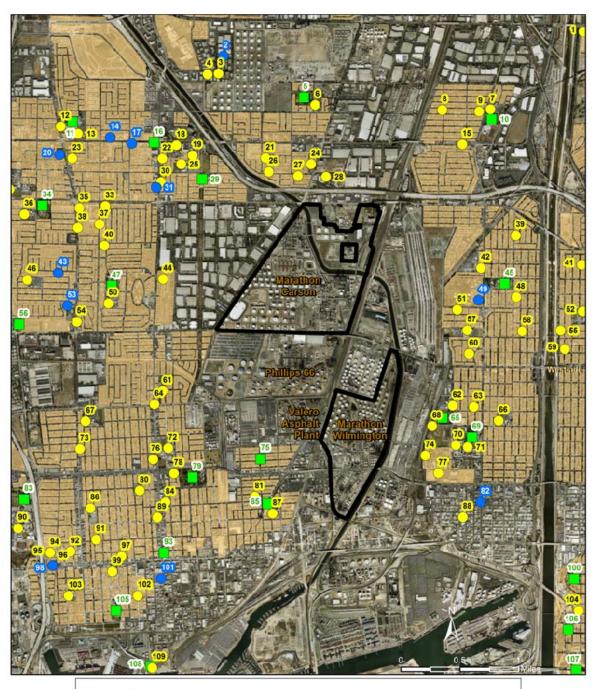
Note: Equipment elevations, coordinates, and path lengths are estimated, subject to minor adjustments depending on site installation.

Attachment 4
Table 2 - Estimated FTIR and UV-DOAS Detection Limits

**Table 2 - Estimated Detection Limits** 

			est Path 4 m)	Longest Path (603 m)	
Technology	1180 Compound	MDL	UDL	MDL	UDL
FTIR	1,3-Butadiene	8	20,000	3	7,900
	Acetaldehyde	10	410,000	4	170,000
	Acrolein	31	180,000	12	74,000
	Ammonia	6	110,000	3	45,000
	Benzene	61	61,000	25	25,000
	Carbonyl Sulfide	2	TBD*	1	TBD
	Ethylbenzene	51	77,000	21	31,000
	Formaldehyde	2	51,000	1	21,000
	Hydrocarbons	12	12,000	5	5,000
	Hydrogen Cyanide	3	41,000	1	17,000
	Nitrogen Dioxide	12	TBD	5	TBD
	Styrene	16	23,000	7	9,500
	Total Xylenes	610	150,000	250	62,000
UVDOAS	Acrolein	17	390,000	7	160,000
	Benzene	1	65,000	0.2	26,000
	Ethylbenzene	4	45,000	2	18,000
	Naphthalene	0.4	350	0.17	140
	Sulfur Dioxide	6	85,000	2	34,000
	Toluene	2	92,000	1	37,000
	Total Xylenes	2	15,000	1	6200





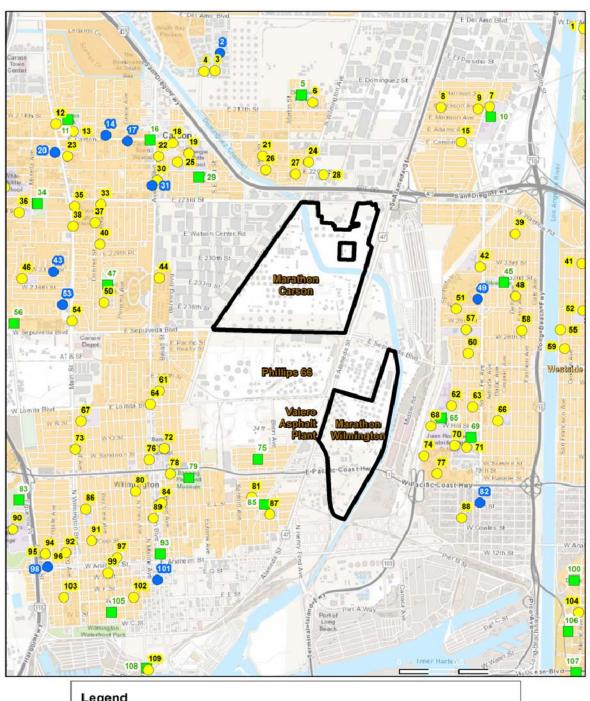
Residential Land Use

Facility Boundary

## Legend

## Sensitive Receptors

- Child/Day Care Service; School
- Adult Health Care Facilities (Residential Care Homes)
- Park and Recreation Area





**Table 3 - Summary of Sensitive Receptors** 

Map Label	Name	Receptor Type	Latitude	Longitude
1	Union School	School	33.84585	-118.20118
2	Our House Living & Learning	Adult Health Care Facilities (Residential Care Homes)	33.84229	-118.25433
3	Village Kids USA	Child/Day Care Service	33.84015	-118.25502
4	Curtis Care	Child/Day Care Service	33.84005	-118.25660
5	Dolphin Park	Park and Recreation Area	33.83732	-118.24233
6	Del Amo Elementary School	School	33.83643	-118.24067
7	Rancho Dominguez Prep School	School	33.83613	-118.21479
8	Olivas Family Childcare	Child/Day Care Service	33.83599	-118.22190
9	Dominguez Elementary School	School	33.83585	-118.21646
10	Dominguez Park	Park and Recreation Area	33.83492	-118.21459
11	Carson Park	Park and Recreation Area	33.83397	-118.27650
12	Boys & Girls Club of Carson 2	Child/Day Care Service	33.83337	-118.27823
13	Carson Street Elementary School	School	33.83252	-118.27563
14	Carson Senior Assisted Living	Adult Health Care Facilities (Residential Care Homes)	33.83210	-118.27089
15	First Baptist Preschool	School	33.83178	-118.21885
16	Time-Out Family Amusement Center	Park and Recreation Area	33.83155	-118.26438
17	Dominic Home Care Svc	Adult Health Care Facilities (Residential Care Homes)	33.83140	-118.26768
18	Golden City Child	Child/Day Care Service	33.83124	-118.26109
19	Carnegie Middle School	School	33.83002	-118.25868
20	Carson Gardens	Adult Health Care Facilities (Residential Care Homes)	33.82989	-118.27830
21	Wilma Bryant Daycare	School	33.82978	-118.24790
22	Carson Christian School	School	33.82957	-118.26314
23	Saint Philomena School	School	33.82946	-118.27646
24	Nevarez Smart Child Day Care	Child/Day Care Service	33.82911	-118.24116
25	Bonita Street Elementary School	School	33.82891	-118.26035
26	Rose's Daycare	Child/Day Care Service	33.82810	-118.24740
27	Creative Mind Family Home Day Care	School	33.82765	-118.24307
28	Boys & Girls Club of Carson 1	Child/Day Care Service	33.82759	-118.23893
29	Calas Park	Park and Recreation Area	33.82711	-118.25722
30	Community Development Center	School	33.82670	-118.26332
31	Avalon Courtyard	Adult Health Care Facilities (Residential Care Homes)	33.82602	-118.26401
32	White Middle School	School	33.82557	-118.28563
33	Dolores Combination Children's Center	School	33.82365	-118.27146
34	Veterans Park and Sports Complex	Park and Recreation Area	33.82362	-118.28075

Map Label	Name	Receptor Type	Latitude	Longitude
35	Carson High School	School	33.82337	-118.27530
36	Caroldale Learning Community	School	33.82252	-118.28341
37	Dolores Street School	School	33.82141	-118.27229
38	Eagle Tree High School	School	33.82094	-118.27549
39	Bobo Family Daycare	School	33.82063	-118.21082
40	Family Day Care	School	33.81877	-118.27153
41	Old King Cole Day Care	School	33.81712	-118.20103
42	Webster Elementary School	School	33.81657	-118.21590
43	Paradise Elderly Home	Adult Health Care Facilities (Residential Care Homes)	33.81534	-118.27832
44	Bundle of Fun My Three Kids Daycare	School	33.81473	-118.26281
45	Silverado Park	Park and Recreation Area	33.81468	-118.21236
46	Two Hundred Thirty-Second Elementary School	School	33.81446	-118.28285
47	General Scott Park	Park and Recreation Area	33.81383	-118.27035
48	Muir Elementary School	School	33.81303	-118.21063
49	American Gold Star Manor	Adult Health Care Facilities (Residential Care Homes)	33.81262	-118.21620
50	Catskill Avenue Elementary School	School	33.81166	-118.27085
51	Family Ceja Day Care	School	33.81139	-118.21934
52	Birney Elementary School	School	33.81136	-118.20080
53	Carson Adult Day Health Care	Adult Health Care Facilities (Residential Care Homes)	33.81132	-118.27689
54	Community Development Center	School	33.80935	-118.27548
55	Vann Family Day Care	School	33.80899	-118.20407
56	Carriage Crest Park	Park and Recreation Area	33.80895	-118.28399
57	Stephens Middle School	School	33.80889	-118.21783
58	Carol Daycare	School	33.80885	-118.20968
59	Fords Family Day Care	Child/Day Care Service	33.80669	-118.20338
60	Johnson Daycare	School	33.80598	-118.21750
61	Broad Avenue Elementary School	School	33.80094	-118.26264
62	Hudson Elizabeth Elementary School	School	33.79958	-118.21983
63	Saint Lucy School	School	33.79946	-118.21674
64	Wilmington Christian School	School	33.79929	-118.26388
65	Hudson Park	Park and Recreation Area	33.79806	-118.22132
66	Garfield Elementary School	School	33.79780	-118.21303
67	Wilmington Middle School	School	33.79711	-118.27399
68	Reid Will J High School	School	33.79703	-118.22282
69	Admiral Kidd Park	Park and Recreation Area	33.79570	-118.21693
70	Juan Rodriguez Cabrillo High School	School	33.79471	-118.21930

Map Label	Name	Receptor Type	Latitude	Longitude
71	Boys and Girls Clubs-Long Beach	Child/Day Care Service	33.79449	-118.21755
72	Banning High School	School	33.79391	-118.26174
73	Happy Harbor Preschool	School	33.79368	-118.27479
74	Bethune Mary School	School	33.79340	-118.22379
75	East Wilmington Park	Park and Recreation Area	33.79273	-118.24809
76	Avalon Continuation School	School	33.79252	-118.26396
77	WyoTech - Long Beach Campus	School	33.79123	-118.22182
78	First Baptist Christian School	School	33.79082	-118.26084
79	Banning Park	Park and Recreation Area	33.79037	-118.25811
80	Fries Elementary School	School	33.78863	-118.26590
81	Holy Family Grammar School	School	33.78806	-118.24889
82	Bay Breeze Care	Adult Health Care Facilities (Residential Care Homes)	33.78775	-118.21554
83	Harbor Park Golf Course	Park and Recreation Area	33.78739	-118.28293
84	Harry Bridges Span School	School	33.78725	-118.26204
85	East Wilmington Greenbelt	Park and Recreation Area	33.78722	-118.24699
86	Gulf Elementary School	School	33.78641	-118.27313
87	Wilmington Park Elementary School	School	33.78600	-118.24622
88	Eugene Field Elementary School	School	33.78585	-118.21813
89	YMCA	Child/Day Care Service	33.78536	-118.26325
90	Los Angeles Harbor College	School	33.78382	-118.28376
91	Yvette's Daycare	School	33.78254	-118.27223
92	Reece Family Day Care	School	33.78103	-118.27598
93	Wilmington Town Square	Park and Recreation Area	33.78101	-118.26219
94	Community Development Center	School	33.78084	-118.27897
95	Friendship Children Center	School	33.78084	-118.27897
96	Vermont Christian School	School	33.78084	-118.27897
97	Flounders 24 Hour Child Care	School	33.78050	-118.26843
98	Wilmington Gardens	Adult Health Care Facilities (Residential Care Homes)	33.77927	-118.27860
99	Saint Peter and Saint Paul Roman Catholic School	School	33.77863	-118.26979
100	Drake Park	Park and Recreation Area	33.77839	-118.20158
101	American AAA Medical Group	Adult Health Care Facilities (Residential Care Homes)	33.77784	-118.26254
102	Banning Elementary School	School	33.77569	-118.26597
103	Hawaiian Elementary School	School	33.77557	-118.27618
104	Edison Elementary School	School	33.77449	-118.20091
105	Wilmington Recreation Center	Park and Recreation Area	33.77382	-118.26916
106	Cesar E Chavez Park-Long Beach	Park and Recreation Area	33.77211	-118.20238

Map Label	Name	Receptor Type	Latitude	Longitude
107	Santa Cruz Park	Park and Recreation Area	33.76715	-118.20116
108	College of Oceaneering	Park and Recreation Area	33.76703	-118.26398
109	College of Oceaneering	School	33.76683	-118.26370