

APPENDIX I

Survey of Number of GDFs with Assist and Balance Phase II EVR Systems

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– Appendix I –

Survey of Number of GDFs with Assist and Balance Phase II EVR Systems

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The purpose of this document is to provide the results of an April 2018 survey of Air Pollution Control Districts and Air Quality Management Districts (Air Districts) to estimate the percentage of gas dispensing facilities (GDF) throughout California that have vacuum assist versus balance Phase II Enhanced Vapor Recovery (EVR) systems. CARB staff previously queried the Air Districts in 2013 and 2015. However, updated information is needed for rulemaking cost estimate calculations because industry contacts indicate the number of assist systems has declined since 2015.

In response to CARB staff's request for information, the secretary of the California Air Pollution Control Officers Association (CAPCOA) Vapor Recovery Subcommittee circulated an email to CAPCOA members requesting the following:

- Number of GDFs equipped with assist Phase II EVR systems per Executive Order VR-201-V
- Number of GDFs equipped with assist Phase II EVR systems and In-Station Diagnostics (ISD) per Executive Order VR-202-V
- Number of GDFs equipped with balance Phase II EVR systems per Executive Order VR-203-W
- Number of GDFs equipped with balance Phase II EVR systems and ISD per Executive Order VR-204-W

Seventeen of the 35 Air Districts responded to the survey, including the five largest Air Districts that contain more than 80 percent of GDFs in the state: South Coast (Los Angeles), San Francisco Bay Area, San Joaquin Valley, San Diego, and Sacramento Metro. Table I-1 provides the survey results. The seventeen Air Districts reported EVR system information for 9,523 GDFs, which account for approximately 93 percent of GDFs in California, given the California Energy Commission estimated there were 10,202 retail GDFs in California in 2016 [CEC, 2017a and 2018]. Consequently, CARB staff concludes the survey results are representative of statewide conditions.

The 2018 survey results indicate that about 52 percent of GDFs have vacuum assist systems, and 48 percent have balance systems. This indicates that the percentage of GDFs with vacuum assist systems has declined, from about 67 percent in 2013 [CARB, 2017d].

Table I-1: Number of GDFs with Assist and Balance Phase II EVR Systems – April 2018 Survey of California Air Districts

Air District	# of GDFs					
	VR-201 Assist Phase II EVR	VR-202 Assist Phase II EVR with ISD	VR-203 Balance Phase II EVR	VR-204 Balance Phase II EVR with ISD	ASSIST TOTAL	BALANCE TOTAL
South Coast	505	1632	276	1530	2,137	1,806
Bay Area	109	637	196	707	746	903
San Joaquin Valley	309	448	270	470	757	740
San Diego	130	378	110	223	508	333
Sacramento Metro	42	188	39	97	230	136
Monterey Bay	49	91	21	107	140	128
Mojave Desert	39	77	27	79	116	106
Santa Barbara	13	42	3	68	55	71
Yolo Solano	10	36	17	58	46	75
San Luis Obispo Co.	7	19	22	51	26	73
Antelope Valley	4	20	24	45	24	69
Butte County	26	33	10	10	59	20
Feather River	4	16	23	22	20	45
El Dorado Co.	14	29	7	12	43	19
Mendocino Co.	9	3	16	10	12	26
Tehama County	5	17	7	7	22	14
Glenn Co.	7	2	2	7	9	9
Subtotal:	1,282	3,668	1,070	3,503	4950	4,573
% of Assist GDF with ISD:		74%	% of Total:		52%	48%
				Total # of GDFs:	9,523	

REFERENCES

- CARB. 2017d. 2013/2014 Field Study to Determine the Extent of the Overpressure Issue Occurring at California Gasoline Dispensing Facilities, Report Number VR-OP-G2. Overpressure Study Technical Support Document prepared by staff of the Vapor Recovery and Fuel Transfer Branch, Monitoring and Laboratory Division (MLD), California Air Resources Board (CARB). December 7, 2017. (Extent of Overpressure Study) Available at: <https://www.arb.ca.gov/vapor/op/studies/gdf/vropg2.pdf>
- CEC. 2017a. 2016 California Annual Retail Fuel Outlet Report Results (CEC-A15). Microsoft Excel file dated October 10, 2017, downloaded from California Energy Commission (CEC) website accessed on April 24, 2018: http://www.energy.ca.gov/almanac/transportation_data/gasoline/piira_retail_survey.html
- CEC. 2018. California Retail Fuel Outlet Annual Reporting (CEC-A15) Results for 2016. California Energy Commission (CEC) website accessed on April 24, 2018: http://www.energy.ca.gov/almanac/transportation_data/gasoline/piira_retail_survey.html