APPENDIX A AIR QUALITY MODELING RESULTS

P16-0667

Thornton 8 Mile ARCO - Commercial - San Joaquin County, Annual

Thornton 8 Mile ARCO - Commercial

San Joaquin County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Fast Food Restaurant with Drive Thru	3.46	1000sqft	0.08	3,462.00	0
Convenience Market With Gas Pumps	16.00	Pump	0.05	3,799.00	0
Free-Standing Discount Store	4.00	1000sqft	0.09	4,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.7	Precipitation Freq (Days)	51
Climate Zone	2			Operational Year	2019
Utility Company	Pacific Gas & Electric Com	pany			
CO2 Intensity (Ib/MWhr)	641.35	CH4 Intensity (Ib/MWhr)	0.029	N2O Intensity 0 (Ib/MWhr)	.006

1.3 User Entered Comments & Non-Default Data

CalEEMod Version: CalEEMod.2016.3.1

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Project Characteristics -

Land Use - Per site plan.

Construction Phase - Anticipated construction schedule.

Grading - Site acreage.

Architectural Coating - Per SJVAPCD rule.

Vehicle Trips - Per project traffic study.

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Area Coating - Per SJVAPCD rule.

Mobile Land Use Mitigation -

Energy Mitigation -

Water Mitigation -

Waste Mitigation -

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Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	150.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	150.00	50.00
tblArchitecturalCoating	EF_Parking	150.00	0.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	150	50
tblAreaCoating	Area_EF_Nonresidential_Interior	150	50
tblAreaCoating	Area_EF_Parking	150	0
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	15
tblConstructionPhase	NumDays	5.00	7.00
tblConstructionPhase	NumDays	10.00	2.00
tblConstructionPhase	NumDays	2.00	3.00
tblConstructionPhase	NumDays	1.00	3.00
tblGrading	AcresOfGrading	1.50	2.10
tblLandUse	BuildingSpaceSquareFeet	3,460.00	3,462.00
tblLandUse	BuildingSpaceSquareFeet	2,258.80	3,799.00
tblLandUse	LandUseSquareFeet	3,460.00	3,462.00
tblLandUse	LandUseSquareFeet	2,258.80	3,799.00
tblProjectCharacteristics	OperationalYear	2018	2019
tblVehicleTrips	WD_TR	542.60	152.84
tblVehicleTrips	WD_TR	57.24	42.70

2.0 Emissions Summary

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2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year					ton	s/yr							МТ	/yr		
2018	0.0895	0.6335	0.4513	7.0000e- 004	5.1400e- 003	0.0396	0.0447	1.5300e- 003	0.0365	0.0380	0.0000	64.1553	64.1553	0.0182	0.0000	64.6090
Maximum	0.0895	0.6335	0.4513	7.0000e- 004	5.1400e- 003	0.0396	0.0447	1.5300e- 003	0.0365	0.0380	0.0000	64.1553	64.1553	0.0182	0.0000	64.6090

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year					ton	s/yr							МТ	/yr		
2018	0.0895	0.6335	0.4513	7.0000e- 004	3.9100e- 003	0.0396	0.0435	1.1200e- 003	0.0365	0.0376	0.0000	64.1552	64.1552	0.0182	0.0000	64.6089
Maximum	0.0895	0.6335	0.4513	7.0000e- 004	3.9100e- 003	0.0396	0.0435	1.1200e- 003	0.0365	0.0376	0.0000	64.1552	64.1552	0.0182	0.0000	64.6089

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	23.93	0.00	2.75	26.80	0.00	1.08	0.00	0.00	0.00	0.00	0.00	0.00

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Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	4-1-2018	6-30-2018	0.3968	0.3968
2	7-1-2018	9-30-2018	0.3224	0.3224
		Highest	0.3968	0.3968

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Area	0.0466	0.0000	2.2000e- 004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.2000e- 004	4.2000e- 004	0.0000	0.0000	4.5000e- 004
Energy	2.5400e- 003	0.0231	0.0194	1.4000e- 004		1.7600e- 003	1.7600e- 003		1.7600e- 003	1.7600e- 003	0.0000	84.7828	84.7828	3.1800e- 003	1.0200e- 003	85.1659
Mobile	1.3399	7.3999	9.4340	0.0235	1.2882	0.0292	1.3173	0.3455	0.0275	0.3730	0.0000	2,166.717 7	2,166.717 7	0.2076	0.0000	2,171.908 4
Waste	n 11 11 11 11					0.0000	0.0000		0.0000	0.0000	11.5827	0.0000	11.5827	0.6845	0.0000	28.6956
Water	n					0.0000	0.0000		0.0000	0.0000	0.4803	2.7405	3.2208	0.0495	1.1900e- 003	4.8118
Total	1.3890	7.4230	9.4536	0.0236	1.2882	0.0309	1.3191	0.3455	0.0293	0.3748	12.0629	2,254.241 5	2,266.304 4	0.9448	2.2100e- 003	2,290.582 2

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2.2 Overall Operational

Mitigated Operational

	ROG	NC)x	СО	S	02	Fugiti PM ²	ive 10	Exhaust PM10	PM10 Tota) Fuç I Pl	gitive M2.5	Exhai PM2	ust 2.5	PM2.5 Tota	l Bio	- CO2	NBio- C	D2 Tot	al CO2	CH	14	N2O	CC)2e
Category								tons	/yr											MT	/yr				
Area	0.0466	0.00	000	2.2000e 004	- 0.0	0000			0.0000	0.000	0		0.00	000	0.0000	0.	0000	4.2000e 004	- 4.2	000e- 004	0.00	000	0.0000	4.50 00	00e-)4
Energy	2.5400e- 003	0.02	231	0.0194	1.40 0	000e- 004			1.7600e- 003	1.7600 003)e-		1.760 003)0e- 3	1.7600e- 003	0.	0000	84.782	3 84	.7828	3.18 00	00e- 03	1.0200e- 003	85.1	659
Mobile	1.3178	7.18	335	8.9442	0.0	0215	1.13	62	0.0267	1.162	9 0.3	3047	0.02	52	0.3300	0.	0000	1,987.50 0	i0 1,9	87.560 0	0.20	020	0.0000	1,992 9	2.609 €
Waste	f;								0.0000	0.000	0		0.00	00	0.0000	2.	8957	0.0000	2.	8957	0.17	711	0.0000	7.1	739
Water	f;								0.0000	0.000	0		0.00	00	0.0000	0.	3842	2.1924	2.	5766	0.03	396	9.5000e- 004	3.84	495
Total	1.3669	7.20	066	8.9638	0.0)217	1.13	62	0.0285	1.164	7 0.3	3047	0.02	270	0.3317	3.	2799	2,074.53 6	35 2,0	77.815 5	0.41	159	1.9700e- 003	2,088 7	3.799 7
	ROG		NO	x	со	sc	02	Fugit PM1	ive Exi 10 P	haust M10	PM10 Total	Fugi PM	itive 12.5	Exha PM	aust PM 2.5 To	2.5 Ital	Bio- C	CO2 NE	io-CO2	Total	CO2	CH4	Ν	20	CO2e
Percent Reduction	1.59		2.91	1	5.18	8.2	25	11.8	30 7	7.83	11.71	11	.80	7.8	86 11	.49	72.8	31	7.97	8.3	2	55.98	10	.86	8.81

3.0 Construction Detail

Construction Phase

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Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	4/1/2018	4/3/2018	5	2	
2	Site Preparation	Site Preparation	4/4/2018	4/7/2018	5	3	
3	Grading	Grading	4/8/2018	4/11/2018	5	3	
4	Building Construction	Building Construction	4/12/2018	8/29/2018	5	100	
5	Paving	Paving	8/30/2018	9/5/2018	5	5	
6	Architectural Coating	Architectural Coating	9/6/2018	9/14/2018	5	7	

Acres of Grading (Site Preparation Phase): 2.1

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 16,892; Non-Residential Outdoor: 5,631; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Grading	Concrete/Industrial Saws	1	8.00	81	0.73
Building Construction	Cranes	1	4.00	231	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Site Preparation	Graders	1	8.00	187	0.41
Paving	Pavers	1	7.00	130	0.42
Paving	Rollers	1	7.00	80	0.38
Demolition	Rubber Tired Dozers	1	1.00	247	0.40
Grading	Rubber Tired Dozers	1	1.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Demolition	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Grading	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37

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Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Architectural Coating	1	1.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	5	4.00	2.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Demolition	4	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	2	5.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

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3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Demolition - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							ΜT	ī/yr		
Off-Road	1.0600e- 003	9.4300e- 003	7.7800e- 003	1.0000e- 005		6.2000e- 004	6.2000e- 004	1 1 1	5.9000e- 004	5.9000e- 004	0.0000	1.0608	1.0608	2.0000e- 004	0.0000	1.0659
Total	1.0600e- 003	9.4300e- 003	7.7800e- 003	1.0000e- 005		6.2000e- 004	6.2000e- 004		5.9000e- 004	5.9000e- 004	0.0000	1.0608	1.0608	2.0000e- 004	0.0000	1.0659

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3.2 Demolition - 2018

Unmitigated Construction Off-Site

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	'/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.0000e- 005	4.0000e- 005	3.6000e- 004	0.0000	8.0000e- 005	0.0000	8.0000e- 005	2.0000e- 005	0.0000	2.0000e- 005	0.0000	0.0750	0.0750	0.0000	0.0000	0.0751
Total	5.0000e- 005	4.0000e- 005	3.6000e- 004	0.0000	8.0000e- 005	0.0000	8.0000e- 005	2.0000e- 005	0.0000	2.0000e- 005	0.0000	0.0750	0.0750	0.0000	0.0000	0.0751

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	'/yr		
Off-Road	1.0600e- 003	9.4300e- 003	7.7800e- 003	1.0000e- 005		6.2000e- 004	6.2000e- 004		5.9000e- 004	5.9000e- 004	0.0000	1.0608	1.0608	2.0000e- 004	0.0000	1.0659
Total	1.0600e- 003	9.4300e- 003	7.7800e- 003	1.0000e- 005		6.2000e- 004	6.2000e- 004		5.9000e- 004	5.9000e- 004	0.0000	1.0608	1.0608	2.0000e- 004	0.0000	1.0659

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3.2 Demolition - 2018

Mitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	'/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.0000e- 005	4.0000e- 005	3.6000e- 004	0.0000	8.0000e- 005	0.0000	8.0000e- 005	2.0000e- 005	0.0000	2.0000e- 005	0.0000	0.0750	0.0750	0.0000	0.0000	0.0751
Total	5.0000e- 005	4.0000e- 005	3.6000e- 004	0.0000	8.0000e- 005	0.0000	8.0000e- 005	2.0000e- 005	0.0000	2.0000e- 005	0.0000	0.0750	0.0750	0.0000	0.0000	0.0751

3.3 Site Preparation - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Fugitive Dust					1.1100e- 003	0.0000	1.1100e- 003	1.2000e- 004	0.0000	1.2000e- 004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.1800e- 003	0.0146	6.3800e- 003	1.0000e- 005		6.3000e- 004	6.3000e- 004		5.8000e- 004	5.8000e- 004	0.0000	1.3373	1.3373	4.2000e- 004	0.0000	1.3477
Total	1.1800e- 003	0.0146	6.3800e- 003	1.0000e- 005	1.1100e- 003	6.3000e- 004	1.7400e- 003	1.2000e- 004	5.8000e- 004	7.0000e- 004	0.0000	1.3373	1.3373	4.2000e- 004	0.0000	1.3477

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3.3 Site Preparation - 2018

Unmitigated Construction Off-Site

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e- 005	3.0000e- 005	2.7000e- 004	0.0000	6.0000e- 005	0.0000	6.0000e- 005	2.0000e- 005	0.0000	2.0000e- 005	0.0000	0.0563	0.0563	0.0000	0.0000	0.0563
Total	4.0000e- 005	3.0000e- 005	2.7000e- 004	0.0000	6.0000e- 005	0.0000	6.0000e- 005	2.0000e- 005	0.0000	2.0000e- 005	0.0000	0.0563	0.0563	0.0000	0.0000	0.0563

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Fugitive Dust			, , ,		5.0000e- 004	0.0000	5.0000e- 004	5.0000e- 005	0.0000	5.0000e- 005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.1800e- 003	0.0146	6.3800e- 003	1.0000e- 005		6.3000e- 004	6.3000e- 004		5.8000e- 004	5.8000e- 004	0.0000	1.3373	1.3373	4.2000e- 004	0.0000	1.3477
Total	1.1800e- 003	0.0146	6.3800e- 003	1.0000e- 005	5.0000e- 004	6.3000e- 004	1.1300e- 003	5.0000e- 005	5.8000e- 004	6.3000e- 004	0.0000	1.3373	1.3373	4.2000e- 004	0.0000	1.3477

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3.3 Site Preparation - 2018

Mitigated Construction Off-Site

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					tons	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e- 005	3.0000e- 005	2.7000e- 004	0.0000	6.0000e- 005	0.0000	6.0000e- 005	2.0000e- 005	0.0000	2.0000e- 005	0.0000	0.0563	0.0563	0.0000	0.0000	0.0563
Total	4.0000e- 005	3.0000e- 005	2.7000e- 004	0.0000	6.0000e- 005	0.0000	6.0000e- 005	2.0000e- 005	0.0000	2.0000e- 005	0.0000	0.0563	0.0563	0.0000	0.0000	0.0563

3.4 Grading - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	ī/yr		
Fugitive Dust			, , ,		1.1300e- 003	0.0000	1.1300e- 003	6.2000e- 004	0.0000	6.2000e- 004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.6000e- 003	0.0141	0.0117	2.0000e- 005		9.3000e- 004	9.3000e- 004		8.9000e- 004	8.9000e- 004	0.0000	1.5912	1.5912	3.1000e- 004	0.0000	1.5989
Total	1.6000e- 003	0.0141	0.0117	2.0000e- 005	1.1300e- 003	9.3000e- 004	2.0600e- 003	6.2000e- 004	8.9000e- 004	1.5100e- 003	0.0000	1.5912	1.5912	3.1000e- 004	0.0000	1.5989

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3.4 Grading - 2018

Unmitigated Construction Off-Site

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.0000e- 005	6.0000e- 005	5.4000e- 004	0.0000	1.2000e- 004	0.0000	1.2000e- 004	3.0000e- 005	0.0000	3.0000e- 005	0.0000	0.1126	0.1126	0.0000	0.0000	0.1127
Total	7.0000e- 005	6.0000e- 005	5.4000e- 004	0.0000	1.2000e- 004	0.0000	1.2000e- 004	3.0000e- 005	0.0000	3.0000e- 005	0.0000	0.1126	0.1126	0.0000	0.0000	0.1127

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	ī/yr		
Fugitive Dust					5.1000e- 004	0.0000	5.1000e- 004	2.8000e- 004	0.0000	2.8000e- 004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.6000e- 003	0.0141	0.0117	2.0000e- 005		9.3000e- 004	9.3000e- 004		8.9000e- 004	8.9000e- 004	0.0000	1.5912	1.5912	3.1000e- 004	0.0000	1.5989
Total	1.6000e- 003	0.0141	0.0117	2.0000e- 005	5.1000e- 004	9.3000e- 004	1.4400e- 003	2.8000e- 004	8.9000e- 004	1.1700e- 003	0.0000	1.5912	1.5912	3.1000e- 004	0.0000	1.5989

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3.4 Grading - 2018

Mitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.0000e- 005	6.0000e- 005	5.4000e- 004	0.0000	1.2000e- 004	0.0000	1.2000e- 004	3.0000e- 005	0.0000	3.0000e- 005	0.0000	0.1126	0.1126	0.0000	0.0000	0.1127
Total	7.0000e- 005	6.0000e- 005	5.4000e- 004	0.0000	1.2000e- 004	0.0000	1.2000e- 004	3.0000e- 005	0.0000	3.0000e- 005	0.0000	0.1126	0.1126	0.0000	0.0000	0.1127

3.5 Building Construction - 2018

Unmitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Off-Road	0.0542	0.5516	0.3876	5.7000e- 004		0.0354	0.0354		0.0326	0.0326	0.0000	52.0058	52.0058	0.0162	0.0000	52.4106
Total	0.0542	0.5516	0.3876	5.7000e- 004		0.0354	0.0354		0.0326	0.0326	0.0000	52.0058	52.0058	0.0162	0.0000	52.4106

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3.5 Building Construction - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	5.7000e- 004	0.0138	3.2500e- 003	3.0000e- 005	6.6000e- 004	1.2000e- 004	7.8000e- 004	1.9000e- 004	1.1000e- 004	3.0000e- 004	0.0000	2.7308	2.7308	1.9000e- 004	0.0000	2.7355
Worker	9.7000e- 004	7.4000e- 004	7.1900e- 003	2.0000e- 005	1.5900e- 003	1.0000e- 005	1.6000e- 003	4.2000e- 004	1.0000e- 005	4.3000e- 004	0.0000	1.5009	1.5009	5.0000e- 005	0.0000	1.5022
Total	1.5400e- 003	0.0146	0.0104	5.0000e- 005	2.2500e- 003	1.3000e- 004	2.3800e- 003	6.1000e- 004	1.2000e- 004	7.3000e- 004	0.0000	4.2316	4.2316	2.4000e- 004	0.0000	4.2376

Mitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					tons	s/yr							MT	/yr		
Off-Road	0.0542	0.5516	0.3876	5.7000e- 004		0.0354	0.0354		0.0326	0.0326	0.0000	52.0058	52.0058	0.0162	0.0000	52.4105
Total	0.0542	0.5516	0.3876	5.7000e- 004		0.0354	0.0354		0.0326	0.0326	0.0000	52.0058	52.0058	0.0162	0.0000	52.4105

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3.5 Building Construction - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	5.7000e- 004	0.0138	3.2500e- 003	3.0000e- 005	6.6000e- 004	1.2000e- 004	7.8000e- 004	1.9000e- 004	1.1000e- 004	3.0000e- 004	0.0000	2.7308	2.7308	1.9000e- 004	0.0000	2.7355
Worker	9.7000e- 004	7.4000e- 004	7.1900e- 003	2.0000e- 005	1.5900e- 003	1.0000e- 005	1.6000e- 003	4.2000e- 004	1.0000e- 005	4.3000e- 004	0.0000	1.5009	1.5009	5.0000e- 005	0.0000	1.5022
Total	1.5400e- 003	0.0146	0.0104	5.0000e- 005	2.2500e- 003	1.3000e- 004	2.3800e- 003	6.1000e- 004	1.2000e- 004	7.3000e- 004	0.0000	4.2316	4.2316	2.4000e- 004	0.0000	4.2376

3.6 Paving - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Off-Road	2.3000e- 003	0.0219	0.0181	3.0000e- 005		1.2800e- 003	1.2800e- 003		1.1800e- 003	1.1800e- 003	0.0000	2.4270	2.4270	6.8000e- 004	0.0000	2.4441
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	2.3000e- 003	0.0219	0.0181	3.0000e- 005		1.2800e- 003	1.2800e- 003		1.1800e- 003	1.1800e- 003	0.0000	2.4270	2.4270	6.8000e- 004	0.0000	2.4441

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3.6 Paving - 2018

Unmitigated Construction Off-Site

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.2000e- 004	1.7000e- 004	1.6200e- 003	0.0000	3.6000e- 004	0.0000	3.6000e- 004	1.0000e- 004	0.0000	1.0000e- 004	0.0000	0.3377	0.3377	1.0000e- 005	0.0000	0.3380
Total	2.2000e- 004	1.7000e- 004	1.6200e- 003	0.0000	3.6000e- 004	0.0000	3.6000e- 004	1.0000e- 004	0.0000	1.0000e- 004	0.0000	0.3377	0.3377	1.0000e- 005	0.0000	0.3380

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	ī/yr		
Off-Road	2.3000e- 003	0.0219	0.0181	3.0000e- 005		1.2800e- 003	1.2800e- 003		1.1800e- 003	1.1800e- 003	0.0000	2.4270	2.4270	6.8000e- 004	0.0000	2.4441
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	2.3000e- 003	0.0219	0.0181	3.0000e- 005		1.2800e- 003	1.2800e- 003		1.1800e- 003	1.1800e- 003	0.0000	2.4270	2.4270	6.8000e- 004	0.0000	2.4441

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3.6 Paving - 2018

Mitigated Construction Off-Site

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.2000e- 004	1.7000e- 004	1.6200e- 003	0.0000	3.6000e- 004	0.0000	3.6000e- 004	1.0000e- 004	0.0000	1.0000e- 004	0.0000	0.3377	0.3377	1.0000e- 005	0.0000	0.3380
Total	2.2000e- 004	1.7000e- 004	1.6200e- 003	0.0000	3.6000e- 004	0.0000	3.6000e- 004	1.0000e- 004	0.0000	1.0000e- 004	0.0000	0.3377	0.3377	1.0000e- 005	0.0000	0.3380

3.7 Architectural Coating - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Archit. Coating	0.0261					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.0500e- 003	7.0200e- 003	6.4900e- 003	1.0000e- 005		5.3000e- 004	5.3000e- 004		5.3000e- 004	5.3000e- 004	0.0000	0.8936	0.8936	8.0000e- 005	0.0000	0.8958
Total	0.0272	7.0200e- 003	6.4900e- 003	1.0000e- 005		5.3000e- 004	5.3000e- 004		5.3000e- 004	5.3000e- 004	0.0000	0.8936	0.8936	8.0000e- 005	0.0000	0.8958

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3.7 Architectural Coating - 2018

Unmitigated Construction Off-Site

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.0000e- 005	1.0000e- 005	1.3000e- 004	0.0000	3.0000e- 005	0.0000	3.0000e- 005	1.0000e- 005	0.0000	1.0000e- 005	0.0000	0.0263	0.0263	0.0000	0.0000	0.0263
Total	2.0000e- 005	1.0000e- 005	1.3000e- 004	0.0000	3.0000e- 005	0.0000	3.0000e- 005	1.0000e- 005	0.0000	1.0000e- 005	0.0000	0.0263	0.0263	0.0000	0.0000	0.0263

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	ī/yr		
Archit. Coating	0.0261	1	, , ,			0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.0500e- 003	7.0200e- 003	6.4900e- 003	1.0000e- 005		5.3000e- 004	5.3000e- 004		5.3000e- 004	5.3000e- 004	0.0000	0.8936	0.8936	8.0000e- 005	0.0000	0.8958
Total	0.0272	7.0200e- 003	6.4900e- 003	1.0000e- 005		5.3000e- 004	5.3000e- 004		5.3000e- 004	5.3000e- 004	0.0000	0.8936	0.8936	8.0000e- 005	0.0000	0.8958

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3.7 Architectural Coating - 2018

Mitigated Construction Off-Site

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.0000e- 005	1.0000e- 005	1.3000e- 004	0.0000	3.0000e- 005	0.0000	3.0000e- 005	1.0000e- 005	0.0000	1.0000e- 005	0.0000	0.0263	0.0263	0.0000	0.0000	0.0263
Total	2.0000e- 005	1.0000e- 005	1.3000e- 004	0.0000	3.0000e- 005	0.0000	3.0000e- 005	1.0000e- 005	0.0000	1.0000e- 005	0.0000	0.0263	0.0263	0.0000	0.0000	0.0263

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Increase Diversity

Increase Transit Accessibility

Improve Pedestrian Network

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Mitigated	1.3178	7.1835	8.9442	0.0215	1.1362	0.0267	1.1629	0.3047	0.0252	0.3300	0.0000	1,987.560 0	1,987.560 0	0.2020	0.0000	1,992.609 9
Unmitigated	1.3399	7.3999	9.4340	0.0235	1.2882	0.0292	1.3173	0.3455	0.0275	0.3730	0.0000	2,166.717 7	2,166.717 7	0.2076	0.0000	2,171.908 4

4.2 Trip Summary Information

	Aver	age Daily Trip Ra	ite	Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Convenience Market With Gas Pumps	2,445.44	3,271.52	2670.08	1,392,260	1,227,973
Fast Food Restaurant with Drive Thru	1,716.58	2,498.22	1877.81	1,729,691	1,525,587
Free-Standing Discount Store	170.80	284.28	225.44	303,771	267,926
Total	4,332.82	6,054.02	4,773.33	3,425,722	3,021,487

4.3 Trip Type Information

		Miles			Trip %			Trip Purpos	e %
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Convenience Market With Gas	9.50	7.30	7.30	0.80	80.20	19.00	14	21	65
Fast Food Restaurant with Drive	9.50	7.30	7.30	2.20	78.80	19.00	29	21	50
Free-Standing Discount Store	9.50	7.30	7.30	12.20	68.80	19.00	47.5	35.5	17

4.4 Fleet Mix

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Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Fast Food Restaurant with Drive Thru	0.540593	0.038119	0.180116	0.134753	0.022260	0.005220	0.015807	0.053428	0.001181	0.001630	0.005273	0.000623	0.000996
Convenience Market With Gas Pumps	0.540593	0.038119	0.180116	0.134753	0.022260	0.005220	0.015807	0.053428	0.001181	0.001630	0.005273	0.000623	0.000996
Free-Standing Discount Store	0.540593	0.038119	0.180116	0.134753	0.022260	0.005220	0.015807	0.053428	0.001181	0.001630	0.005273	0.000623	0.000996

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	59.6409	59.6409	2.7000e- 003	5.6000e- 004	59.8746
Electricity Unmitigated	6,					0.0000	0.0000		0.0000	0.0000	0.0000	59.6409	59.6409	2.7000e- 003	5.6000e- 004	59.8746
NaturalGas Mitigated	2.5400e- 003	0.0231	0.0194	1.4000e- 004		1.7600e- 003	1.7600e- 003		1.7600e- 003	1.7600e- 003	0.0000	25.1420	25.1420	4.8000e- 004	4.6000e- 004	25.2914
NaturalGas Unmitigated	2.5400e- 003	0.0231	0.0194	1.4000e- 004		1.7600e- 003	1.7600e- 003	 	1.7600e- 003	1.7600e- 003	0.0000	25.1420	25.1420	4.8000e- 004	4.6000e- 004	25.2914

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5.2 Energy by Land Use - NaturalGas

<u>Unmitigated</u>

	NaturalGa s Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr					ton	s/yr							MT	/yr		
Convenience Market With Gas Pumps	44638.3	2.4000e- 004	2.1900e- 003	1.8400e- 003	1.0000e- 005		1.7000e- 004	1.7000e- 004		1.7000e- 004	1.7000e- 004	0.0000	2.3821	2.3821	5.0000e- 005	4.0000e- 005	2.3962
Fast Food Restaurant with Drive Thru	379504	2.0500e- 003	0.0186	0.0156	1.1000e- 004	F 	1.4100e- 003	1.4100e- 003		1.4100e- 003	1.4100e- 003	0.0000	20.2518	20.2518	3.9000e- 004	3.7000e- 004	20.3722
Free-Standing Discount Store	47000	2.5000e- 004	2.3000e- 003	1.9400e- 003	1.0000e- 005		1.8000e- 004	1.8000e- 004		1.8000e- 004	1.8000e- 004	0.0000	2.5081	2.5081	5.0000e- 005	5.0000e- 005	2.5230
Total		2.5400e- 003	0.0231	0.0194	1.3000e- 004		1.7600e- 003	1.7600e- 003		1.7600e- 003	1.7600e- 003	0.0000	25.1420	25.1420	4.9000e- 004	4.6000e- 004	25.2914

Mitigated

	NaturalGa s Use	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr					ton	s/yr							МТ	'/yr		
Convenience Market With Gas Pumps	44638.3	2.4000e- 004	2.1900e- 003	1.8400e- 003	1.0000e- 005		1.7000e- 004	1.7000e- 004		1.7000e- 004	1.7000e- 004	0.0000	2.3821	2.3821	5.0000e- 005	4.0000e- 005	2.3962
Fast Food Restaurant with Drive Thru	379504	2.0500e- 003	0.0186	0.0156	1.1000e- 004	F F F F	1.4100e- 003	1.4100e- 003		1.4100e- 003	1.4100e- 003	0.0000	20.2518	20.2518	3.9000e- 004	3.7000e- 004	20.3722
Free-Standing Discount Store	47000	2.5000e- 004	2.3000e- 003	1.9400e- 003	1.0000e- 005		1.8000e- 004	1.8000e- 004		1.8000e- 004	1.8000e- 004	0.0000	2.5081	2.5081	5.0000e- 005	5.0000e- 005	2.5230
Total		2.5400e- 003	0.0231	0.0194	1.3000e- 004		1.7600e- 003	1.7600e- 003		1.7600e- 003	1.7600e- 003	0.0000	25.1420	25.1420	4.9000e- 004	4.6000e- 004	25.2914

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5.3 Energy by Land Use - Electricity

<u>Unmitigated</u>

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr		ΜT	7/yr	
Convenience Market With Gas Pumps	46119.9	13.4168	6.1000e- 004	1.3000e- 004	13.4694
Fast Food Restaurant with Drive Thru	110334	32.0974	1.4500e- 003	3.0000e- 004	32.2232
Free-Standing Discount Store	48560	14.1267	6.4000e- 004	1.3000e- 004	14.1820
Total		59.6409	2.7000e- 003	5.6000e- 004	59.8746

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr		ΜT	/yr	
Convenience Market With Gas Pumps	46119.9	13.4168	6.1000e- 004	1.3000e- 004	13.4694
Fast Food Restaurant with Drive Thru	110334	32.0974	1.4500e- 003	3.0000e- 004	32.2232
Free-Standing Discount Store	48560	14.1267	6.4000e- 004	1.3000e- 004	14.1820
Total		59.6409	2.7000e- 003	5.6000e- 004	59.8746

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6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Mitigated	0.0466	0.0000	2.2000e- 004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.2000e- 004	4.2000e- 004	0.0000	0.0000	4.5000e- 004
Unmitigated	0.0466	0.0000	2.2000e- 004	0.0000	 , , ,	0.0000	0.0000	 , , ,	0.0000	0.0000	0.0000	4.2000e- 004	4.2000e- 004	0.0000	0.0000	4.5000e- 004

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6.2 Area by SubCategory

<u>Unmitigated</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory					ton	s/yr							МТ	/yr		
Architectural Coating	2.6100e- 003		, , ,			0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0440					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.0000e- 005	0.0000	2.2000e- 004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.2000e- 004	4.2000e- 004	0.0000	0.0000	4.5000e- 004
Total	0.0466	0.0000	2.2000e- 004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.2000e- 004	4.2000e- 004	0.0000	0.0000	4.5000e- 004

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory					ton	s/yr							МТ	/yr		
Architectural Coating	2.6100e- 003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0440					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.0000e- 005	0.0000	2.2000e- 004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.2000e- 004	4.2000e- 004	0.0000	0.0000	4.5000e- 004
Total	0.0466	0.0000	2.2000e- 004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.2000e- 004	4.2000e- 004	0.0000	0.0000	4.5000e- 004

7.0 Water Detail

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7.1 Mitigation Measures Water

Apply Water Conservation Strategy

	Total CO2	CH4	N2O	CO2e	
Category	MT/yr				
Mitigated	2.5766	0.0396	9.5000e- 004	3.8495	
Unmitigated	3.2208	0.0495	1.1900e- 003	4.8118	

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7.2 Water by Land Use

<u>Unmitigated</u>

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Convenience Market With Gas Pumps	0.167315/ 0.102548	0.4209	5.4700e- 003	1.3000e- 004	0.5970
Fast Food Restaurant with Drive Thru	1.05023 / 0.0670357	2.0546	0.0343	8.2000e- 004	3.1577
Free-Standing Discount Store	0.29629 / 0.181597	0.7453	9.6800e- 003	2.3000e- 004	1.0572
Total		3.2208	0.0495	1.1800e- 003	4.8118

Mitigated

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Convenience Market With Gas Pumps	0.133852/ 0.0820383	0.3367	4.3700e- 003	1.1000e- 004	0.4776
Fast Food Restaurant with Drive Thru	0.840181 / 0.0536286	1.6437	0.0274	6.6000e- 004	2.5262
Free-Standing Discount Store	0.237032/ 0.145278	0.5962	7.7500e- 003	1.9000e- 004	0.8457
Total		2.5766	0.0396	9.6000e- 004	3.8495

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8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

Category/Year

	Total CO2	CH4	N2O	CO2e	
	MT/yr				
Mitigated	2.8957	0.1711	0.0000	7.1739	
Unmitigated	11.5827	0.6845	0.0000	28.6956	

CalEEMod Version: CalEEMod.2016.3.1

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8.2 Waste by Land Use

<u>Unmitigated</u>

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons		MT	ī/yr	
Fast Food Restaurant with Drive Thru	39.86	8.0912	0.4782	0.0000	20.0457
Free-Standing Discount Store	17.2	3.4914	0.2063	0.0000	8.6499
Total		11.5827	0.6845	0.0000	28.6956

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons		MT	/yr	
Fast Food Restaurant with Drive Thru	9.965	2.0228	0.1195	0.0000	5.0114
Free-Standing Discount Store	4.3	0.8729	0.0516	0.0000	2.1625
Total		2.8957	0.1711	0.0000	7.1739

9.0 Operational Offroad

Days/Year

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10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
<u>Boilers</u>						
Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type	
User Defined Equipment						I .
Equipment Type	Number					

11.0 Vegetation

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Thornton 8 Mile ARCO - Residential

San Joaquin County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Apartments Low Rise	234.00	Dwelling Unit	7.98	234,000.00	742

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.7	Precipitation Freq (Days)	51
Climate Zone	2			Operational Year	2020
Utility Company	Pacific Gas & Electric Com	pany			
CO2 Intensity (Ib/MWhr)	641.35	CH4 Intensity (Ib/MWhr)	0.029	N2O Intensity (Ib/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

CalEEMod Version: CalEEMod.2016.3.1

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Project Characteristics -

Land Use - Per site plan.

Construction Phase - Anticipated construction schedule.

Grading - Totsl acres to be graded.

Architectural Coating - Per SJVAPCD rule.

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Area Coating - Per SJVAPCD rule.

Mobile Land Use Mitigation -

Water Mitigation -

Waste Mitigation -

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Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Parking	150.00	0.00
tblArchitecturalCoating	EF_Residential_Exterior	150.00	50.00
tblArchitecturalCoating	EF_Residential_Interior	150.00	50.00
tblAreaCoating	Area_EF_Parking	150	0
tblAreaCoating	Area_EF_Residential_Exterior	150	50
tblAreaCoating	Area_EF_Residential_Interior	150	50
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	15
tblConstructionPhase	NumDays	20.00	15.00
tblConstructionPhase	NumDays	230.00	225.00
tblConstructionPhase	NumDays	20.00	5.00
tblConstructionPhase	NumDays	20.00	10.00
tblConstructionPhase	NumDays	20.00	10.00
tblGrading	AcresOfGrading	5.00	8.00
tblLandUse	LotAcreage	14.63	7.98
tblProjectCharacteristics	OperationalYear	2018	2020

2.0 Emissions Summary
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2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year					ton	s/yr							МТ	/yr		
2019	1.1495	3.3496	2.9634	5.9700e- 003	0.2981	0.1775	0.4756	0.1132	0.1665	0.2797	0.0000	533.4715	533.4715	0.0893	0.0000	535.7040
Maximum	1.1495	3.3496	2.9 <mark>634</mark>	5.9700e- 003	0.2981	0.1775	0.4756	0.1132	0.1665	0.2797	0.0000	533.4715	533.4715	0.0893	0.0000	535.7040

Mitigated Construction

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year					ton	s/yr							MT	/yr		
2019	1.1495	3.3496	2.9634	5.9700e- 003	0.2295	0.1775	0.4070	0.0765	0.1665	0.2430	0.0000	533.4711	533.4711	0.0893	0.0000	535.7036
Maximum	1.1495	3.3496	2.9634	5.9700e- 003	0.2295	0.1775	0.4070	0.0765	0.1665	0.2430	0.0000	533.4711	533.4711	0.0893	0.0000	535.7036

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	23.01	0.00	14.42	32.40	0.00	13.11	0.00	0.00	0.00	0.00	0.00	0.00

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Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	1-1-2019	3-31-2019	1.0583	1.0583
2	4-1-2019	6-30-2019	0.9123	0.9123
3	7-1-2019	9-30-2019	0.9223	0.9223
		Highest	1.0583	1.0583

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category		tons/yr											MT	/yr		
Area	1.2131	0.1318	3.2574	5.4700e- 003		0.2576	0.2576		0.2576	0.2576	32.2609	104.2087	136.4696	0.1555	1.8600e- 003	140.9115
Energy	0.0205	0.1754	0.0746	1.1200e- 003		0.0142	0.0142		0.0142	0.0142	0.0000	532.0349	532.0349	0.0188	6.8000e- 003	534.5308
Mobile	0.5683	3.9533	6.4790	0.0233	1.6818	0.0248	1.7066	0.4510	0.0234	0.4744	0.0000	2,148.946 6	2,148.946 6	0.1068	0.0000	2,151.615 9
Waste						0.0000	0.0000		0.0000	0.0000	21.8500	0.0000	21.8500	1.2913	0.0000	54.1323
Water						0.0000	0.0000		0.0000	0.0000	4.8369	33.7856	38.6225	0.4983	0.0121	54.6703
Total	1.8018	4.2605	9.8111	0.0299	1.6818	0.2966	1.9784	0.4510	0.2951	0.7462	58.9478	2,818.975 8	2,877.923 6	2.0707	0.0207	2,935.860 8

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2.2 Overall Operational

Mitigated Operational

	ROG	NC	Эх	СО	SO	2 Fu F	igitive M10	Exhaust PM10	PM1 Tota	0 Fuç al PN	gitive E M2.5	Exhaust PM2.5	PM2.5 Tot	al Bio	o- CO2	NBio- CO2	2 Tota	I CO2	CH4	Ν	120	CO2e	
Category							tor	ns/yr										MT/y	yr				
Area	1.2131	0.13	318	3.2574	5.470 003	De-		0.2576	0.25	76		0.2576	0.2576	32	2.2609	104.2087	136	.4696	0.155	5 1.8 (600e-)03	140.9115	5
Energy	0.0205	0.17	754	0.0746	1.120 003	De-		0.0142	0.01	42		0.0142	0.0142	0.	.0000	532.0349	532.	.0349	0.018	8 6.8 (000e-)03	534.5308	3
Mobile	0.5097	3.37	792	5.1637	0.01	77 1	.2311	0.0188	1.24	99 0.3	3301	0.0177	0.3479	0.	.0000	1,631.151 5	1,63	1.151 5	0.091	6 0.	0000	1,633.44′ 7	1
Waste	n 1 1 1							0.0000	0.00	00		0.0000	0.0000	5.	.4625	0.0000	5.4	1625	0.322	8 0.0	0000	13.5331	-
Water	,	 - - -						0.0000	0.00	00		0.0000	0.0000	3.	.8695	27.0285	30.	8980	0.398	7 9.6	400e-)03	43.7362	
Total	1.7433	3.68	364	8.4957	0.024	13 1	.2311	0.2906	1.52	16 0.3	3301	0.2895	0.6196	41	.5929	2,294.423 6	2,33	6.016 5	0.987	4 0.	D183	2,366.153 3	3
	ROG		NO	x	со	SO2	Fug Pl	jitive Ex M10	chaust PM10	PM10 Total	Fugitiv PM2.	ve Ext .5 Pl	naust Pl M2.5 T	/12.5 otal	Bio- C	O2 NBic	-CO2	Total C	:02	CH4	N2	0 C	O2e
Percent Reduction	3.25		13.4	18 1	3.41	18.81	26	5.80	2.02	23.09	26.80	0 1	.91 1	6.96	29.4	4 18	.61	18.83	3	52.32	11.	64 19	9.41

3.0 Construction Detail

Construction Phase

Thornton 8 Mile ARCO - Residential - San Joaquin County, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2019	1/7/2019	5	5	
2	Site Preparation	Site Preparation	1/8/2019	1/21/2019	5	10	
3	Grading	Grading	1/22/2019	2/4/2019	5	10	
4	Building Construction	Building Construction	2/5/2019	12/16/2019	5	225	
5	Architectural Coating	Architectural Coating	12/11/2019	12/31/2019	5	15	
6	Paving	Paving	12/18/2019	12/31/2019	5	10	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 8

Acres of Paving: 0

Residential Indoor: 473,850; Residential Outdoor: 157,950; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Thornton 8 Mile ARCO - Residential	- San Joa	aquin Count	y, Annual
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Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Demolition	Excavators	3	8.00	158	0.38
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Grading	Excavators	1	8.00	158	0.38
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Paving	Pavers	2	8.00	130	0.42
Paving	Rollers	2	8.00	80	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Paving	Paving Equipment	2	8.00	132	0.36
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Building Construction	Welders	1	8.00	46	0.45

Trips and VMT

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Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Architectural Coating	1	34.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	168.00	25.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Demolition	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Demolition - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Off-Road	8.7800e- 003	0.0895	0.0552	1.0000e- 004		4.4900e- 003	4.4900e- 003		4.1700e- 003	4.1700e- 003	0.0000	8.6566	8.6566	2.4100e- 003	0.0000	8.7168
Total	8.7800e- 003	0.0895	0.0552	1.0000e- 004		4.4900e- 003	4.4900e- 003		4.1700e- 003	4.1700e- 003	0.0000	8.6566	8.6566	2.4100e- 003	0.0000	8.7168

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3.2 Demolition - 2019

Unmitigated Construction Off-Site

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	'/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.6000e- 004	1.2000e- 004	1.1900e- 003	0.0000	3.0000e- 004	0.0000	3.0000e- 004	8.0000e- 005	0.0000	8.0000e- 005	0.0000	0.2733	0.2733	1.0000e- 005	0.0000	0.2735
Total	1.6000e- 004	1.2000e- 004	1.1900e- 003	0.0000	3.0000e- 004	0.0000	3.0000e- 004	8.0000e- 005	0.0000	8.0000e- 005	0.0000	0.2733	0.2733	1.0000e- 005	0.0000	0.2735

Mitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Off-Road	8.7800e- 003	0.0895	0.0552	1.0000e- 004		4.4900e- 003	4.4900e- 003		4.1700e- 003	4.1700e- 003	0.0000	8.6566	8.6566	2.4100e- 003	0.0000	8.7168
Total	8.7800e- 003	0.0895	0.0552	1.0000e- 004		4.4900e- 003	4.4900e- 003		4.1700e- 003	4.1700e- 003	0.0000	8.6566	8.6566	2.4100e- 003	0.0000	8.7168

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3.2 Demolition - 2019

Mitigated Construction Off-Site

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.6000e- 004	1.2000e- 004	1.1900e- 003	0.0000	3.0000e- 004	0.0000	3.0000e- 004	8.0000e- 005	0.0000	8.0000e- 005	0.0000	0.2733	0.2733	1.0000e- 005	0.0000	0.2735
Total	1.6000e- 004	1.2000e- 004	1.1900e- 003	0.0000	3.0000e- 004	0.0000	3.0000e- 004	8.0000e- 005	0.0000	8.0000e- 005	0.0000	0.2733	0.2733	1.0000e- 005	0.0000	0.2735

3.3 Site Preparation - 2019

Unmitigated Construction On-Site

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Fugitive Dust					0.0903	0.0000	0.0903	0.0497	0.0000	0.0497	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0217	0.2279	0.1103	1.9000e- 004		0.0120	0.0120		0.0110	0.0110	0.0000	17.0843	17.0843	5.4100e- 003	0.0000	17.2195
Total	0.0217	0.2279	0.1103	1.9000e- 004	0.0903	0.0120	0.1023	0.0497	0.0110	0.0607	0.0000	17.0843	17.0843	5.4100e- 003	0.0000	17.2195

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3.3 Site Preparation - 2019

Unmitigated Construction Off-Site

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.9000e- 004	2.9000e- 004	2.8600e- 003	1.0000e- 005	7.2000e- 004	1.0000e- 005	7.2000e- 004	1.9000e- 004	0.0000	2.0000e- 004	0.0000	0.6558	0.6558	2.0000e- 005	0.0000	0.6563
Total	3.9000e- 004	2.9000e- 004	2.8600e- 003	1.0000e- 005	7.2000e- 004	1.0000e- 005	7.2000e- 004	1.9000e- 004	0.0000	2.0000e- 004	0.0000	0.6558	0.6558	2.0000e- 005	0.0000	0.6563

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Fugitive Dust		, , ,			0.0407	0.0000	0.0407	0.0223	0.0000	0.0223	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0217	0.2279	0.1103	1.9000e- 004		0.0120	0.0120		0.0110	0.0110	0.0000	17.0843	17.0843	5.4100e- 003	0.0000	17.2195
Total	0.0217	0.2279	0.1103	1.9000e- 004	0.0407	0.0120	0.0526	0.0223	0.0110	0.0333	0.0000	17.0843	17.0843	5.4100e- 003	0.0000	17.2195

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3.3 Site Preparation - 2019

Mitigated Construction Off-Site

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.9000e- 004	2.9000e- 004	2.8600e- 003	1.0000e- 005	7.2000e- 004	1.0000e- 005	7.2000e- 004	1.9000e- 004	0.0000	2.0000e- 004	0.0000	0.6558	0.6558	2.0000e- 005	0.0000	0.6563
Total	3.9000e- 004	2.9000e- 004	2.8600e- 003	1.0000e- 005	7.2000e- 004	1.0000e- 005	7.2000e- 004	1.9000e- 004	0.0000	2.0000e- 004	0.0000	0.6558	0.6558	2.0000e- 005	0.0000	0.6563

3.4 Grading - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Fugitive Dust			, , ,		0.0344	0.0000	0.0344	0.0170	0.0000	0.0170	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0129	0.1417	0.0815	1.5000e- 004		6.9900e- 003	6.9900e- 003		6.4300e- 003	6.4300e- 003	0.0000	13.3211	13.3211	4.2100e- 003	0.0000	13.4265
Total	0.0129	0.1417	0.0815	1.5000e- 004	0.0344	6.9900e- 003	0.0413	0.0170	6.4300e- 003	0.0234	0.0000	13.3211	13.3211	4.2100e- 003	0.0000	13.4265

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3.4 Grading - 2019

Unmitigated Construction Off-Site

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.3000e- 004	2.4000e- 004	2.3800e- 003	1.0000e- 005	6.0000e- 004	0.0000	6.0000e- 004	1.6000e- 004	0.0000	1.6000e- 004	0.0000	0.5465	0.5465	2.0000e- 005	0.0000	0.5469
Total	3.3000e- 004	2.4000e- 004	2.3800e- 003	1.0000e- 005	6.0000e- 004	0.0000	6.0000e- 004	1.6000e- 004	0.0000	1.6000e- 004	0.0000	0.5465	0.5465	2.0000e- 005	0.0000	0.5469

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	ī/yr		
Fugitive Dust		, , ,			0.0155	0.0000	0.0155	7.6500e- 003	0.0000	7.6500e- 003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0129	0.1417	0.0815	1.5000e- 004		6.9900e- 003	6.9900e- 003		6.4300e- 003	6.4300e- 003	0.0000	13.3211	13.3211	4.2100e- 003	0.0000	13.4265
Total	0.0129	0.1417	0.0815	1.5000e- 004	0.0155	6.9900e- 003	0.0225	7.6500e- 003	6.4300e- 003	0.0141	0.0000	13.3211	13.3211	4.2100e- 003	0.0000	13.4265

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3.4 Grading - 2019

Mitigated Construction Off-Site

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					tons	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.3000e- 004	2.4000e- 004	2.3800e- 003	1.0000e- 005	6.0000e- 004	0.0000	6.0000e- 004	1.6000e- 004	0.0000	1.6000e- 004	0.0000	0.5465	0.5465	2.0000e- 005	0.0000	0.5469
Total	3.3000e- 004	2.4000e- 004	2.3800e- 003	1.0000e- 005	6.0000e- 004	0.0000	6.0000e- 004	1.6000e- 004	0.0000	1.6000e- 004	0.0000	0.5465	0.5465	2.0000e- 005	0.0000	0.5469

3.5 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Off-Road	0.2656	2.3714	1.9309	3.0300e- 003		0.1451	0.1451		0.1364	0.1364	0.0000	264.4922	264.4922	0.0644	0.0000	266.1030
Total	0.2656	2.3714	1.9309	3.0300e- 003		0.1451	0.1451		0.1364	0.1364	0.0000	264.4922	264.4922	0.0644	0.0000	266.1030

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3.5 Building Construction - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0141	0.3660	0.0818	8.0000e- 004	0.0186	2.8100e- 003	0.0214	5.3700e- 003	2.6800e- 003	8.0500e- 003	0.0000	76.1628	76.1628	5.1000e- 003	0.0000	76.2902
Worker	0.0827	0.0614	0.5997	1.5300e- 003	0.1506	1.0600e- 003	0.1516	0.0400	9.7000e- 004	0.0410	0.0000	137.7217	137.7217	4.2200e- 003	0.0000	137.8272
Total	0.0968	0.4274	0.6815	2.3300e- 003	0.1691	3.8700e- 003	0.1730	0.0454	3.6500e- 003	0.0491	0.0000	213.8844	213.8844	9.3200e- 003	0.0000	214.1174

Mitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					tons	s/yr							MT	/yr		
Off-Road	0.2656	2.3714	1.9309	3.0300e- 003		0.1451	0.1451		0.1364	0.1364	0.0000	264.4919	264.4919	0.0644	0.0000	266.1027
Total	0.2656	2.3714	1.9309	3.0300e- 003		0.1451	0.1451		0.1364	0.1364	0.0000	264.4919	264.4919	0.0644	0.0000	266.1027

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3.5 Building Construction - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0141	0.3660	0.0818	8.0000e- 004	0.0186	2.8100e- 003	0.0214	5.3700e- 003	2.6800e- 003	8.0500e- 003	0.0000	76.1628	76.1628	5.1000e- 003	0.0000	76.2902
Worker	0.0827	0.0614	0.5997	1.5300e- 003	0.1506	1.0600e- 003	0.1516	0.0400	9.7000e- 004	0.0410	0.0000	137.7217	137.7217	4.2200e- 003	0.0000	137.8272
Total	0.0968	0.4274	0.6815	2.3300e- 003	0.1691	3.8700e- 003	0.1730	0.0454	3.6500e- 003	0.0491	0.0000	213.8844	213.8844	9.3200e- 003	0.0000	214.1174

3.6 Architectural Coating - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Archit. Coating	0.7321					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.0000e- 003	0.0138	0.0138	2.0000e- 005		9.7000e- 004	9.7000e- 004		9.7000e- 004	9.7000e- 004	0.0000	1.9149	1.9149	1.6000e- 004	0.0000	1.9190
Total	0.7341	0.0138	0.0138	2.0000e- 005		9.7000e- 004	9.7000e- 004		9.7000e- 004	9.7000e- 004	0.0000	1.9149	1.9149	1.6000e- 004	0.0000	1.9190

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3.6 Architectural Coating - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.1200e- 003	8.3000e- 004	8.0900e- 003	2.0000e- 005	2.0300e- 003	1.0000e- 005	2.0500e- 003	5.4000e- 004	1.0000e- 005	5.5000e- 004	0.0000	1.8582	1.8582	6.0000e- 005	0.0000	1.8596
Total	1.1200e- 003	8.3000e- 004	8.0900e- 003	2.0000e- 005	2.0300e- 003	1.0000e- 005	2.0500e- 003	5.4000e- 004	1.0000e- 005	5.5000e- 004	0.0000	1.8582	1.8582	6.0000e- 005	0.0000	1.8596

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	ī/yr		
Archit. Coating	0.7321	, , ,		, , ,		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.0000e- 003	0.0138	0.0138	2.0000e- 005		9.7000e- 004	9.7000e- 004		9.7000e- 004	9.7000e- 004	0.0000	1.9149	1.9149	1.6000e- 004	0.0000	1.9190
Total	0.7341	0.0138	0.0138	2.0000e- 005		9.7000e- 004	9.7000e- 004		9.7000e- 004	9.7000e- 004	0.0000	1.9149	1.9149	1.6000e- 004	0.0000	1.9190

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3.6 Architectural Coating - 2019

Mitigated Construction Off-Site

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.1200e- 003	8.3000e- 004	8.0900e- 003	2.0000e- 005	2.0300e- 003	1.0000e- 005	2.0500e- 003	5.4000e- 004	1.0000e- 005	5.5000e- 004	0.0000	1.8582	1.8582	6.0000e- 005	0.0000	1.8596
Total	1.1200e- 003	8.3000e- 004	8.0900e- 003	2.0000e- 005	2.0300e- 003	1.0000e- 005	2.0500e- 003	5.4000e- 004	1.0000e- 005	5.5000e- 004	0.0000	1.8582	1.8582	6.0000e- 005	0.0000	1.8596

3.7 Paving - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	ī/yr		
Off-Road	7.2700e- 003	0.0762	0.0733	1.1000e- 004		4.1200e- 003	4.1200e- 003		3.7900e- 003	3.7900e- 003	0.0000	10.2376	10.2376	3.2400e- 003	0.0000	10.3186
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	7.2700e- 003	0.0762	0.0733	1.1000e- 004		4.1200e- 003	4.1200e- 003		3.7900e- 003	3.7900e- 003	0.0000	10.2376	10.2376	3.2400e- 003	0.0000	10.3186

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3.7 Paving - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.3000e- 004	2.4000e- 004	2.3800e- 003	1.0000e- 005	6.0000e- 004	0.0000	6.0000e- 004	1.6000e- 004	0.0000	1.6000e- 004	0.0000	0.5465	0.5465	2.0000e- 005	0.0000	0.5469
Total	3.3000e- 004	2.4000e- 004	2.3800e- 003	1.0000e- 005	6.0000e- 004	0.0000	6.0000e- 004	1.6000e- 004	0.0000	1.6000e- 004	0.0000	0.5465	0.5465	2.0000e- 005	0.0000	0.5469

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Off-Road	7.2700e- 003	0.0762	0.0733	1.1000e- 004		4.1200e- 003	4.1200e- 003		3.7900e- 003	3.7900e- 003	0.0000	10.2376	10.2376	3.2400e- 003	0.0000	10.3186
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	7.2700e- 003	0.0762	0.0733	1.1000e- 004		4.1200e- 003	4.1200e- 003		3.7900e- 003	3.7900e- 003	0.0000	10.2376	10.2376	3.2400e- 003	0.0000	10.3186

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3.7 Paving - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.3000e- 004	2.4000e- 004	2.3800e- 003	1.0000e- 005	6.0000e- 004	0.0000	6.0000e- 004	1.6000e- 004	0.0000	1.6000e- 004	0.0000	0.5465	0.5465	2.0000e- 005	0.0000	0.5469
Total	3.3000e- 004	2.4000e- 004	2.3800e- 003	1.0000e- 005	6.0000e- 004	0.0000	6.0000e- 004	1.6000e- 004	0.0000	1.6000e- 004	0.0000	0.5465	0.5465	2.0000e- 005	0.0000	0.5469

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Increase Density

Increase Diversity

Increase Transit Accessibility

Improve Pedestrian Network

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Mitigated	0.5097	3.3792	5.1637	0.0177	1.2311	0.0188	1.2499	0.3301	0.0177	0.3479	0.0000	1,631.151 5	1,631.151 5	0.0916	0.0000	1,633.441 7
Unmitigated	0.5683	3.9533	6.4790	0.0233	1.6818	0.0248	1.7066	0.4510	0.0234	0.4744	0.0000	2,148.946 6	2,148.946 6	0.1068	0.0000	2,151.615 9

4.2 Trip Summary Information

	Aver	rage Daily Trip Ra	ate	Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	1,542.06	1,675.44	1420.38	4,473,451	3,274,473
Total	1,542.06	1,675.44	1,420.38	4,473,451	3,274,473

4.3 Trip Type Information

		Miles			Trip %			Trip Purpos	e %
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Low Rise	10.80	7.30	7.50	45.60	19.00	35.40	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.546554	0.037008	0.181258	0.129446	0.020679	0.005026	0.016032	0.054515	0.001184	0.001555	0.005196	0.000618	0.000931

5.0 Energy Detail

Historical Energy Use: N

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5.1 Mitigation Measures Energy

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	Category tons/yr											MT	/yr			
Electricity Mitigated			, (0.0000	0.0000		0.0000	0.0000	0.0000	328.8927	328.8927	0.0149	3.0800e- 003	330.1814
Electricity Unmitigated	,		, , , , , , ,			0.0000	0.0000		0.0000	0.0000	0.0000	328.8927	328.8927	0.0149	3.0800e- 003	330.1814
NaturalGas Mitigated	0.0205	0.1754	0.0746	1.1200e- 003		0.0142	0.0142		0.0142	0.0142	0.0000	203.1423	203.1423	3.8900e- 003	3.7200e- 003	204.3495
NaturalGas Unmitigated	0.0205	0.1754	0.0746	1.1200e- 003		0.0142	0.0142	 , , ,	0.0142	0.0142	0.0000	203.1423	203.1423	3.8900e- 003	3.7200e- 003	204.3495

5.2 Energy by Land Use - NaturalGas

<u>Unmitigated</u>

	NaturalGa s Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr					ton	ıs/yr							МТ	/yr		
Apartments Low Rise	3.80674e +006	0.0205	0.1754	0.0746	1.1200e- 003		0.0142	0.0142		0.0142	0.0142	0.0000	203.1423	203.1423	3.8900e- 003	3.7200e- 003	204.3495
Total		0.0205	0.1754	0.0746	1.1200e- 003		0.0142	0.0142		0.0142	0.0142	0.0000	203.1423	203.1423	3.8900e- 003	3.7200e- 003	204.3495

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5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGa s Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr					ton	s/yr							MT	/yr		
Apartments Low Rise	3.80674e +006	0.0205	0.1754	0.0746	1.1200e- 003		0.0142	0.0142		0.0142	0.0142	0.0000	203.1423	203.1423	3.8900e- 003	3.7200e- 003	204.3495
Total		0.0205	0.1754	0.0746	1.1200e- 003		0.0142	0.0142		0.0142	0.0142	0.0000	203.1423	203.1423	3.8900e- 003	3.7200e- 003	204.3495

5.3 Energy by Land Use - Electricity

<u>Unmitigated</u>

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr		МТ	7/yr	
Apartments Low Rise	1.13056e +006	328.8927	0.0149	3.0800e- 003	330.1814
Total		328.8927	0.0149	3.0800e- 003	330.1814

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5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr		ΜT	7/yr	
Apartments Low Rise	1.13056e +006	328.8927	0.0149	3.0800e- 003	330.1814
Total		328.8927	0.0149	3.0800e- 003	330.1814

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Mitigated	1.2131	0.1318	3.2574	5.4700e- 003		0.2576	0.2576		0.2576	0.2576	32.2609	104.2087	136.4696	0.1555	1.8600e- 003	140.9115
Unmitigated	1.2131	0.1318	3.2574	5.4700e- 003		0.2576	0.2576		0.2576	0.2576	32.2609	104.2087	136.4696	0.1555	1.8600e- 003	140.9115

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6.2 Area by SubCategory

<u>Unmitigated</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory					ton	s/yr							МТ	/yr		
Architectural Coating	0.0732					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.9139					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.1729	0.1116	1.5142	5.3800e- 003		0.2480	0.2480		0.2480	0.2480	32.2609	101.3705	133.6315	0.1528	1.8600e- 003	138.0042
Landscaping	0.0531	0.0202	1.7433	9.0000e- 005		9.5900e- 003	9.5900e- 003		9.5900e- 003	9.5900e- 003	0.0000	2.8381	2.8381	2.7700e- 003	0.0000	2.9073
Total	1.2131	0.1318	3.2574	5.4700e- 003		0.2576	0.2576		0.2576	0.2576	32.2609	104.2087	136.4696	0.1555	1.8600e- 003	140.9115

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6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr												MT	/yr		
Architectural Coating	0.0732					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.9139					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.1729	0.1116	1.5142	5.3800e- 003		0.2480	0.2480		0.2480	0.2480	32.2609	101.3705	133.6315	0.1528	1.8600e- 003	138.0042
Landscaping	0.0531	0.0202	1.7433	9.0000e- 005		9.5900e- 003	9.5900e- 003		9.5900e- 003	9.5900e- 003	0.0000	2.8381	2.8381	2.7700e- 003	0.0000	2.9073
Total	1.2131	0.1318	3.2574	5.4700e- 003		0.2576	0.2576		0.2576	0.2576	32.2609	104.2087	136.4696	0.1555	1.8600e- 003	140.9115

7.0 Water Detail

7.1 Mitigation Measures Water

Apply Water Conservation Strategy

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	Total CO2	CH4	N2O	CO2e
Category				
Mitigated	30.8980	0.3987	9.6400e- 003	43.7362
Unmitigated	38.6225	0.4983	0.0121	54.6703

7.2 Water by Land Use

<u>Unmitigated</u>

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e	
Land Use	Mgal	MT/yr				
Apartments Low Rise	15.246 / 9.61164	38.6225	0.4983	0.0121	54.6703	
Total		38.6225	0.4983	0.0121	54.6703	

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7.2 Water by Land Use

Mitigated

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e	
Land Use	Mgal	MT/yr				
Apartments Low Rise	12.1968 / 7.68931	30.8980	0.3987	9.6400e- 003	43.7362	
Total		30.8980	0.3987	9.6400e- 003	43.7362	

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

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Category/Year

	Total CO2	CH4	N2O	CO2e				
	MT/yr							
Mitigated	5.4625	0.3228	0.0000	13.5331				
Unmitigated	21.8500	1.2913	0.0000	54.1323				

8.2 Waste by Land Use

<u>Unmitigated</u>

	Waste Disposed	Total CO2	CH4	N2O	CO2e	
Land Use	tons	MT/yr				
Apartments Low Rise	107.64	21.8500	1.2913	0.0000	54.1323	
Total		21.8500	1.2913	0.0000	54.1323	

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8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	26.91	5.4625	0.3228	0.0000	13.5331
Total		5.4625	0.3228	0.0000	13.5331

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type Number

11.0 Vegetation

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APPENDIX B BIOLOGICAL EVALUATION





September 15, 2016

PS Fuels, Inc. Attn: S. Mann 2190 Meridian Park Boulevard, Suite G Concord, CA 94520

BIOLOGICAL RESOURCES EVALUATION FOR APN 070-670-01, SEC OF THE INTERSECTION OF THORNTON ROAD AND 8 MILE ROAD, STOCKTON, SAN JOAQUIN COUNTY, CA 95209.

1.0 INTRODUCTION

PS Fuels, Inc. has submitted plans to develop a portion of San Joaquin County APN 070-670-01 into an ARCO AM/PM gasoline station and convenience store. In accordance with the requirements of the San Joaquin County Planning Department, a Biological Evaluation of the approximately 10.09-acre parcel has been conducted by the biological and botanical staff of Bole & Associates. The 10.09-acre parcel (Project Area) is located in a predominantly residential and agricultural corridor of Stockton. The Project Area is adjoined to the north by 8 Mile Road and farther to the north by agricultural/undeveloped parcels; to the east by single family residences; to the south by single family residences and a parcel of undeveloped land; and to the west by Thornton Road and farther to the west by single family residences. The property is located at the southeast corner of the intersection of 8 Mile Road and Thornton Road in Stockton, San Joaquin County, CA 95209 (Appendix A, Figure 1). The Project Area consists of undeveloped land that has historically been used for agricultural purposes. The site is currently undeveloped and is not planted for any agricultural use since 2005. The northern, western, and southern perimeter of the property contains landscaped trees and shrubs serviced by irrigation lines, drips, and sprinklers.

2.0 SETTING

The Project Area is located in the northwest portion of the City of Stockton. The Project Area consists primarily as undeveloped land that has historically been used for agricultural purposes. Apart from non-native grasses, weeds, and forbs, and cultivated landscaping along the northern, western, and southern perimeter of the property, the site consists of recently plowed undeveloped land. The subject property is located within a predominantly residential/agricultural corridor of the City of Stockton.

The Stockton area has a Mediterranean climate characterized by hot, dry summers and mild, rainy winters. Data collected by the Western Regional Climate Center shows that annual precipitation generally ranges from 16 to 27 inches. Average annual precipitation is 14 inches. Annual precipitation occurs almost exclusively as rainfall, mostly from October through May.

Biological Evaluation APN 070-670-01 Bole & Associates August 2016 Mean monthly minimum air temperatures are typically in the mid 40s and low 50s during November through March. While mean maximum air temperatures are around 90° F during July and August. Recorded extremes are 20° F and 115° F, respectively (Western Regional Climate Center, 2016).

3.0 METHODOLOGY

Biological and botanical surveys were conducted based on United States Fish and Wildlife Services (USFWS), Sacramento office, species list, California Department of Fish and Wildlife (CDFW) Natural Diversity Database (CNDDB) search and California Native Plant Society's (CNPS) list of rare and endangered plants (Appendix C). All species lists were derived from the United States Geological Survey (USGS) "Lodi South" 7.5 minute quadrangle and surrounding eight (8) quadrangles. Based on the results of the species lists, appropriate biological and botanical surveys were conducted. Species habitat surveys were conducted during August, 2016 by Bole & Associates biologists and botanists. Habitat surveys were conducted by walking all areas of the Project Area (and surrounding 500 foot buffer) and evaluating potential habitat for special-status species based on vegetation composition and structure, surrounding area, presence of predatory species, microclimate and available resources (e.g. prey items, nesting burrows). Botanical surveys and habitat evaluations for rare plant botanical species were conducted during August, 2016, by Bole and Associate's senior botanist Charlene J. Bole. Botanical surveys and habitat evaluations for rare plant botanical species were conducted by walking all areas of the Project Area while taking inventory of botanical species and searching for special-status plant species and their habitats. A determination of Waters of the U.S. was also conducted during August, 2016 by Marcus Bole and was conducted under the guidelines of the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (2008).

3.1 Regulatory Requirements

The following describes federal, state, and local environmental laws and policies that are relevant to the California Environmental Quality Act (CEQA) review process.

Federal

Federal Endangered Species Act

The United States Congress passed the Federal Endangered Species Act (ESA) in 1973 to protect species that are endangered or threatened with extinction. The ESA is intended to operate in conjunction with the National Environmental Policy Act (NEPA) to help protect the ecosystems upon which endangered and threatened species depend. The ESA makes it unlawful to "take" a listed animal without a permit. Take is defined as "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect or attempt to engage in any such conduct." Through regulations, the term "harm" is defined as "an act which actually kills or injures wildlife." Such an act may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding, or sheltering.

Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) (16 USC §703) prohibits the killing of migratory birds or the destruction of their occupied nests and eggs except in accordance with regulations

prescribed by the USFWS. The bird species covered by the MBTA includes nearly all of those that breed in North America, excluding introduced (i.e. exotic) species (50 Code of Federal Regulations §10.13). Activities that involve the removal of vegetation including trees, shrubs, grasses, and forbs or ground disturbance has the potential to affect bird species protected by the MBTA.

Waters of the United States, Clean Water Act, Section 404

The US Army Corps of Engineers (USACE) and the U.S. Environmental Protection Agency (EPA) regulate the discharge of dredged or fill material into jurisdictional waters of the United States, under the Clean Water Act (§404). The term "waters of the United States" is an encompassing term that includes "wetlands" and "other waters." Wetlands have been defined for regulatory purposes as follows: "those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions (33 CFR 328.3, 40 CFR 230.3). Wetlands generally include swamps, marshes, bogs, and similar areas." Other waters of the United States (OWUS) are seasonal or perennial water bodies, including lakes, stream channels, drainages, ponds, and other surface water features, that exhibit an ordinary high-water mark but lack positive indicators for one or more of the three wetland parameters (i.e., hydrophytic vegetation, hydric soil, and wetland hydrology) (33 CFR 328.4). The USACE may issue either individual permits on a case-by-case basis or general permits on a program level. General permits are pre-authorized and are issued to cover similar activities that are expected to cause only minimal adverse environmental effects. Nationwide permits are general permits issued to cover particular fill activities. All nationwide permits have general conditions that must be met for permits issued for a particular Project, as well as specific regional conditions that apply to each nationwide permit.

Executive Orders 13112; Prevention and Control of Invasive Species

On Feb 3, 1999, Executive Order 13112 was signed establishing the National Invasive Species Council. Executive Order 11312 directs all federal agencies to prevent and control introductions of invasive nonnative species in a cost-effective and environmentally sound manner to minimize their economic, ecological, and human health impacts. Executive Order 11312 established a national Invasive Species Council made up of federal agencies and departments and a supporting Invasive Species Advisory Committee composed of state, local, and private entities. The Invasive Species Council and Advisory Committee oversees and facilitates implementation of the Executive Order, including preparation of a National Invasive Species Management Plan. Section two (2) of the Executive Order states:

(a) Each Federal agency whose actions may affect the status of invasive species shall, to the extent practicable and permitted by law, (1) identify such actions; (2) subject to the availability of appropriations, and within Administration budgetary limits, use relevant programs and authorities to: (i) prevent the introduction of invasive species; (ii) detect and respond rapidly to and control populations of such species in a cost-effective and environmentally sound manner; (iii) monitor invasive species populations accurately and reliably; (iv) provide for restoration of native species and habitat conditions in ecosystems that have been invaded; (v) conduct research on invasive species and develop technologies to prevent introduction and provide for environmentally sound control of invasive species; and (vi) promote public education on invasive species and the means to address them; and (3) not authorize, fund, or carry out actions that it believes are likely to cause or promote the introduction or spread of invasive species in the United States or elsewhere unless, pursuant to guidelines that it has prescribed, the agency has

determined and made public its determination that the benefits of such actions clearly outweigh the potential harm caused by invasive species; and that all feasible and prudent measures to minimize risk of harm will be taken in conjunction with the actions.

(b) Federal agencies shall pursue the duties set forth in this section in consultation with the Invasive Species Council, consistent with the Invasive Species Management Plan and in cooperation with stakeholders, as appropriate, and, as approved by the Department of State, when Federal agencies are working with international organizations and foreign nations.

Clean Water Act, Section 401

The Clean Water Act (§401) requires water quality certification and authorization for placement of dredged or fill material in wetlands and OWUS. In accordance with the Clean Water Act (§401), criteria for allowable discharges into surface waters have been developed by the State Water Resources Control Board, Division of Water Quality. The resulting requirements are used as criteria in granting National Pollutant Discharge Elimination System (NPDES) permits or waivers, which are obtained through the Regional Water Quality Control Board (RWQCB) per the Clean Water Act (§402). Any activity or facility that will discharge waste (such as soils from construction) into surface waters, or from which waste may be discharged, must obtain an NPDES permit or waiver from the RWQCB. The RWQCB evaluates an NPDES permit application to determine whether the proposed discharge is consistent with the adopted water quality objectives of the basin plan.

State of California

California Endangered Species Act

The California Endangered Species Act (CESA) is similar to the ESA, but pertains to state-listed endangered and threatened species. The CESA requires state agencies to consult with the CDFW when preparing documents to comply with the CEQA. The purpose is to ensure that the actions of the lead agency do not jeopardize the continued existence of a listed species or result in the destruction, or adverse modification of habitat essential to the continued existence of those species. In addition to formal listing under the federal and state endangered species acts, "species of special concern" receive consideration by CDFW. Species of special concern are those whose numbers, reproductive success, or habitat may be threatened.

California Fish and Wildlife Code

The California Fish and Game Code (CFWC) (§3503.5) states that it is "unlawful to take, possess, or destroy any birds in the order Falconiformes (hawks, eagles, and falcons) or Strigiformes (all owls except barn owls) or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by this code or any regulation adopted pursuant thereto." Take includes the disturbance of an active nest resulting in the abandonment or loss of young. The CFWC (§3503) also states that "it is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird, except as otherwise provided by this code or any regulation made pursuant thereto."

Rare and Endangered Plants

The CNPS maintains a list of plant species native to California with low population numbers, limited distribution, or otherwise threatened with extinction. This information is published in the Inventory of Rare and Endangered Vascular Plants of California. Potential impacts to

populations of CNPS-ranked plants receive consideration under CEQA review. The CNPS California Rare Plant Rank (CRPR) categorizes plants as the following:

Rank 1A: Plants presumed extinct in California;

Rank 1B: Plants rare, threatened, or endangered in California or elsewhere;

Rank 2: Plants rare, threatened, or endangered in California, but more numerous elsewhere;

Rank 3: Plants about which we need more information; and

Rank 4: Plants of limited distribution.

The California Native Plant Protection Act (CFGC §1900-1913) prohibits the taking, possessing, or sale within the state of any plants with a state designation of rare, threatened, or endangered as defined by CDFW. An exception to this prohibition allows landowners, under specific circumstances, to take listed plant species, provided that the owners first notify CDFW and give the agency at least ten (10) days to retrieve (and presumably replant) the plants before they are destroyed. Fish and Wildlife Code §1913 exempts from the take' prohibition "the removal of endangered or rare native plants from a canal, lateral ditch, building site, or road, or other right of way."

California Environmental Quality Act Guidelines §15380

Although threatened and endangered species are protected by specific federal and state statutes, CEQA Guidelines §15380(d) provides that a species not listed on the federal or state list of protected species may be considered rare or endangered if the species can be shown to meet certain specified criteria. These criteria have been modeled based on the definition in the ESA and the section of the CFGC dealing with rare, threatened, and endangered plants and animals. The CEQA Guidelines (§15380) allows a public agency to undertake a review to determine if a significant effect on species that have not yet been listed by either the USFWS or CDFW (e.g. candidate species, species of concern) would occur. Thus, CEQA provides an agency with the ability to protect a species from a Project's potential impacts until the respective government agencies have an opportunity to designate the species as protected, if warranted.

3.2 Personal and Survey Dates

Biological and botanical surveys were conducted by Bole and Associates personnel. Initial habitat surveys were conducted by biologist David Bole on August 16, 2016. Species of special interest included riparian brush rabbit (Sylvilagus bachmani riparius), tri-colored blackbird (Agelaius tricolor), western burrowing owl (Athene cunicularia), Swainson's hawk (Buteo swainsoni), Vernal Pool tadpole shrimp (Lepidurus packardi), California linderiella (Linderiella occidentalis), Vernal Pool fairy shrimp (Branchinecta lynchi), valley elderberry longhorn beetle (Desmocerus californicus dimorphus) (VELB), California red-legged frog (Rana draytonii), California tiger salamander (Ambystoma californiense), delta smelt (Hypomesus transpacificus), Central Valley DPS steelhead (Oncorhynchus mykiss irideus), and the Giant garter snake (Thamnophis gigas). A general botanical survey and habitat evaluation for rare plant botanical species was conducted by botanist Charlene J. Bole on August 16, 2016. Species of special interest included Mason's lilaeopsis (Lilaeopsis masonii), Suisun Marsh aster (Symphyotrichum lentum), and large-flowered fiddleneck (Amsinckia grandiflora). Other plants of special interest included A and B listed noxious weeds of California and elderberry shrubs, the host plant for the VELB. A determination of Waters of the U.S. was also conducted on August 16, 2016 by Marcus H. Bole. Jurisdictional and non-jurisdictional wetland and other water features were determined based on the definitions as described in the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (2008.)

3.3 Agency Coordination and Professional Contacts

The USFWS was contacted on August 5, 2016 for documentation of special-status species likely to occur within the USGS "Lodi South" 7.5 minute quadrangle and eight (8) surrounding quadrangles. On August 5, 2016, RareFind (5) was used to access the CNDDB regarding special-status species potentially occurring in or near the Project Area. The CNPS inventory of rare and endangered plants for the USGS quadrangle on which the Project occurs and surrounding USGS quadrangles with similar habitat, was also reviewed to determine the presence of special-status plant species that may occur in or near the Project Area.

4.0 FINDINGS

The Project Area is located on relatively flat land, at an average elevation of 14 feet above sea level, with no readily discernible gradient noted within the confines of the Project Area. Soils within the property are classified as predominantly Rioblancho clay loam, 0 to 2 percent slopes (NRCS 2016). Site vegetation consists of non-native grasses and forbs, with ornamental trees and shrubs located along the northern, western, and southern perimeter of the property.

The Project Area historically has never been formally developed for any residential, commercial, or industrial purposes and has remained undeveloped/agricultural land. The subject property has historically been used for agricultural purposes including row crops; the site ceased to be farmed in 2005 during the initial construction of the adjoining residential developments and has remained fallow as ruderal grassland through to the present day.

Ruderal Grasslands

Ruderal grasslands characterize the majority of the Project Area. Ruderal grasslands include disturbed areas characterized by sparse non-native, typically weedy vegetation. Most ruderal grasslands are vacant parcels surrounded by developed areas. Ruderal land cover is dominated by a mixture of non-native annual grasses and weedy species, such as black mustard (*Brassica nigra*), thistles (*Cirsium* spp.), and wild radish (*Raphanus sativa*), that tend to colonize quickly after disturbance.

Wildlife common to ruderal habitats can include species closely associated with urban development such as the house sparrow (*Passer domesticus*), European starling (*Sturnus vulgaris*), rock dove (*Columba livia*), western scrub-jay (*Aphelocomo california*), black-tailed jackrabbit (*Lepus californicus*), raccoon (*Procyon lotor*), opossum (*Didelphis virginiana*), striped skunk (*Mephitis mephitis*), and house mouse (*Mus musculus*).

4.1 Regional Species and Habitats of Concern

Bole & Associates prepared the following table of species that have the potential to occur within the project's Project Area and is composed of special-status species within the USGS "Lodi South" 7.5 minute quadrangle and surrounding eight (8) quadrangles. Species lists reviewed, and which are incorporated in the following table, include the USFWS Sacramento office species list, and the CNDDB. Species that have the potential to occur within the Project Area are based on
suitable habitat within the Project Area, CNDDB occurrences within a five (5) mile radius of the Project Area and observations made during biological surveys. Not all species listed within the following table have the potential to occur within the Project Area based on unsuitable habitat and/or lack of recorded observations within a five (5) mile radius of the Project Area.

Table 1. Listed and Proposed Species Potentially Occurring Near or Within
The APN 070-670-01, SEC Thornton Road and 8 Mile Road, Stockton, Project Area

Common Name (Scientific Name)	<u>Status</u> Fed/State/ CNPS	General Habitat Description	Habitat Present/ Habitat Absent	Rationale		
INVERTEBRA	TES					
California linderiella (Linderiella occidentalis)	_/\$2\$3/_	Vernal pools, swales, and ephemeral freshwater habitat.	A/HA	There are no vernal pools within the Project Area.		
Vernal pool fairy shrimp (Branchinecta lynchi)	FT/_/_	Small, clear-water sandstone- depression pools and grassed swale, earth slump, or basalt flow depression pools.	A/HA	There are no vernal pools within the Project Area.		
Valley elderberry longhorn beetle (Desmocerus californicus dimorphus)	FT/_/_	A/HA	There are no elderberry shrubs within the Project Area.			
Vernal pool tadpole shrimp (Lepidurus packardi)	FE/_/_	Vernal pools, swales, and ephemeral freshwater habitat.	A/HA	There are no vernal pools within the Project Area.		
REPTILES AN	D AMPHIBIAN	18				
California Red-legged frog (Rana draytonii)	FT/SSC/_	Ponds in humid forests, woodlands, grasslands, coastal scrub, and streamsides with plant cover. Most common in lowlands or foothills.	A/HA	There is no suitable habitat within the Project Area for this species.		
California tiger salamander (Ambystoma californiense)	FE/ST/_	Grasslands and low foothills with pools or ponds necessary for breeding, including vernal pools, stock ponds, etc.	A/HA	There is no suitable habitat within the Project Area for this species.		

Common Name (Scientific Name)	<u>Status</u> Fed/State/ CNPS	General Habitat Description	Habitat Present/ Habitat Absent	Rationale
Giant garter snake (Thamnophis gigas)	ST/FT/_	Perennial wetlands; 1auatic habitat for foraging, bankside basking areas with nearby emergent vegetation for cover and thermal regulation.	A/HA	There is no suitable habitat within the Project Area for this species.
FISH				
Central Valley steelhead (Oncorhynchus mykiss irideus)	FT/_/_	Sacramento and San Joaquin Rivers and their tributaries.	A/HA	There is no suitable habitat within the Project Area for this species.
Delta smelt (Hypomesus transpacificus)	FT/SE/_	Sacramento-San Joaquin Estuary	A/HA	There is no suitable habitat within the Project Area for this species.
BIRDS			• •	
Western burrowing owl (Athene cunicularia)	MBTA/SSC/_	Open, dry annual or perennial grasslands, deserts and scrublands characterized by low-growing vegetation.	A/MH	There is marginal suitable habitat within the Project Area for this species. None were observed during the habitat survey.
Tri-colored black bird (Agelaius tricolor)	MBTA/SSC/_	Marshes and swamps, agricultural irrigation ditches, blackberry brambles and grasslands	A/HA	There is no suitable habitat within the Project Area.
Swainson's Hawk (Buteo swainsoni)	inson's Breeding habitat includes shrub- steppe areas with scattered trees, large shrubs, and riparian areas. Preferred habitat includes adjacent irrigated agricultural areas with alfalfa and grass hay for foraging. Nests in a variety of trees, but most often small shrubby trees in shrub- steppe and desert habitats.		A/HA	There is no suitable habitat within the Project Area. Adjacent agricultural areas to the north may provide marginal foraging habitat. None observed during the habitat survey.
MAMMALS				
Riparian brush rabbit (Sylvilagus bachmani riparius)	SE/TE	Riparian oak forests with a dense understory of wild roses, grapes, and blackberries.	A/HA	There is no suitable habitat in the Project Area. None were observed during the habitat survey.

CODE DESIGNATIONS					
CODE DE/ FE = Federally-listed Endangered FT = Federally-listed Threatened FC = Federal Candidate Species BCC = Federal Candidate Species BCC = Federal Bird of Conservation Concern MBTA = Protected by the federal Migratory Bird Treaty Act SE = State-listed Endangered ST = State-listed Threatened SR = State-listed Rare SSC = State Species of Special Concern S1 = State Critically Imperiled S2 = State Imperiled S3 = State Vulnerable S4 = State Apparently Secure SSC = CDFW Species of Special Concern	SIGNATIONS A = Species Absent P = Species Present HA = Habitat Absent HP = Habitat Present CH = Critical Habitat MH = Marginal Habitat CNPS 1B = Rare or Endangered in California or elsewhere CNPS 2 = Rare or Endangered in California, more common elsewhere CNPS 4 = Plants with limited distribution 0.1 = Seriously Threatened 0.2 = Fairly Threatened 0.3 = Not very Threatened				
 S3 = State Vulnerable S4 = State Apparently Secure SSC = CDFW Species of Special Concern FP =CDFW Fully Protected Species SNC = CDFW Sensitive Natural Community 	 0.1 =Seriously Threatened 0.2 = Fairly Threatened 0.3 = Not very Threatened 				

Migratory Birds

Nesting birds are protected under the MBTA (16 USC 703) and the CFWC (3503). The MBTA (16 USC §703) prohibits the killing of migratory birds or the destruction of their occupied nests and eggs except in accordance with regulations prescribed by the USFWS. The bird species covered by the MBTA includes nearly all of those that breed in North America, excluding introduced (i.e. exotic) species (50 Code of Federal Regulations §10.13). Activities that involve the removal of vegetation including trees, shrubs, grasses, and forbs or ground disturbance has the potential to affect bird species protected by the MBTA. The CFWC (§3503.5) states that it is "unlawful to take, possess, or destroy any birds in the order Falconiformes (hawks, eagles, and falcons) or Strigiformes (all owls except barn owls) or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by this code or any regulation adopted pursuant thereto." Take includes the disturbance of an active nest resulting in the abandonment or loss of young. The CFWC (§3503) also states that "it is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird, except as otherwise provided by this code or any regulation adopted pursuant thereto."

Survey Results

During the migratory bird and raptor surveys conducted during August, 2016, there were no "stick nests" or ground nests observed within the Project Area or surrounding 500 foot buffer. No nesting activity was observed. If construction activities occur during the March – August time period, preconstruction nest surveys are recommended.

Wetlands and Others Waters of the U.S.

Bole and Associates conducted a determination of Waters of the U.S. within the Project Area. Surveys were conducted on August 16, 2016 by Wetland Scientist Marcus H. Bole. The surveys involved an examination of botanical resources, soils, hydrological features, and determination of wetland characteristics based on the *United States Army Corps of Engineers Wetlands Delineation Manual (1987); the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (2008); the U.S. Army Corps of Engineers Jurisdictional* Determination Form Instructional Guidebook (2007); the U.S. Army Corps of Engineers Ordinary High Flows and the Stage-Discharge Relationship in the Arid West Region (2011); and the U.S. Army Corps of Engineers Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States (2008). No federal jurisdictional wetlands or Other Waters of the U.S. were observed within the Project Area or within the 500 foot buffer surrounding the Project Area.

5.0 CONCLUSIONS AND RECOMMENDATIONS

According to California Environmental Quality Act (CEQA) guidelines, a project is normally considered to have a significant impact on wildlife if it will interfere substantially with the movement of any resident or migratory fish or wildlife species; or substantially diminishes habitat quantity or quality for dependent wildlife and plant species. Impacts to special status species and their associated habitats are also considered significant if the impact would reduce or adversely modify a habitat of recognized value to a sensitive wildlife species or to an individual of such species. This guideline applies even to those species not formally listed as threatened, rare or endangered by the California Department of Fish & Wildlife and the United States Fish and Wildlife Service. Project implementation will not result in impacts to special status plant or wildlife species or their critical habitats. Project implementation will not have a significant impact on resident or migratory wildlife, special status plant or wildlife species, or any associated protected habitat. However, due to the presence of foraging habitat north of the Project Area, if construction activities occur during the March – August time period, preconstruction nest surveys are recommended.

This concludes our biological and botanical evaluation of the 10.09-acre Project Area comprising San Joaquin County APN 070-670-01, located at the SEC of the intersection of 8 Mile Road and Thornton Road in Stockton, San Joaquin County, CA 95209. If you have any questions concerning our findings please feel free to contact me directly at: Bole & Associates, Attn: David Bole, 6898 Penny Way, Browns Valley, CA 95918, phone 530-415-6623, fax 530-633-0119, email: davidhbole@yahoo.com For a complete copy of the Statement of Qualifications of the staff members conducting this evaluation please visit our website at: mhbole.com.

Respectfully Submitted:

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Marans H. Bole

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7.0 APPENDIX

APPENDIX A: SITE MAPS

APPENDIX B: SITE PHOTOS

APPENDIX C: CNDDB SPECIES LIST

APPENDIX D: SOILS AND WETLAND DATA

APPENDIX A: SITE MAPS



Figure 1: Location Map





Figure 3: Site Topo Map: APN 070-670-01, SEC of the intersection of Thornton Road and 8 Mile Road, Stockton, San Joaquin County, CA 95209. Section 5, Township 2 North, Range 6 East, Lodi South (1976) USGS Quadrangle.



BOLE & ASSOCIATES 6898 Penny Way, Browns Valley, CA 95918 (530) 415-6623, email: davidhbole@yahoo.com SITE: APN 070-670-01 ITEM: SITE DIAGRAM-AERIAL OVERLAY

Figure 4: Aerial

APPENDIX B: SITE PHOTOS



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SITE: APN 070-670-01 ITEM: SITE PHOTOS DATE: 8/16/2016 **APPENDIX C: CNDDB LIST**



Summary Table Report

California Department of Fish and Wildlife

California Natural Diversity Database



Query Criteria: (Federal Listing Status IS (Endangered OR Threatened OR Proposed Endangered OR All CNDDB element occurrences OR Delisted) OR State Listing Status IS All CNDDB element occurrences OR Threatened OR All CNDDB element occurrences OR Threatened OR Delisted) OR All CNDDB element occurrences OR Threatened OR All CNDDB element occurrences OR Delisted OR All CNDDB element occurrences OR Delisted OR Delisted OR Candidate Endangered OR Candidate Threatened))

				Elev.		E	Elem	ent C)cc. F	Rank	6	Populatio	on Status		Presence	
Name (Scientific/Common)	CNDDB Ranks	Listing Status (Fed/State)	Other Lists	Range (ft.)	Total EO's	Α	в	с	D	x	U	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extirp.	Extirp.
Agelaius tricolor	G2G3	None	BLM_S-Sensitive	50	838	0	0	0	0	1	0	1	0	0	1	0
tricolored blackbird	S1S2	None	CDFW_SSC-Species of Special Concern IUCN_EN-Endangered NABCI_RWL-Red Watch List USFWS_BCC-Birds of Conservation Concern	50	S:1											
Athene cunicularia burrowing owl	G4 S3	None None	BLM_S-Sensitive CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern USFWS_BCC-Birds of Conservation Concern	5 30	1904 S:2	0	1	1	0	0	0	0	2	2	0	0
Buteo swainsoni	G5	None	BLM_S-Sensitive IUCN_LC-Least	5	2405 S:32	0	6	4	2	1	19	8	24	31	1	0
Swainson's nawk	00	Threatened	Concern USFWS_BCC-Birds of Conservation Concern	41												
Lepidurus packardi	G4	Endangered	IUCN_EN-Endangered	50	320	0	0	0	0	0	1	1	0	1	0	0
vernal pool tadpole shrimp	S3S4	None		50	S:1											
Lilaeopsis masonii	G2	None	Rare Plant Rank - 1B.1	0	197	0	0	0	1	0	1	1	1	2	0	0
Mason's lilaeopsis	S2	Rare		5	S:2											
<i>Linderiella occidentalis</i> California linderiella	G2G3 S2S3	None None	IUCN_NT-Near Threatened	35 35	430 S:1	0	0	0	0	0	1	0	1	1	0	0
Oncorhynchus mykiss irideus steelhead - Central Valley DPS	G5T2Q S2	Threatened None	AFS_TH-Threatened		31 S:1	0	0	0	0	0	1	0	1	1	0	0



Summary Table Report

California Department of Fish and Wildlife

California Natural Diversity Database



				Elev.		E	Elem	ent C	Occ.	Rank	s	Populatio	on Status		Presence	
Name (Scientific/Common)	CNDDB Ranks	Listing Status (Fed/State)	Other Lists	Range (ft.)	Total EO's	Α	в	с	D	x	U	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extirp.	Extirp.
Symphyotrichum lentum Suisun Marsh aster	G2 S2	None None	Rare Plant Rank - 1B.2 SB_RSABG-Rancho Santa Ana Botanic Garden SB_USDA-US Dept of Agriculture		173 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Thamnophis gigas</i> giant gartersnake	G2 S2	Threatened Threatened	IUCN_VU-Vulnerable	18 18	347 S:1	0	0	0	0	0	1	1	0	1	0	0
Valley Oak Woodland Valley Oak Woodland	G3 S2.1	None None		5 5	91 S:1	0	0	0	0	0	1	1	0	1	0	0



United States Department of the Interior

FISH AND WILDLIFE SERVICE San Francisco Bay-Delta Fish and Wildlife 650 CAPITOL MALL, SUITE 8-300 SACRAMENTO, CA 95814 PHONE: (916)930-5603 FAX: (916)930-5654 URL: kim_squires@fws.gov



Consultation Code: 08FBDT00-2016-SLI-0218 Event Code: 08FBDT00-2016-E-00179 Project Name: APN 070-670-01 August 25, 2016

Subject: List of threatened and endangered species that may occur in your proposed project location, and/or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2) (c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 *et seq.*), and projects affecting these species may require development of an eagle conservation plan

(http://www.fws.gov/windenergy/eagle_guidance.html). Additionally, wind energy projects should follow the wind energy guidelines (http://www.fws.gov/windenergy/) for minimizing impacts to migratory birds and bats.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at: http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm; http://www.towerkill.com; and

http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment



United States Department of Interior Fish and Wildlife Service

Project name: APN 070-670-01

Official Species List

Provided by:

San Francisco Bay-Delta Fish and Wildlife 650 CAPITOL MALL SUITE 8-300 SACRAMENTO, CA 95814 (916) 930-5603_ http://kim_squires@fws.gov

Expect additional Species list documents from the following office(s):

Sacramento Fish and Wildlife Office FEDERAL BUILDING 2800 COTTAGE WAY, ROOM W-2605 SACRAMENTO, CA 95825 (916) 414-6600

Consultation Code: 08FBDT00-2016-SLI-0218 Event Code: 08FBDT00-2016-E-00179

Project Type: DEVELOPMENT

Project Name: APN 070-670-01

Project Description: Located at the SWC of the intersection of Thornton Road and 8 Mile Road, this project will involve the construction of senior housing.

Please Note: The FWS office may have modified the Project Name and/or Project Description, so it may be different from what was submitted in your previous request. If the Consultation Code matches, the FWS considers this to be the same project. Contact the office in the 'Provided by' section of your previous Official Species list if you have any questions or concerns.



United States Department of Interior Fish and Wildlife Service

Project name: APN 070-670-01

Project Location Map:



Project Coordinates: MULTIPOLYGON (((-121.35174036026 38.0576207962024, -121.35165452957152 38.056438095889966, -121.34710550308226 38.056505679279866, -121.3471269607544 38.05757010943819, -121.35174036026 38.0576207962024)))

Project Counties: San Joaquin, CA



United States Department of Interior Fish and Wildlife Service

Project name: APN 070-670-01

Endangered Species Act Species List

There are a total of 10 threatened or endangered species on your species list. Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species. Critical habitats listed under the **Has Critical Habitat** column may or may not lie within your project area. See the **Critical habitats within your project area** section further below for critical habitat that lies within your project. Please contact the designated FWS office if you have questions.

Amphibians	Status	Has Critical Habitat	Condition(s)
California red-legged frog (<i>Rana</i> <i>draytonii</i>) Population: Entire	Threatened	Final designated	
California tiger Salamander (<i>Ambystoma californiense</i>) Population: U.S.A. (Central CA DPS)	Threatened	Final designated	
Crustaceans			
Vernal Pool fairy shrimp (<i>Branchinecta lynchi</i>) Population: Entire	Threatened	Final designated	
Vernal Pool tadpole shrimp (<i>Lepidurus packardi</i>) Population: Entire	Endangered	Final designated	
Fishes			
Delta smelt (<i>Hypomesus</i> <i>transpacificus</i>) Population: Entire	Threatened	Final designated	
Flowering Plants			



United States Department of Interior Fish and Wildlife Service

Project name: APN 070-670-01

Fleshy owl's-clover (Castilleja	Threatened	Final designated					
campestris ssp. succulenta)							
Large-Flowered fiddleneck	Endangered	Final designated					
(Amsinckia grandiflora)							
Insects							
Valley Elderberry Longhorn beetle	Threatened	Final designated					
(Desmocerus californicus dimorphus)							
Population: Entire							
Mammals							
Riparian Brush rabbit (Sylvilagus	Endangered						
bachmani riparius)							
Population: Entire							
Reptiles							
Giant Garter snake (Thamnophis	Threatened						
gigas)							
Population: Entire							



United States Department of Interior Fish and Wildlife Service

Project name: APN 070-670-01

Critical habitats that lie within your project area

There are no critical habitats within your project area.

http://ecos.fws.gov/ipac, 08/25/2016 04:05 PM

APPENDIX D: SOILS AND WETLAND DATA



USDA Natural Resources Conservation Service



Map Unit Legend

San Joaquin County, California (CA077)							
Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI				
226	Rioblancho clay loam, drained, 0 to 2 percent slopes	11.0	100.0%				
Totals for Area of Interest		11.0	100.0%				



U.S. Fish and Wildlife Service

National Wetlands Inventory

APN 070-670-01 Wetlands Map



Other

Riverine

September 1, 2016

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland Freshwater Emergent Wetland
- Lake

Freshwater Pond

Freshwater Forested/Shrub Wetland

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

APPENDIX C ARCHAEOLOGICAL SURVEY

CLASS III ARCHAEOLOGICAL SURVEY

8 Mile Road AMPM Development Project circa 10-acres City of Stockton, San Joaquin County, California.

Prepared for

Marcus H. Bole & Associates 104 Brock Drive Wheatland, CA 95692

Author

Sean Michael Jensen, M.A.

Keywords for Information Center Use:

Archaeological Inventory Survey, circa 10-acres, San Joaquin County, CEQA, USGS Lodi South, Ca. 7.5' Quadrangle, No Significant Historical Resources, No Unique Archaeological Resources.

October 10, 2016

GENESIS SOCIETY - PARADISE, CALIFORNIA

ARCHAEOLOGICAL - HISTORICAL - CULTURAL RESOURCE MANAGEMENT SERVICES

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ATTACHMENTS

Project Location and Archaeological Survey Area Map. Copy of Records Search from CCIC, 10015L, dated September 26, 2016. Information request letter delivered to the Native American Heritage Commission (NAHC). Response from the NAHC.

1. INTRODUCTION

Project Background

This report details the results of a Class III archaeological inventory of the proposed 8 Mile Road AMPM development project which involves a land area of approximately 10-acres located adjacent to the south side of 8 Mile Road and the east side of Thornton Road, approximately 1-mile east of Interstate 5, within the City of Stockton, San Joaquin County, California. The project would involve commercial development of the property, which could include construction of a new commercial building, construction of parking and access, and placement of utilities.

The proposed project constitutes a "project," per CEQA, which could impact various types of resources located within the Area of Potential Effects (APE). Evaluation of the potential impacts to cultural (i.e., archaeological and historical) resources must be considered per City of Stockton and San Joaquin County rules and regulations as well as requirements of the California Environmental Quality Act of 1970, Public Resources Code, Section 21000, et seq. (CEQA), and The California CEQA Environmental Quality Act Guidelines, California Administrative Code, Section 15000 et seq. (Guidelines, as amended October 1998).

Scope of Work

At the most general level, compliance with CEQA requires completion of projects in conformity with the standards contained in Section 15064.5 of the CEQA Guidelines, as amended. Based on this and other relevant Sections of the Guidelines, the following specific tasks were considered an adequate and appropriate Scope of Work for the present project:

- Conduct a records search at the Central California Information Center of the California Historical Resources Information System at CSU-Stanislaus, and review state databases and other relevant background information. The goals of the records search and data base review are to determine (a) the extent and distribution of previous archaeological surveys, (b) the locations of known archaeological sites and any previously recorded archaeological districts, and (c) the relationships between known sites and environmental variables. This step is designed to ensure that, during subsequent field survey work, all archaeological and historical sites considered significant per CEQA are discovered, correctly identified, fully documented, and properly interpreted.
- Conduct a pedestrian field survey of the project area. Based on map review, a complete coverage intensive survey was considered appropriate, given the presence of high archaeological sensitivity throughout the project area. The purpose of the pedestrian survey is to ensure that any previously recorded sites identified during the records search are re-located and existing evaluations updated based on current site and field conditions. For previously undocumented sites identified which might qualify as "cultural resources" per CEQA, the field survey would involve formally recording these on DPR-523 Forms.

• Upon completion of the records search and pedestrian survey, prepare an archaeological inventory survey report that identifies project effects and recommends appropriate mitigation measures for any prehistoric or historic sites recommended significant under CEQA and which might be affected by the project.

The remainder of the present document constitutes the Final Report for this project, detailing the results of the records search and field survey and containing recommendations for treatment of significant sites that could be impacted by the project. All field survey procedures followed guidelines provided by the State Historic Preservation Office (Sacramento) and conform to accepted professional standards.

Location

The 8 Mile Road AMPM development project area totals approximately 10-acres located adjacent to the south side of 8 Mile Road and the east side of Thornton Road, approximately 1-mile east of Interstate 5, within the City of Stockton, San Joaquin County, California. Lands affected are located within a portion of the northwest quarter of the northwest quarter of Section 5 of T2N, R6E, as shown on the USGS Lodi South, California, 7.5' quadrangle (see attached *Project Location Map*).

The most important natural surface water sources within the project area are Pixley Slough which is located approximately ³/₄-mile southeast of the APE, and Bear Creek which is located approximately one mile south of the APE. Both of these stream courses have been completely altered through channelization and realignment.

Based on a review of topographic and other maps, and notwithstanding prior impacts to surface and subsurface soil components resulting from prior ranching and adjacent residential and infrastructure activities, the study area appeared to contain lands ranging from moderate to high in sensitivity for historic-era resources, and low to moderate for prehistoric resources.

2. RECORDS SEARCH and SOURCES CONSULTED

Several sources of information were considered relevant to evaluating the types of archaeological sites and site distribution that might be encountered within the project area. The information evaluated prior to conducting pedestrian field survey includes soil types and geomorphological features, data maintained by the Central California Information Center at CSU-Stanislaus, and review of available published and unpublished documents relevant to regional prehistory, ethnography, and early historic developments.

Records at Central California Information Center

Prior to conducting the intensive-level field survey, a search of archaeological records maintained by the Central California Information Center at CSU-Stanislaus was conducted (Records Search File No. 10015L, dated September 26, 2016). This search documented the following existing conditions for the c. 10-acre study area, and a 1/8-mile search radius:

Previous Archaeological Survey: A small portion of both the northern and western APE margins have been subjected archaeological survey as a result of four previous investigations, including:

CCIC #	Date	Author
SJ-00778	1987	Napton
SJ-00791	1989	Napton
SJ-05712	2004	Francis
SJ-06843	2007	ESA

Recorded Cultural Resources:

No prehistoric, or historic-era resources have been documented within, immediately adjacent to, or within 1/8-mile of the present APE.

Other Sources Consulted

In addition to the archaeological records of San Joaquin County as maintained by the Central California Information Center, the following sources were also consulted:

- The National Register of Historic Places (2008 and updates).
- The California Register of Historical Resources (2008 and updates).
- The California Inventory of Historic Resources (1976).
- California State Historical Landmarks (1996).
- California Points of Historical Interest (1992).
- The Historic Property Data File (2014).
- The Determination of Eligibility (2014).
- Historic Maps: Map #2 from History of San Joaquin County, California with Illustrations (Thompson and West 1879 1968 reprint); 1883 map of San Joaquin County; 1910 Castle USGS (1:31680-scale series); 1939 Lodi USACE 15' (1:62500); 1953 Lodi South USGS 7.5' (1:24000); GLO Plat T2N/R6E, Sheet #41-090, dated 1853-1865.
- Published and unpublished documents relevant to environment, ethnography, prehistory and early historic developments in the vicinity, providing context for assessing site types and distribution patterns for the project area (summarized below under *Environmental and Cultural Context*).

Native American Consultation

In addition to examining the records of San Joaquin County at the CCIC and reviewing published and other sources of information, consultation was undertaken with the Native American Heritage Commission (NAHC) re. sacred land listings for the property. An information request letter was delivered to the NAHC on September 14, 2016. The NAHC responded on September 15, 2016, indicating that a search of the "Sacred Lands File was conducted for the area of potential effect (APE) referenced above with negative results."

3. ENVIRONMENTAL and CULTURAL CONTEXT

Environmental Context

The project area is located within the San Joaquin Valley, the southern half of the Great Central Valley of California, within flat valley bottomland. More substantial relief existed throughout the Valley floor prior to land leveling and land surface re-contour associated with historic and contemporary agriculture. There is little resemblance between today's environmental context and that which existed 150 years ago, since most of the land area has either been leveled and intensively farmed, dredged and channelized (creeks and sloughs), or has been built out (communities of Stockton and Lodi, farm complexes, excavated drainage areas and other features). One of the consequences of these historic through contemporary activities is that much of the native vegetation no longer exists (Barbour and Major 1977; Kuchler 1977). The same conclusion applies to the riparian plant and animal associations once linked with sloughs and stream courses, as well as avian and land fauna. Prior to effects of Euro-American settlement, however, the natural resources of this area were abundant and supported stable and very substantial Native American populations, for whom habitation concentrated along waterways and in association with levees and other elevated lands.

Generally, environmental conditions within the Central Valley have remained stable throughout the past 8-10,000 years, although minor fluctuations in overall precipitation and temperature regime have been documented, and these undoubtedly influenced prehistoric patterns of land use and settlement.

Cultural Context

Prehistory: The San Joaquin Valley area generally has a long and complex cultural history with distinct regional patterns that extends back more than 11,000 years. The first generally agreed-upon evidence for the presence of prehistoric peoples in the area is represented by the distinctive fluted spear points (e.g. Heizer 1938), some resembling Clovis Points, found on the margins of extinct lakes in the San Joaquin Valley. The Clovis points are found on the same surface with the bones of extinct animals such as mammoths, sloths, and camels. Based on evidence from elsewhere, the ancient hunters who used these spear points existed during a narrow time range between about 10,900 BP and 11,200 BP (Moratto 2004).

The next cultural period represented, the Western Pluvial Lakes Tradition and thought by most to be subsequent to the Clovis period, is another widespread complex that is characterized by stemmed spear points. This poorly defined early cultural tradition is regionally known from a small number of sites in the Central Coast Range, San Joaquin Valley lake margins, and Sierra Nevada foothills. The cultural tradition is dated to between about 8,000 and 10,000 years ago and its practitioners may be the precursors to the subsequent cultural pattern (Wallace 1978c).

About 8,000 years ago, many California cultures shifted the main focus of their subsistence strategies from hunting to seed gathering as evidenced by the increase in food-grinding implements found in archeological sites dating to this period. This cultural pattern is best known for southern California, where it has been termed the Milling Stone Horizon
(Wallace, 1954, 1978a). However, subsequent research suggests that the horizon may be more widespread than originally described and likely extended throughout the Valley (Moratto 2004); radiocarbon dates suggest a maximum age range between about 8,000 and 2,000 BP, but with most clustering between about 6,000 to 4,000 BP.

Cultural patterns as reflected in the archeological record, particularly specialized subsistence practices, became codified within the last 3,000 years. The archeological record becomes more complex, as specialized adaptations to locally available resources were developed and populations expanded. Many sites dated to this time period contain mortars and pestles and/or are associated with bedrock mortars implying the intense exploitation of the acorn. The range of subsistence resources utilized along with regional exchange systems expanded significantly. Along the coast and in the Central Valley, archeological evidence of social stratification and craft specialization is indicated by well-made artifacts such as charmstones and beads, often found as mortuary items. Ethnographic lifeways serve as good analogs for this period.

Ethnography: The project area is located within territory claimed by the Penutianspeaking Northern Valley Yokuts (Wallace 1978b: Figure 1) at the time of initial European-American entry into this region (*circa*. A.D. 1800). The Yokuts occupied a fairly extensive area, extending from the crest of the Coast "Diablo" Range easterly into the foothills of the Sierra Nevada, north to the American River, and south to the upper San Joaquin River.

The basic social unit for the Yokuts was the family, although the village may also be considered a social, a political and economic unit. Villages were often located on elevated features (natural levees, knolls, ridges) adjoining streams, and were inhabited mainly in the winter as it was necessary to seasonally relocate, sometimes to hills and higher elevation zones, to establish temporary camps during food gathering seasons (i.e., spring, summer and fall). Villages typically consisted of a scattering of small structures, numbering from four or five to several dozen in larger villages, each house containing a single family of from three to seven people. Larger villages, with from twelve to fifteen or more houses, might also contain an earth lodge.

As with most California Indian groups, economic life for the Yokuts revolved around hunting, fishing and the collecting of plant foods, with deer, acorns, and aquatic resources representing primary staples. The collection and processing of these various food resources was accomplished with the use of a wide variety of wooden, bone and stone artifacts. The Yokuts were very sophisticated in terms of their knowledge of the uses of local animals and plants, and of the availability of raw material sources that could be used in manufacturing an immense array of primary and secondary tools and implements. However, only fragmentary evidence of their material culture remains, due in part to perishability, and in part to the impacts to archaeological sites resulting from later (historic) land uses.

Historic Context: Historically, the interior of California was initially visited by Anglo-American fur trappers, Russian scientists, and Spanish-Mexican expeditions during the early part of the 19th Century. These early explorations were followed by a rapid escalation of European-American activities, which culminated in the massive influx fostered by the discovery of gold at Coloma in 1848. Early Spanish expeditions arrived from Bay Area missions as early as 1804, penetrating the northwestern San Joaquin Valley (Cook, 1976). By the mid-1820s, hundreds of fur trappers were annually traversing the Valley on behalf of the Hudson's Bay Company (Maloney, 1945). By the late 1830s and early 1840s, several small permanent European-American settlements had emerged in the Central Valley and adjacent foothill lands, including Ranchos in the interior Coast Range, and the settlement at New Helvetia (Sutter's Fort) at the confluence of the Sacramento and American Rivers (Sacramento).

It was in 1841 that Charles Weber arrived in California via the Bidwell-Bartleson party, and it was Weber who settled in what would become present-day downtown Stockton. Weber, partnering with others, established a colony at this location, and received the circa 38,000-acre Rancho del Campo de los Franceses land grant in 1844. During the spring of 1849, the town of Stockton was surveyed and established.

With the discovery of gold in the Sierra Nevada, large numbers of European-Americans, Hispanics, and Chinese arrived in and traveled through the Valley. The Valley's east-side mining communities' demands for hard commodities led quickly to the expansion of ranching and agriculture throughout the Great Central Valley and the interior valleys of the Coast Range. Stable, larger populations arose and permanent communities slowly emerged in the Central Valley, particularly along major transportation corridors. Of particular importance in this regard was the transformation brought about by the railroad.

The Southern Pacific and Central Pacific Railroads and a host of smaller interurban lines to the north and east around the cities of Sacramento, Stockton and Modesto began intensive projects in the late 1860s. By the turn of the century, nearly 3,000 miles of lines connected the cities of Modesto and Stockton with points south and north. Many of the valley's cities, including many in San Joaquin and adjacent Counties, were laid out as isolated railroad towns in the 1870s and 1880s by the Southern and Central Pacific, which not only built and settled, but continued to nurture the infant cities until settlement could be independently sustained.

4. ARCHAEOLOGICAL SURVEY and CULTURAL INVENTORY

Survey Coverage

All of the circa 10-acre project APE was subjected to intensive pedestrian survey by means of walking systematic transects, spaced at 10 meter intervals.

In searching for cultural resources, the surveyor took into account the results of background research and was alert for any unusual contours, soil changes, distinctive vegetation patterns, exotic materials, artifacts, feature or feature remnants and other possible markers of cultural sites.

Field work was undertaken on October 9, 2016 by Sean Michael Jensen. Mr. Jensen is a professional archaeologist, with 30 years experience in archaeology and history, who meets

the Secretary of Interior's Standards for Professional Qualification, as demonstrated in his listing on the California Historical Resources Information System list of qualified archaeologists and historians. No special problems were encountered and all survey objectives were satisfactorily achieved.

General Observations

The entire APE appears to have been subjected to intensive disturbance related directly to agricultural cultivation over the past century, disturbance resulting from adjacent 8 Mile Road and Thornton Road construction and ongoing maintenance, and to both buried and overhead utilities.

Prehistoric Resources

No evidence of prehistoric occupation or utilization was observed within the APE. The best explanation for the absence of such materials is the degree of disturbance to which all of the property has been subjected, and to more suitable settings located closer to both Pixley Slough and Bear Creek.

Historic-era Resources

No evidence of historic-era resources was observed within the APE.

5. PROJECT EFFECTS

A project may have a significant impact or adverse effect on cultural resources if the project will or could result in the physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance or values of the resource would be materially impaired.

Based on the specific findings detailed above under *Pedestrian Survey and Inventory*, no significant historical resources or unique archaeological resources are present within the project area and none will be affected by the undertaking, as presently proposed.

6. PROJECT SUMMARY

This report details the results of a Class III archaeological inventory of the proposed 8 Mile Road AMPM development project which involves a land area of approximately 10-acres located adjacent to the south side of 8 Mile Road and the east side of Thornton Road, approximately 1-mile east of Interstate 5, within the City of Stockton, San Joaquin County, California. The project would involve commercial development of the property, which could include construction of a new commercial building, construction of parking and access, and placement of utilities. A search of State data bases, including all records and documents available at the Central California Information Center and intensive pedestrian survey, failed to identify any prehistoric or historic-era resources within the APE.

Based on the findings of the present archaeological inventory, no significant historical resources and no unique archaeological resources will be affected by the undertaking, as presently proposed. Despite these negative findings, the following general provisions are considered appropriate:

- 1) <u>Consultation in the event of inadvertent discovery of human remains</u>: Evidence of human burial or scattered human remains related to prehistoric occupation of the area could be inadvertently encountered anywhere within the project area during future construction activity or other actions involving disturbance to the ground surface and subsurface components. In the event of such an inadvertent discovery, the County Coroner would have to be informed and consulted, per State law. Ultimately, the goal of consultation is to establish an agreement between the most likely lineal descendant designated by the Native American Heritage Commission and the project proponent(s) with regard to a plan for treatment and disposition of any human remains and artifacts which might be found in association. Such treatment and disposition may require reburial of any identified human remains/burials within a "preserve" or other designated portion of the development property not subject to ground disturbing impacts.
- 2) <u>Consultation in the event of inadvertent discovery of cultural material</u>: The present evaluation and recommendations are based on the findings of an inventory-level surface survey only. There is always the possibility that significant unidentified cultural materials could be encountered on or below the surface during the course of future development or construction activities. This caveat is particularly relevant considering the constraints generally to archaeological field survey, and particularly where past ground disturbance has occurred, as in the present case. In the event of an inadvertent discovery of previously unidentified cultural material, archaeological consultation should be sought immediately.

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CLASS III ARCHAEOLOGICAL SURVEY

8 Mile Road AMPM Development Project circa 10-acres City of Stockton, San Joaquin County, California.

ATTACHMENTS

- Project Location and Archaeological Survey Area Map
- Records Search, Central California Information Center (CCIC)
- Letter to the Native American Heritage Commission (NAHC)
- Response from the NAHC

GENESIS SOCIETY - PARADISE, CALIFORNIA



<u>APE MAP</u>: 8 Mile Road ARCO AM/PM, APN 070-670-01, SEC of the intersection of Thornton Road and 8 Mile Road, Stockton, San Joaquin County, CA 95209. Section 5, Township 2 North, Range 6 East, Lodi South (1976) USGS Quadrangle. Approximately 38.0570957N, -121.3506698W



CENTRAL CALIFORNIA INFORMATION CENTER

California Historical Resources Information System Department of Anthropology – California State University, Stanislaus One University Circle, Turlock, California 95382 (209) 667-3307

Alpine, Calaveras, Mariposa, Merced, San Joaquin, Stanislaus & Tuolumne Counties

Date: 9/26/2016

Records Search File No.: 10015L Re: Project: 8-Mile AM\PM Access and Use Agreement No.: 136

Sean M. Jensen Genesis Society 7053 Molokai Drive Paradise, CA 95969

Email: seanjensen@comcast.net

Dear Mr. Jensen,

Report Copies:

The Central California Information Center received your record search request for the project area referenced above, located on the Lodi South USGS 7.5' quadrangle in San Joaquin County. The following reflects the results of the records search for the project area and a one-eighth-mile radius:

As per data currently available at the CCaIC, the locations of resources and reports are provided in the following format: 🖾 custom GIS maps 🗌 shapefiles 🔲 hand-drawn maps

Summary Data:				
Resources within project area:	0 resou	rces reported	to the CCalC	
Resources within 1/8th-mile radius:	0 resou	rces reported	to the CCalC	
Reports within project area:	2 repor	ted to the CCa	IC: SJ-00791, SJ-06	5843
Reports within 1/8th-mile radius:	2 repor	ted: SJ-00778,	SJ-05712	
Resource Database Printout (list):		\Box enclosed	\Box not requested	⊠ nothing listed
Resource Database Printout (details):		\Box enclosed	\Box not requested	⊠ nothing listed
Resource Digital Database Records (spreadsheet):				
Resource Record Copies:		\Box enclosed	\Box not requested	⊠ nothing listed
<u>Report Database Printout (list):</u>		□ enclosed	⊠ not requested	□ nothing listed
<u>Report Database Printout (details):</u>	pdf	⊠ enclosed	\Box not requested	\Box nothing listed

all reports, pdf

 \boxtimes enclosed \square not requested \square nothing listed

OHP Historic Properties Directory:	\Box enclosed	\Box not requested	⊠ nothing listed
Archaeological Determinations of Eligibility:	\Box enclosed	\Box not requested	⊠ nothing listed
CA Inventory of Historic Resources (1976):	\Box enclosed	\Box not requested	⊠ nothing listed
Caltrans Bridge Survey:	□ enclosed	⊠ not requested	\Box nothing listed
Ethnographic Information:	□ enclosed	⊠ not requested	\Box nothing listed
Historical Literature:	\Box enclosed	\Box not requested	⊠ nothing listed
Historical Maps: hardcopies	⊠ enclosed	□ not requested	\Box nothing listed
Map No. Two from <i>History of San Joaquin Coun</i> 1879; 1968 reprint) Map of the County of San Joaquin (1883) 1910 Castle USGS 7.5' (1:31680-scale series) 1939 Lodi USACE 15' (1:62500) 1953 Lodi South USGS 7.5' (1:24000)	ty, California (with Illustrations (ז	hompson and West
Local Inventories: No local inventories on Joaquin Co.	file or mainta	ined at the CCaIC f	or this part of San
GLO and/or Rancho Plat Maps: hardcopy	⊠ enclosed	\Box not requested	\Box nothing listed
T2N/R6E Sheet #41-090 Dated 1853-18	65		
<u>Soil Survey Maps</u> :	🗵 not availa	ble at CCIC; please	go to
http://websoilsurvey.nrcs.usda.gov/app/WebSoi	ISurvey.aspx		

Resources known to have value to local cultural groups:

None have been formally reported to the CCaIC.

Please forward a copy of any resulting reports from this project to the office as soon as possible. Due to the sensitive nature of archaeological site location data, we ask that you do not include resource location maps and resource location descriptions in your report if the report is for public distribution. If you have any questions regarding the results presented herein, please contact the office at the phone number listed above.

The provision of CHRIS Data via this records search response does not in any way constitute public disclosure of records otherwise exempt from disclosure under the California Public Records Act or any other law, including, but not limited to, records related to archeological site information maintained by or on behalf of, or in the possession of, the State of California, Department of Parks and Recreation, State Historic Preservation Officer, Office of Historic Preservation, or the State Historical Resources Commission.

Due to processing delays and other factors, not all of the historical resource reports and resource records that have been submitted to the Office of Historic Preservation are available via this records search. Additional information may be available through the federal, state, and local agencies that produced or paid for historical resource management work in the search area. Additionally, Native American tribes have historical resource information not in the CHRIS Inventory, and you should contact the California Native American Heritage Commission for information on local/regional tribal contacts.

Should you require any additional information for the above referenced project, reference the record search number listed above when making inquiries. Requests made after initial invoicing will result in the preparation of a separate invoice.

Thank you for using the California Historical Resources Information System (CHRIS).

Note: Billing will be transmitted separately via email by our Financial Services office* (\$225.20), payable within 60 days of receipt of the invoice.

Sincerely,

R. Hand

Robin Hards, Assistant Research Technician Central California Information Center California Historical Resources Information System

*Invoice to: Laurie Marroquin, Financial Services (<u>lamarroquin@csustan.edu</u> or <u>MSR270@csustan.edu</u>)

GENESIS SOCIETY

a Corporation Sole

7053 MOLOKAI DRIVE PARADISE, CALIFORNIA 95969 (530) 680-6170 VOX seanjensen@comcast.net

September 14, 2016

Native American Heritage Commission

1550 Harbor Boulevard, West Sacramento, California 95691

Subject: 8 Mile AMPM Development Project, circa 5-acres, City of Stockton, San Joaquin County, California.

Dear Commission:

We have been requested to conduct the archaeological survey, for the above-cited project, and are requesting any information you may have concerning archaeological sites or traditional use areas for this area. Any information you might supply will be used to supplement the archaeological and historical study being prepared for this project.

<u>Project Name:</u>	8 Mile AMPM Development Project, circa 5-acres
County:	San Joaquin
Map:	USGS Lodi South, 7.5'
<i>Location</i> :	Portion of Section 5 of T2N, R6E

Thanks in advance for your assistance.

Regards,

Sean Míchael Jensen

Sean Michael Jensen, Administrator

NATIVE AMERICAN HERITAGE COMMISSION

1550 Harbor Blvd., Suite 100 West Sacramento, CA 95691 (916) 373-3710 Fax (916) 373-5471



September 15, 2016

Sean Jensen Genesis Society

Sent by Email: seanjensen@comcast.net Number of Pages: 2

RE: 8 Mile AMPM Development Project, San Joaquin County

Dear Mr. Jensen:

A record search of the Native American Heritage Commission (NAHC) Sacred Lands File was completed for the area of potential project effect (APE) referenced above with negative results. Please note that the absence of specific site information in the Sacred Lands File does not indicate the absence of Native American cultural resources in any APE.

I suggest you contact all of those listed, if they cannot supply information, they might recommend others with specific knowledge. The list should provide a starting place to locate areas of potential adverse impact within the APE. By contacting all those on the list, your organization will be better able to respond to claims of failure to consult. If a response has not been received within two weeks of notification, the NAHC requests that you follow-up with a telephone call to ensure that the project information has been received.

If you receive notification of change of addresses and phone numbers from any of these individuals or groups, please notify me. With your assistance we are able to assure that our lists contain current information. If you have any questions or need additional information, please contact via email: Sharaya.souza@nahc.ca.gov.

Sincerely,

Sharaya Souza Staff Services Analyst

Native American Heritage Commission Native American Contact List San Joaquin County 9/15/2016

Buena Vista Rancheria

Rhonda Morningstar Pope, Chairperson 1418 20th Street, Suite 200 Miwok Sacramento, CA, 95811 Phone: (916)491-0011 Fax: (916)491-0012 rhonda@buenavistatribe.com

lone Band of Miwok Indians

Crystal Martinez-Alire, Chairperson P.O. Box 699 Plymouth, CA, 95669 Phone: (209) 245 - 5800 Fax: (209) 245-3112 administrator@ionemiwok.org

North Valley Yokuts Tribe

Katherine Erolinda Perez, Chairperson P.O. Box 717 Linden, CA, 95236 Phone: (209)887-3415 canutes@verizon.net

Costanoan Northern Valley Yokut

Miwok

Wilton Rancheria

Raymond Hitchcock, Chairperson 9728 Kent Street Miwok Elk Grove, CA, 95624 Phone: (916)683-6000 Fax: (916)683-6015 rhitchcock@wiltonrancheriansn.gov

This list is current only as of the date of this document. Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resource Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native Americans with regard to cultural resources assessment for the proposed 8 Mile AMPM Development Project, San Joaquin County, San Joaquin County.

APPENDIX D PHASE I ESA

PHASE I ENVIRONMENTAL SITE ASSESSMENT

APN 070-670-01 SEC Thornton Road and 8 Mile Road Stockton, San Joaquin County, CA 95209 Bole and Associates File # 0815-2016-1500



Prepared for

PS Fuels, Inc. Attn: S. Mann 2190 Meridian Park Blvd., Suite G Concord, CA 94520

Prepared by



6898 Penny Way Browns Valley, CA 96918

September 15, 2016

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1. Summary

Bole & Associates has performed a Phase I Environmental Site Assessment (ESA) in general conformance with the scope and limitation of the American Society for Testing and Materials (ASTM) Standard Practice for Environmental Site Assessments E 1527-13, and the Environmental Protection Agency Standards and Practices for All Appropriate Inquires (AAI) (40 CFR Part 312) for the subject property described as San Joaquin County Assessor's Parcel Number 070-670-01, located at the southeast corner of the intersection of Thornton Road and 8 Mile Road in Stockton, San Joaquin County, CA 95209. Any exceptions to, or deletions from this practice are described in Section 2.4 of this report. The Phase I Environmental Site Assessment is designed to provide PS Fuels, Inc. and their assigns with an assessment concerning environmental conditions (limited to those issues identified in the report) as they exist at the subject property. The subject property consists of an approximately 10.09-acre parcel of undeveloped land. The subject property is located in a mixed agricultural/residential corridor of Stockton and is adjoined to the north by undeveloped/agricultural land; and to the east, south, and west by single-family residences. While no initial environmental site assessment can fully eliminate the uncertainty regarding the potential for recognized environmental conditions, the ASTM standard does cite the balance between appropriate levels of inquiry and the cost of such exhaustive investigations. It is Bole & Associate's opinion that a full assessment of the site has been completed. Our investigations did not reveal any Recognized Environmental Conditions associated with the subject property and it is the professional opinion of Bole and Associates that no further investigations are warranted at this time.

2. Introduction

2.1. Purpose

As per Section 1.1 of the American Society of Testing and Materials (ASTM) Standard Practice Designation E 1527-13, the purpose of this assessment is to identify recognized environmental conditions, as defined in Section 3.2.78 of the same Standard Practice; that is "the presence or likely presence of any hazardous substances or petroleum products in, on or at a property due to release to the environment; under conditions indicative of a release to the environment; or under conditions that pose a material threat of a future release to the environment. *De minimis* conditions are not recognized environmental conditions." This practice is intended to permit a user to satisfy one of the requirements to qualify for the innocent landowner defense to the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA); that is, the practices that constitute "all appropriate inquiry into the previous ownership and uses of the property consistent with good commercial or customary practice" as defined in 42 U.S.C. § 9601(35) (A) & (B). Bole & Associates has conducted this Phase I ESA under the direction a qualified Environmental Professional, whose seal and/or signature appears hereon. This document serves to identify recognized environmental conditions (RECs) in association with the subject property.

2.2. Detailed Scope-of-Services

The Phase I ESA conducted at the subject property was in general accordance with ASTM Standard E 1527-13 and included some or all of the following:

- Review of previous environmental site assessments
- Records review
- Interviews with regulatory officials
- A site visit
- Evaluation of information and preparation of the report provided herein.

Typically, a Phase I ESA does not include sampling or testing of air, soil, groundwater, surface water, or building materials. These activities would be carried out in a Phase II ESA, if required. For this Phase I ESA, no additions to the ASTM E 1527-13 standard were made.

2.3. Significant Assumptions

Bole & Associates believes the results, specifications, conclusions and professional opinions to be accurate and relevant but cannot accept responsibility for the accuracy or completeness of public documentation or

accuracy, completeness, or possible withholding of information by interviewees or other private parties. We make no other warranty, either expressed or implied.

It is assumed that this investigation is being conducted to identify recognized environmental conditions (RECs) concerning the subject property, and to permit the user to satisfy one of the requirements to qualify for the innocent landowner defense to CERCLA liability. This investigation may mention but does not fully address non-scope considerations such as:

Asbestos Radon Lead-based paint Lead in drinking water Wetlands Regulatory compliance (USACOE, USFWS, etc.) Cultural and historic resources Health and safety Ecological resources Endangered species Air quality Water quality

This property assessment did not include air, soil or water sampling, or laboratory analysis. Therefore, the results of this investigation do not preclude the possibility of substances that are currently or in the future may be defined as hazardous being present on the property. This report does not purport to address all safety problems, if any, associated with the subject property.

2.4. Limitations, Exceptions, and Data Gaps

The scope of services performed to complete this Phase I ESA is limited in nature. Site conditions can change in time, and our assessment is not intended to predict future site conditions. Because of the limited nature of this assessment, site history will be developed based only on information provided by a review of available regulatory files on this site and near-by sites. This report is not a complete risk assessment and the scope of services does not include a complete determination of the extent of, nor the environmental or public health impact of, known or suspected hazardous materials or wastes.

Along with all of the limitations set forth in various sections of the ASTM E 1527-13 protocol, the accuracy and completeness of this report may be limited by the following:

Access Limitations - All areas of the subject property were readily accessible by foot.

Physical Obstructions to Observations – No physical obstructions were noted on the subject property. Outstanding Information Requests – The property owner Jimenez Thornton Road Ranch was unable to complete an environmental questionnaire; the lack of an owner-provided questionnaire is considered to be a data gap; however, based on the additional historical databases and information obtained by Bole and Associates, including historic aerial photograph, historic topographic maps, and other historical information sources, this data gap is deemed to be less than significant. Historical Data Source Failure – None.

The information and conclusions contained in this report are based upon work undertaken by trained professionals and technical staff in accordance with generally accepted engineering and scientific practices current at the time the work was performed. The conclusions and recommendations presented represent the best judgment of Bole & Associates based on the data obtained from the work. Due to the nature of investigation and the limited data available, Bole & Associates cannot warrant against undiscovered environmental liabilities. Conclusions and recommendations presented in this report should not be construed as legal advice.

Should additional information become available which differs significantly from our understanding of conditions presented in this report, we request that this information be brought to our attention so that we may reassess the conclusions provided herein.

The government database search included sites that are within the search range of the subject property. However, sites exist that are in the general vicinity of the subject property without enough information listed to map these "orphan" sites or determine if they are within the search range. The Orphan summary indicated that there are two (2) unmapped orphan sites in the database report. Based on the status and location of these sites they are not considered recognized environmental conditions in association with the subject property.

Based on information obtained during the evaluation process and general knowledge of the history of this vicinity of San Joaquin County, it is the opinion of the Bole & Associates representative that the historical subject property uses have been adequately defined.

Aside from the limitation(s) listed above, it is the opinion of David Bole, Environmental Professional that this property assessment provides an appropriate degree of inquiry to determine if RECs exist on the subject property.

2.5. Special Terms and Conditions

Authorization to perform this assessment was given by the client on August 15, 2016 by PS Fuels, Inc. Instructions as to the location of the property, and details of access were supplied by PS Fuels, Inc.

2.6. Reliance

This report has been prepared for the sole benefit of PS Fuels, Inc. and their assigns. The report may not be relied upon by any other person or entity without the express written consent of Bole & Associates and the client with the following exceptions (s): any lender or CDC chosen to assist with the purchasing or financing of this report will be provide a letter of reliance upon request.

2.7. Environmental Personnel

This assessment was conducted under the supervision of David H. Bole, Environmental Professional. The following personnel contributed to the assessment:

- David H. Bole, B.S, Environmental Professional, Registered Environmental Property Assessor (REPA) Number 762718, performed site observations, conducted local file reviews, provided supervision, review, and opinions/conclusions.
- Marcus H. Bole, M.S., Environmental Science, REPA 647913, Quality Control Project Manager, coordinated and reviewed database searches, conducted first-level and final reviews of all reports and documents in accordance with the principles of ISO 9001.

3. Site Description

The Bole & Associates representative performed a site inspection/observation on August 16, 2016.

3.1. Location and Legal Description

The subject property is legally defined as San Joaquin County Assessor's Parcel Number (APN) 070-670-01, located at the southeast corner of the intersection of Thornton Road and 8 Mile Road in Stockton, San Joaquin County, CA 95209. The subject property location is outlined in Appendix A of this report.

3.2. Site and Vicinity Characteristics

The subject property consists of an approximately 10.09-acre parcel of undeveloped land. The subject property is located in a predominantly residential/agricultural corridor of Stockton and is adjoined to the north by undeveloped/agricultural land; and to the east, south and west by single-family residences. The current use of the immediately adjacent properties is presented in Section 3.5 of this report. For information regarding the physical setting and soil composition in the general area of the subject property refer to section 5.4.

3.3. Current Use of the Property

At the time of the August 16, 2016 site observation the subject property was undeveloped land.

3.4. Descriptions of Structures, Roads, Other Improvements on the Site

At the time of the August 16, 2016 site observation structures, roads, and other improvements for the subject properties include the following:

- An approximately 10.09-acre parcel of undeveloped land.
- No permanent structures were noted on the subject property.
- The northern, southern, and western perimeter of the property contained manicured, irrigated landscaping including shrubs and trees. Irrigation improvements were noted in these areas.
- The northwest corner of the site contained electrical utilities associated with the traffic signal at the intersection of 8 Mile Road and Thornton Road.
- A gravel path was noted at the eastern perimeter of the site running north-west, providing access to the residences to the south of the subject property.
- The extent of utility improvements (water, sewer, and power) was not readily discernible. Irrigation and water utilities were apparent, and in use with the landscaping along the northern, southern, and western perimeter of the property.
- Access to the site is gained from the north via 8 Mile Road; from the west via Thornton Road; and from the south via Breaker Way.

3.5 Current Uses of the Adjoining Properties

During the vicinity reconnaissance, Bole & Associates observed the following land use on properties in the immediate vicinity of the subject property.

Direction	Property Description/Address/(NAICS) (if applicable)
North	APNs 055-210-06/055-210-05, agricultural/undeveloped land.
East	Single family residences
South	Single family residences; APN 070-670-02 (undeveloped land)
West	Single family residences

4. User Provided Information

4.1. Title Records

A Preliminary Title Report (PTR) was not supplied by the client/user.

4.2. Environmental Liens or Activity and Use Limitations

There was no report or record of any environmental liens, activity, and/or use limitations due to hazardous material issues on the subject or surrounding properties. On August 17, 2016 EDR® searched the LIENS, LIENS 2, DEED, US ENG CONTROLS, and US INST CONTROLS databases. The subject property did not appear in any of these databases. A search of environmental liens was conducted by EDR® on August 18, 2016; no environmental liens were found associated with the subject property.

4.3. Specialized Knowledge

This site was not listed on the EDR[®] Radius Map[™] Report with Geocheck[®] in any of the databases searched by EDR.

4.4. Commonly Known or Reasonably Ascertainable Information

All commonly known or reasonably ascertainable information is described in this report.

4.5. Valuation Reduction for Environmental Issues

Based upon physical observations and from a review of historical sources, no environmental issues were identified that could result in property value reduction.

4.6. Owner, Property Manager, and Occupant Information

The property owner Jimenez Thornton Road Ranch was unable to complete an environmental questionnaire; the lack of an owner-provided questionnaire is considered to be a data gap; however, based on the additional historical databases and information obtained by Bole and Associates, including historic aerial photograph, historic topographic maps, and other historical information sources, this data gap is deemed to be less than significant.

Property Owner	Jimenez Thornton Road Ranch
Property Occupant	Undeveloped land/unoccupied
Property Onsite Contact(s)	none

4.7. Reason for Performing Phase I

The Phase I ESA is being conducted as part of environmental due diligence prior to valuation of property for the purchase/financing/sale of this property by PS Fuels, Inc. and their assigns.

4.8. Other

No other user-provided information was available for review

5. Records Review

The comprehensive EDR® Radius Map^{TM} Report with GeoCheck® Report is provided as a searchable document attached to the general deliverable. The report includes descriptions of standard and additional environmental records searched, original source of information, approximate search distance, date information was last updated by EDR®, and date information was last updated by original source.

Bole & Associates contracted Environmental Data Resources, Inc. (EDR®) to conduct a search of Federal and State databases containing known and suspected sites of environmental contamination. The number of listed sites identified within the approximate minimum search distance (AMSD) from the Federal and State environmental records database listings specified in ASTM Standard E 1527-13 are summarized in the following table. Detailed information for sites identified within the AMSDs is provided below, along with an opinion about the significance of the listing to the analysis of recognized environmental conditions in connection with the subject property.

Standard Environmental Record Sources	Additional Environmental Record Sources
Federal NPL Site List	State and Local HIST CAL-SITES
Federal Proposed NPL Site List	State and Local CA BOND EXP PLAN List
Federal Delisted NPL Site List	State and Local SCH List
Federal NPL Liens Site List	State and Local WDS List
Federal LIENS2 List	State and Local NPDES List
Federal CORRACTS List	State and Local Cortese List
Federal US ENG CONTROLS List	State and Local HIST CORTESE List
Federal US INST CONTROL List	State and Local SWRCY List
Federal DOT OPS List	State and Local LEAKING UNDERGROUND STORAGE TANK Sites
Federal US CDL List	State and Local CA FID UNDERGROUND STORAGE TANK Sites
Federal US BROWNFIELDS List	State and Local SLIC List
Federal Department of Defense Site	State and Local UST Sites
Federal Formerly Used Defense Sites	State and Local HIST UST Sites
Federal LUCIS List	State and Local SWEEPS UST List
Federal CONSENT List	State and Local CHMIRS List
Federal ROD List	State and Local ABOVEGROUND STORAGE TANK Sites
Federal UMTRA Sites	State and Local NOTIFY 65 List
Federal DEBRIS REGION 9 List	State and Local VCP List

Federal ODI List	State and Local DRYCLEANERS Sites
Federal MINES List	State and Local RESPONSE List
Federal TSCA List	State and Local HAZNET List
Federal FTTS List	State and Local EMI List
Federal HIST FTTS List	State and Local ENVIROSTOR List
Federal SSTS List	State and Local HWP List
Federal ICIS List	State and Local PROC List
Federal PADS List	State and Local EDR PROPRIETARY RECORDS List
Federal MLTS List	State and Local Toxic Pits List
Federal RADINFO List	State and Local SWF/LF List
Federal RAATS List	State and Local WMUDS/SWAT List
Federal SCRD DRYCLEANERS Sites	State and Local LIENS List
Federal UST HIST CDL List	State and Local LDS List
Federal PCB TRANSFORMER List	State and Local MCS List
Federal Facility Site Information List	State and Local DEED List
Federal COAL ASH DOE List	State and Local WIP List
Federal FEMA UST List	State and Local CDL List
Federal COAL ASH EPA List	State and Local ENF List
Federal CERCLIS List	State and Local HAULERS List
Federal CERCLIS NFRAP List	State and Local MWMP List
Federal RCRA TSDF List	State and Local HWT List
Federal RCRA Large Quantity Generators List	Tribal INDIAN RESERV List
Federal RCRA Small Quantity Generators List	Tribal INDIAN ODL List
Federal RCRA CESQG List	State and Tribal INDIAN LUST List
Federal RCRA NONGEN List	Tribal INDIAN UST List
Federal ERNS List	Tribal INDIAN VCP List
Federal HMIRS List	
Federal TRIS List	
Federal FINDS List	

5.1. Standard Environmental Record Sources

Information on standard environmental records was provided by EDR® on August 17, 2016. Sections 5.3.1 and 5.3.2 discuss the results of this review.

5.2. Additional Environmental Record Sources

The following is a list of additional local environmental and historic record sources contacted/reviewed by the Bole & Associates representative:

- State Water Resources Control Board GeoTracker® Database
- San Joaquin County Environmental Management Department
- County of San Joaquin Building Department

5.3. Standard and Additional Environmental Record Review Results

A summary of results for EDR® revealed multiple sites within the radius search required by the ASTM Standard practice. This subject property was not listed in any of the databases searched by EDR. A regulatory file review with the San Joaquin County Environmental Health Department did not reveal any hazardous materials violations, documentation, or indications of release of hazardous materials.

5.3.1. Federal Environmental Records

Sites identified within the search radius of the subject property in the Federal State Regulatory records databases are as follows: none.

5.3.2. State and Tribal Environmental Records

Sites identified within the search radius of the subject property in the California State Regulatory records databases are as follows: none.

EDR PROPRIETARY RECORDS

EDR US Hist Auto Stations: EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/ service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR Classifies as "High Risk Historical Records," or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches. A review of the EDR US Hist Auto Stations list, as provided by EDR, has revealed that there is one (1) EDR US Hist Auto Station sites within the searched area. This listing is linked to a 2008 historical listing for a mobile mechanic whose home office was based at 10936 Iris Bloom Drive (approximately 1,000 feet to the west). Based upon the status and location of this site it is not considered a recognized environmental condition in association with the subject property.

Orphan Summary:

The above government database search included sites that are within the ASTM search range of the subject property. However, sites exist that are in the general vicinity of the subject property without enough information listed to map these "orphan" sites or determine if they are within the ASTM search range. The Orphan summary indicates that there is one (1) unmapped site within the searched area. Based upon the status and location of this site it is not considered a recognized environmental condition in association with the subject property.

5.3.3. Local Environmental Records

State Water Resources Control Board GeoTracker® Database

Bole and Associates reviewed the on-line State Water Resources Control Board GeoTracker® Database. The subject property was not listed in the database. None of the immediately adjacent properties were listed in GeoTracker.

San Joaquin County Environmental Health Department

Bole and Associates contacted the San Joaquin County Environmental Health Department on August 24, 2016 in an effort to review current and historical data regarding hazardous materials for the subject property. The SJEHD had no files for the subject property available for review.

5.3.4. Environmental Lien Search

On August 17, 2016 EDR® searched the Engineering Controls Sites List (US ENG CONTROLS), the Sites with Institutional Controls (US INST CONTROL), and Deed Restriction Listing (DEED). The subject property and immediately adjacent properties were not listed in these databases. On August 18, 2016 EDR conducted a search of environmental liens and other activity/use limitations. No liens were found associated with the subject property.

5.4. Physical Setting Sources and Results

The elevation of the subject property is approximately 14 feet above mean sea level, as depicted on the U.S.G.S. 7.5 Minute Series Topographic Map of the 1976 LODI SOUTH, CA Quadrangle. The general topography of the subject property slopes towards the southwest.

Soil	Areas of	Landform Groups	Potential Soil Hazards
Association	Occurrence		Characterization/Hydric Status
Rioblancho clay	Basin rims	Basin rims formed from	Moderate. These soils are poorly drained
loam	in the San	alluvium from mixed rock	with moderate infiltration rates. These
	Joaquin	sources.	soils are partially hydric.
	Valley		

Subject Property Soil Associations:

Geologic Information Sources:

U.S. Geological Survey. "Lodi South Quadrangle," California 1976. 1:24,000. 7.5 Minute Series. U.S. Department of Interior, USGS. 1976.

NRCS Web Soil Survey http://www.websoilsurvey.sc.egov.usda.gov.

National Wetlands Inventory Wetlands Mapper, http://www.fws.gov/wetlands

6. Historical Use Information on the Property and Adjoining Properties Sources and Results

Historical information identifying the past site use was obtained from a variety of sources as detailed in Appendix D of this report and included: aerial photographs and Sanborn® Fire Insurance maps supplied by EDR®. Other resources include historical USGS topographic maps, a search of City Directories, and a search of the County of San Joaquin Building Department Records.

Historical Topographic Maps

Historical topographic maps were reviewed to determine past land use patterns of the subject and surrounding properties. Maps from 1894 through 2012 were reviewed. The results are as follows:

Year	Target Quad	Description
1894	Lodi	The site is shown surrounded by undeveloped land.
1910	Castle	Similar to previous quads. A dirt road is shown to the east leading to a rural residence.
1939- 1942	Lodi	Similar to previous quads.
1953- 1978	Lodi South	Similar to previous quads.
2012	Lodi South	No markings were noted on the map.

Sanborn® Fire Insurance Maps

Sanborn® Fire Insurance Maps with coverage of the subject property were sought through EDR®. Sanborn® Fire Insurance Maps are detailed drawings of site development, and were typically used by fire insurance companies to determine site fire insurability. According to EDR®, there was not Sanborn® coverage for the subject property. The report certifies that the complete holdings of the Sanborn Library, LLC collection have been searched based on client supplied target property information, and fire insurance maps covering the target property were not found.

Aerial Photographs

Historical aerial photographs were reviewed to determine past land use patterns of the subject and surrounding properties. Photographs covering the years 1940-2012 were available for review. The results of the review are as follows:

Year(s)	Scale	Description
1940- 1998	1'' = 500'	The subject property and immediately adjacent properties on all sides are shown as undeveloped land.
2005	1" = 500'	The subject property and the immediately adjacent properties to the north are shown as undeveloped land. To the east, south, and west are shown areas of continuing residential development with streets and individual lots visible.
2006	1'' = 500'	The subject property is shown as undeveloped land. The eastern portion of the property appears to contain trailers and equipment stored on the ground. No permanent structures were readily visible. Residential development is shown to the east, south, and west, with undeveloped land to the north.
2009- 2012	1'' = 500'	The equipment that was shown on the 2006 photograph is no longer shown on the eastern portion of the site. The immediately adjacent properties on all sides appear as shown on the 2006 photograph.

County of San Joaquin Building Department Records

Records were requested from the County of San Joaquin Building Department for the subject property. No building records were available for review.

City Directory Search

Historic City Directories were searched for the vicinity of the subject property for the years spanning 1906-2013. The subject property has never formally been developed and is not linked to any specific street address and was therefore not listed in any of the directory listings searched. The complete City Directory listings for the adjacent properties are included in Appendix D.

7. Site Observations

7.1. Methodology and Limiting Conditions

Site observations were conducted on foot on August 16, 2016. Weather conditions at the time of the site observations were clear and sunny. All photographs of the subject property were taken on the subject property. Photographs of pertinent site features identified during the site observations are included in Appendix B.

7.2. General Site Setting

The subject property consists of one (1) approximately 10.09-parcel of undeveloped land. The site is located in a predominantly residential corridor of Stockton and is adjoined to the north by 8 Mile Road and agricultural land beyond; to the east by single family residences; to the south by single family residences and undeveloped land; and to the west by Thornton Road and single family residences beyond.

7.3. Site Observation Findings

7.3.1. Hazardous Substances

The subject property is currently undeveloped land. No hazardous substances were noted on the subject property.

7.3.2. Petroleum Products

No petroleum products were noted on the subject property.

7.3.3. USTs

No obvious signs of Underground Storage Tank (UST) use, including fill pipes, vent pipes, or product dispensers were noted on the subject property. According to records reviewed with the San Joaquin County Environmental Health Department the subject property has no history of underground petroleum storage tank use.

7.3.4. ASTs

No aboveground storage tanks were noted on the subject property.

7.3.5. Other Suspect Containers

Other suspect containers were not identified on the subject property during the records search or during onsite observations.

7.3.6. Equipment Likely to Contain PCBs

Equipment likely to contain PCB material was not identified on the subject property during the records search or on-site observations.

7.3.7. Interior Staining/Corrosion

There are no permanent structures on the subject property.

7.3.8. Discharge Features

The subject property is currently undeveloped land. No curbs, drains, or gutters were noted within the confines of the parcel. The residential development to the south includes curbs and gutters that carry storm

water into the storm sewer system. Concrete sidewalks with curbs and gutters have been constructed to the immediate north adjacent to 8 Mile Road and the immediate west adjacent to Thornton Road.

7.3.9. Pits, Ponds, and Lagoons

No pits, ponds or lagoons were observed on the subject property during the on-site observations.

7.3.10. Solid Waste Dumping/Landfills

No evidence of solid waste dumping or landfills was noted on the subject property.

7.3.11. Stained Soil/Stressed Vegetation

No stained soil or stressed vegetation was observed on the subject property during the on-site observations.

7.3.12. Wells

No well casings were observed on the subject property during the on-site observations. Irrigated landscaping utilities were noted along the northern, western, and southern perimeter of the site. It is assumed this irrigation water is provided via municipal lines.

7.3.13. Interviews

The property owner Jimenez Thornton Road Ranch was unable to complete an environmental questionnaire; the lack of an owner-provided questionnaire is considered to be a data gap; however, based on the additional historical databases and information obtained by Bole and Associates, including historic aerial photograph, historic topographic maps, and other historical information sources, this data gap is deemed to be less than significant.

7.3.14. Vapor Intrusion

Vapor intrusion is the migration of Volatile Organic Compounds (VOCs) from the subsurface into buildings. VOCs are compounds or chemicals including products such as gasoline, diesel, solvents, certain pesticides, Polynuclear Aromatic Hydrocarbons (PAHs), and other organic compounds with sufficient volatility and toxicity to pose a vapor intrusion risk. If there are, or are likely to be, buildings within 100 feet of a VOC source area of contaminated soil or within 100 feet of a VOC groundwater plume, soil gas data will be needed to assess vapor intrusion risk. The California Department of Toxic Substances Control (DTSC) requires that the human health risk be evaluated at sites if volatile chemical contamination is present. Some of the physical features that are indicative of chemical releases are: storage tanks and storage areas, areas with odors or stressed vegetation, waste piles, pools of liquid, electrical or hydraulic equipment, unidentified containers, drains and sumps, stained soil and pavement, degraded floors and walls, pits, ponds, and lagoons, dry wells and injection wells, wash racks and oil/water separators, waste processing areas, solvent dipping tanks and spray booths, and waste transfer areas. The subject property was evaluated during onsite inspections to determine if any of the above physical features were present in such a manner to present an elevated risk of vapor intrusion into onsite buildings. A comprehensive evaluation of the current and historical features, structures, and activities at the subject property did not reveal potential locations of releases of hazardous chemicals to the environment. The potential for vapor migration and/or vapor intrusion on this property is considered low.

8. Findings, Opinions, and Conclusions

Bole & Associates has performed a Phase I Environmental Site Assessment (ESA) in general conformance with the scope and limitation of the American Society for Testing and Materials (ASTM) Standard Practice for Preliminary Site Assessments E 1527-13, and the Environmental Protection Agency Standards and Practices for All Appropriate Inquires (AAI) (40 CFR Part 312) for the subject property described as San Joaquin County Assessor's Parcel Number 070-670-01, located at the southeast corner of the intersection of Thornton Road and 8 Mile Road in Stockton, San Joaquin County, CA 95209. Any exceptions to, or deletions from this practice are described in Section 2.4 of this report. The Phase I Environmental Site Assessment is designed to provide PS Fuels, Inc. and their assigns with an assessment concerning environmental conditions (limited to those issues identified in the report) as they exist at the subject property. The subject property consists of an approximately 10.09-acre parcel of undeveloped land. The subject property is located in a mixed agricultural/residential corridor of Stockton and is adjoined to the

north by undeveloped/agricultural land; and to the east, south, and west by single-family residences. While no initial environmental site assessment can fully eliminate the uncertainty regarding the potential for recognized environmental conditions, the ASTM standard does cite the balance between appropriate levels of inquiry and the cost of such exhaustive investigations. It is Bole & Associate's opinion that a full assessment of the site has been completed. Our investigations did not reveal any Recognized Environmental Conditions associated with the subject property and it is the professional opinion of Bole and Associates that no further investigations are warranted at this time.

While no initial environmental site assessment can fully eliminate the uncertainty regarding the potential for recognized environmental conditions, the ASTM standard does cite the balance between appropriate levels of inquiry and the cost of such exhaustive investigations. It is Bole & Associate's opinion that a full assessment of the site has been completed. Our investigations did not reveal any Recognized Environmental Conditions associated with the subject property and it is the professional opinion of Bole and Associates that no further investigations are warranted at this time.

9. Qualifications and Signature

Bole & Associates has performed this assessment under my supervision in accordance with generally accepted environmental practices and procedures, as of the date of this report. I declare that, to the best of my professional knowledge and belief, I meet the definition of environmental professional as defined in §312.10 of 40 CFR 312. I have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the subject property. I have developed and performed all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312. I have employed the degree of care and skill ordinarily exercised under similar circumstances by reputable environmental professionals practicing in this area. The conclusions contained within this assessment are based upon site conditions readily observed or were reasonably ascertainable and present at the time of the site observations.

Prepared and Certified By:

David Bole, B.S. Principal Environmental Scientist Registered Environmental Assessor National Registry REPA 762718

Final Review and Certification:

Marans H. Bole

Marcus H. Bole, M.S. Senior Environmental Professional Registered Environmental Property Assessor National Registry REPA 647913



APPENDIX A: MAPS



Site Location Map: APN 070-670-01, SEC of the intersection of Thornton Road and 8 Mile Road, Stockton, San Joaquin County, CA 95209. Section 5, Township 2 North, Range 6 East, Lodi South (1976) USGS Quadrangle.



<u>Vicinity Map</u>: APN 070-670-01, SEC of the intersection of Thornton Road and 8 Mile Road, Stockton, San Joaquin County, CA 95209. Site is shown surrounded by undeveloped/agricultural land and single-family residences.



BOLE & ASSOCIATES 6898 Penny Way, Browns Valley, CA 95918 (530) 415-6623, email: davidhbole@yahoo.com SITE: APN 070-670-01 ITEM: SITE DIAGRAM

FIGURE 3

APPENDIX B: SITE OBSERVATION PHOTOGRAPHS



6898 Penny Way, Browns Valley, CA 95918 (530) 415-6623, email: davidhbole@yahoo.com **ITEM: SITE PHOTOS** DATE: 8/16/2016

PLATE: 1



BOLE & ASSOCIATES

6898 Penny Way, Browns Valley, CA 95918 (530) 415-6623, email: davidhbole@yahoo.com SITE: APN 070-670-01 ITEM: ADJACENT PROPERTIES DATE: 8/16/2016 PLATE: 2
APPENDIX C: REGULATORY RECORDS REVIEW

EDR® RADIUS MAPTM REPORT

APN 070-670-01

Thornton Road and 8 Mile Road Stockton, CA 95209

Inquiry Number: 4703290.2s August 17, 2016

The EDR Radius Map[™] Report with GeoCheck®



6 Armstrong Road, 4th floor Shelton, CT 06484 Toll Free: 800.352.0050 www.edrnet.com

FORM-LBB-CHM

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Thank you for your business. Please contact EDR at 1-800-352-0050 with any questions or comments.

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A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-13) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

THORNTON ROAD AND 8 MILE ROAD STOCKTON, CA 95209

COORDINATES

Latitude (North):	38.0570150 - 38° 3' 25.25''
Longitude (West):	121.3493550 - 121° 20' 57.67"
Universal Tranverse Mercator:	Zone 10
UTM X (Meters):	644818.4
UTM Y (Meters):	4213221.5
Elevation:	14 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map:	5619734 LODI SOUTH, CA
Version Date:	2012

AERIAL PHOTOGRAPHY IN THIS REPORT

Portions of Photo from: Source: 20140628 USDA Target Property Address: THORNTON ROAD AND 8 MILE ROAD STOCKTON, CA 95209

Click on Map ID to see full detail.

MAP				RELATIVE	DIST (ft. & mi.)
ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	ELEVATION	DIRECTION
1		10936 IRIS BLOOM DR	EDR Hist Auto	Lower	1000, 0.189, West

TARGET PROPERTY SEARCH RESULTS

The target property was not listed in any of the databases searched by EDR.

DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records either on the target property or within the search radius around the target property for the following databases:

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL	National Priority List
Proposed NPL	Proposed National Priority List Sites
NPL LIENS	Federal Superfund Liens

Federal Delisted NPL site list

Delisted NPL_____ National Priority List Deletions

Federal CERCLIS list

FEDERAL FACILITY______ Federal Facility Site Information listing SEMS______ Superfund Enterprise Management System

Federal CERCLIS NFRAP site list

SEMS-ARCHIVE...... Superfund Enterprise Management System Archive

Federal RCRA CORRACTS facilities list

CORRACTS_____ Corrective Action Report

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF..... RCRA - Treatment, Storage and Disposal

Federal RCRA generators list

 RCRA-LQG
 RCRA - Large Quantity Generators

 RCRA-SQG
 RCRA - Small Quantity Generators

 RCRA-CESQG
 RCRA - Conditionally Exempt Small Quantity Generator

Federal institutional controls / engineering controls registries

LUCIS_____ Land Use Control Information System US ENG CONTROLS_____ Engineering Controls Sites List

US INST CONTROL...... Sites with Institutional Controls

Federal ERNS list

ERNS_____ Emergency Response Notification System

State- and tribal - equivalent NPL

RESPONSE...... State Response Sites

State- and tribal - equivalent CERCLIS

ENVIROSTOR EnviroStor Database

State and tribal landfill and/or solid waste disposal site lists

SWF/LF..... Solid Waste Information System

State and tribal leaking storage tank lists

LUST	Geotracker's Leaking Underground Fuel Tank Report
INDIAN LUST	Leaking Underground Storage Tanks on Indian Land
SLIC	Statewide SLIC Cases

State and tribal registered storage tank lists

FEMA UST	Underground Storage Tank Listing
UST	Active UST Facilities
AST	Aboveground Petroleum Storage Tank Facilities
INDIAN UST	Underground Storage Tanks on Indian Land

State and tribal voluntary cleanup sites

VCP	Voluntary	Cleanup	Program	Properties
INDIAN VCP	Voluntary	Cleanup	Priority I	_isting

State and tribal Brownfields sites

BROWNFIELDS..... Considered Brownfieds Sites Listing

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS..... A Listing of Brownfields Sites

Local Lists of Landfill / Solid Waste Disposal Sites

WMUDS/SWAT	Waste Management Unit Database
SWRCY	Recycler Database
HAULERS	Registered Waste Tire Haulers Listing
INDIAN ODI	Report on the Status of Open Dumps on Indian Lands
DEBRIS REGION 9	Torres Martinez Reservation Illegal Dump Site Locations
ODI	Open Dump Inventory

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL Delisted National Clandestine Laboratory Regis	ster
HIST Cal-Sites Historical Calsites Database	
SCH School Property Evaluation Program	
CDL Clandestine Drug Labs	
Toxic Pits Toxic Pits Cleanup Act Sites	
US CDL National Clandestine Laboratory Register	

Local Lists of Registered Storage Tanks

SWEEPS UST	SWEEPS UST Listing
HIST UST	Hazardous Substance Storage Container Database
CA FID UST	Facility Inventory Database

Local Land Records

LIENS	Environmental Liens Listing
LIENS 2	CERCLA Lien Information
DEED	Deed Restriction Listing

Records of Emergency Release Reports

HMIRS	Hazardous Materials Information Reporting System
CHMIRS	California Hazardous Material Incident Report System
LDS	Land Disposal Sites Listing
MCS	Military Cleanup Sites Listing

Other Ascertainable Records

RCRA NonGen / NLR	RCRA - Non Generators / No Longer Regulated
FUDS	Formerly Used Defense Sites
DOD	Department of Defense Sites
SCRD DRYCLEANERS	State Coalition for Remediation of Drycleaners Listing
US FIN ASSUR	Financial Assurance Information
EPA WATCH LIST	EPA WATCH LIST
2020 COR ACTION	2020 Corrective Action Program List
TSCA	Toxic Substances Control Act
TRIS	Toxic Chemical Release Inventory System
SSTS	Section 7 Tracking Systems
ROD	Records Of Decision
RMP	Risk Management Plans
RAATS	RCRA Administrative Action Tracking System
PRP	Potentially Responsible Parties
PADS	PCB Activity Database System
ICIS	Integrated Compliance Information System
FTTS	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide
	Act)/TSCA (Toxic Substances Control Act)
MLTS	Material Licensing Tracking System
COAL ASH DOE	Steam-Electric Plant Operation Data
COAL ASH EPA	Coal Combustion Residues Surface Impoundments List
PCB TRANSFORMER	PCB Transformer Registration Database
RADINFO	Radiation Information Database
HIST FTTS	FIFRA/TSCA Tracking System Administrative Case Listing

INDIAN RESERV	
ELISPAD Earmorly Litilized Sites Demodial Action Drogram	
IMTRA	
LEAD SMELTERS	
LEAD SWIELTERSLedu Silleller Silles	
US AIRS	stem
US MINES Mines Master Index File	
PINDS Facility index System/Facility Registry System	
DUCKET HWC Hazardous waste Compliance Docket Listing	
UXU	
CA BOND EXP. PLAN	
Cortese Hazardous Waste & Substances Sites List	
CUPA Listings CUPA Resources List	
DRYCLEANERSCleaner Facilities	
EMI Emissions Inventory Data	
ENF Enforcement Action Listing	
Financial Assurance Financial Assurance Information Listing	
HAZNET Facility and Manifest Data	
HIST CORTESE	
HWP EnviroStor Permitted Facilities Listing	
HWT Registered Hazardous Waste Transporter Database	
MINES Mines Site Location Listing	
MWMP Medical Waste Management Program Listing	
NPDES NPDES Permits Listing	
PEST LIC Pesticide Regulation Licenses Listing	
PROC Certified Processors Database	
Notify 65 Proposition 65 Records	
UIC UIC Listing	
WASTEWATER PITS Oil Wastewater Pits Listing	
WDS Waste Discharge System	
WIP Well Investigation Program Case List	
FUELS PROGRAM EPA Fuels Program Registered Listing	
ECHO Enforcement & Compliance History Information	

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP	EDR Proprietary Manufactured Gas Plants
EDR Hist Cleaner	EDR Exclusive Historic Dry Cleaners

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA LF	Recovered Government Archive Solid Waste Facilities List
RGA LUST	Recovered Government Archive Leaking Underground Storage Tank

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.

Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in **bold italics** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR Hist Auto: EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

A review of the EDR Hist Auto list, as provided by EDR, has revealed that there is 1 EDR Hist Auto site within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
Not reported	10936 IRIS BLOOM DR	W 1/8 - 1/4 (0.189 mi.)	1	8

Due to poor or inadequate address information, the following sites were not mapped. Count: 2 records.

Site Name

Database(s)

SITE "E" ELEMENTARY SCHOOL

CDL ENVIROSTOR, SCH **OVERVIEW MAP - 4703290.2S**



I nornton Road and 8 Mille Road	
Stockton CA 95209	
38.057015 / 121.349355	

ADDRESS:

LAT/LONG:

CLIENT: Bole and Associates CONTACT: David Bole INQUIRY #: 4703290.2s DATE: August 17, 2016 1:57 pm Copyright © 2016 EDR, Inc. © 2015 TomTom Rel. 2015.



LAT/LONG:

38.057015 / 121.349355

INQUIRY #: 4703290.2s DATE: August 17, 2016 2:02 pm Copyright © 2016 EDR, Inc. © 2015 TomTom Rel. 2015.

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONMEN	ITAL RECORDS							
Federal NPL site list								
NPL Proposed NPL NPL LIENS	1.000 1.000 TP		0 0 NR	0 0 NR	0 0 NR	0 0 NR	NR NR NR	0 0 0
Federal Delisted NPL si	ite list							
Delisted NPL	1.000		0	0	0	0	NR	0
Federal CERCLIS list								
FEDERAL FACILITY SEMS	1.000 0.500		0 0	0 0	0 0	0 NR	NR NR	0 0
Federal CERCLIS NFRA	AP site list							
SEMS-ARCHIVE	0.500		0	0	0	NR	NR	0
Federal RCRA CORRAC	CTS facilities li	ist						
CORRACTS	1.000		0	0	0	0	NR	0
Federal RCRA non-CO	RRACTS TSD f	acilities list						
RCRA-TSDF	1.000		0	0	0	0	NR	0
Federal RCRA generato	ors list							
RCRA-LQG RCRA-SQG RCRA-CESQG	0.125 0.125 0.125		0 0 0	NR NR NR	NR NR NR	NR NR NR	NR NR NR	0 0 0
Federal institutional co engineering controls re	ntrols / gistries							
LUCIS US ENG CONTROLS US INST CONTROL	0.500 0.500 0.500		0 0 0	0 0 0	0 0 0	NR NR NR	NR NR NR	0 0 0
Federal ERNS list								
ERNS	TP		NR	NR	NR	NR	NR	0
State- and tribal - equiv	alent NPL							
RESPONSE	1.000		0	0	0	0	NR	0
State- and tribal - equiv	alent CERCLIS	5						
ENVIROSTOR	1.000		0	0	0	0	NR	0
State and tribal landfill solid waste disposal site	and/or te lists							
SWF/LF	0.500		0	0	0	NR	NR	0
State and tribal leaking	storage tank l	ists						
LUST	1.000		0	0	0	0	NR	0

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
INDIAN LUST SLIC	0.500 0.500		0 0	0 0	0 0	NR NR	NR NR	0 0
State and tribal registere	d storage tai	nk lists						
FEMA UST UST AST INDIAN UST	0.250 0.125 0.250 0.250		0 0 0 0	0 NR 0 0	NR NR NR NR	NR NR NR NR	NR NR NR NR	0 0 0 0
State and tribal voluntary	/ cleanup site	es						
VCP INDIAN VCP	0.500 0.500		0 0	0 0	0 0	NR NR	NR NR	0 0
State and tribal Brownfie	lds sites							
BROWNFIELDS	0.500		0	0	0	NR	NR	0
ADDITIONAL ENVIRONMEN	TAL RECORD	s						
Local Brownfield lists								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
Local Lists of Landfill / S Waste Disposal Sites	olid							
WMUDS/SWAT SWRCY HAULERS INDIAN ODI DEBRIS REGION 9 ODI	0.500 0.500 TP 0.500 0.500 0.500		0 0 NR 0 0 0	0 0 NR 0 0 0	0 0 NR 0 0 0	NR NR NR NR NR	NR NR NR NR NR	0 0 0 0 0
Local Lists of Hazardous Contaminated Sites	waste /							
US HIST CDL HIST Cal-Sites SCH CDL Toxic Pits US CDL	TP 1.000 0.250 TP 1.000 TP		NR 0 0 NR 0 NR	NR 0 NR 0 NR	NR 0 NR 0 NR	NR 0 NR NR 0 NR	NR NR NR NR NR	0 0 0 0 0
Local Lists of Registered	l Storage Tar	nks						
SWEEPS UST HIST UST CA FID UST	0.125 0.125 0.250		0 0 0	NR NR 0	NR NR NR	NR NR NR	NR NR NR	0 0 0
Local Land Records								
LIENS LIENS 2 DEED	TP TP 0.500		NR NR 0	NR NR 0	NR NR 0	NR NR NR	NR NR NR	0 0 0
Records of Emergency R	elease Repo	rts						
HMIRS	TP		NR	NR	NR	NR	NR	0

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
CHMIRS	TP		NR	NR	NR	NR	NR	0
LDS	TP		NR	NR	NR	NR	NR	0
MCS	TP		NR	NR	NR	NR	NR	0
Other Ascertainable Rec	ords							
RCRA NonGen / NLR	TP		NR	NR	NR	NR	NR	0
FUDS	1.000		0	0	0	0	NR	0
DOD	1.000		0	0	0	0	NR	0
SCRD DRYCLEANERS	0.500		0	0	0	NR	NR	0
US FIN ASSUR	TP		NR	NR	NR	NR	NR	0
EPA WATCH LIST	TP		NR	NR	NR	NR	NR	0
2020 COR ACTION	0.250		0	0	NR	NR	NR	0
TSCA	TP		NR	NR	NR	NR	NR	0
TRIS	TP		NR	NR	NR	NR	NR	0
SSTS	TP		NR	NR	NR	NR	NR	0
ROD	1.000		0	0	0	0	NR	0
RMP	IP		NR	NR	NR	NR	NR	0
RAATS	TP		NR	NR	NR	NR	NR	0
PRP	IP		NR	NR	NR	NR	NR	0
PADS			NR	NR	NR	NR	NR	0
			NR	NR	NR	NR	NR	0
FIIS								0
								0
	10							0
	0.500 TD							0
								0
	TD			ND				0
DOT OPS	TP		NR	NR	NR	NR	NR	0
CONSENT	1 000		0	0	0	0	NR	õ
INDIAN RESERV	1 000		0	Õ	0	õ	NR	õ
FUSRAP	1.000		Õ	õ	õ	õ	NR	õ
UMTRA	0.500		0	0	Ō	NR	NR	0
LEAD SMELTERS	TP		NR	NR	NR	NR	NR	0
US AIRS	TP		NR	NR	NR	NR	NR	0
US MINES	0.250		0	0	NR	NR	NR	0
FINDS	TP		NR	NR	NR	NR	NR	0
DOCKET HWC	TP		NR	NR	NR	NR	NR	0
UXO	1.000		0	0	0	0	NR	0
CA BOND EXP. PLAN	1.000		0	0	0	0	NR	0
Cortese	0.500		0	0	0	NR	NR	0
CUPA Listings	0.250		0	0	NR	NR	NR	0
DRYCLEANERS	0.250		0	0	NR	NR	NR	0
EMI	TP		NR	NR	NR	NR	NR	0
ENF	TP		NR	NR	NR	NR	NR	0
Financial Assurance	TP		NR	NR	NR	NR	NR	0
	11		NR	NR	NR	NR	NR	0
HIST CORTESE	0.500		0	0	0	NR	NR	0
HVVP	1.000		0	0	0	0	NR	0
HVVI	0.250		0	0	NR	NR	NR	0
MINES	112		NR	NR	NR	NR	NR	0

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
MWMP	0.250		0	0	NR	NR	NR	0
NPDES	TP		NR	NR	NR	NR	NR	0
PEST LIC	TP		NR	NR	NR	NR	NR	0
PROC	0.500		0	0	0	NR	NR	0
Notify 65	1.000		0	0	0	0	NR	0
UIC	IP		NR	NR	NR	NR	NR	0
WASTEWATER PITS	0.500		0	0	0	NR	NR	0
WDS			NR	NR	NR	NR	NR	0
	0.250		0	0	NR	NR		0
	0.250 TD							0
EDR HIGH RISK HISTORIC	AL RECORDS							
EDR Exclusive Records	6							
EDR MGP	1.000		0	0	0	0	NR	0
EDR Hist Auto	0.250		0	1	NR	NR	NR	1
EDR Hist Cleaner	0.250		0	0	NR	NR	NR	0
EDR RECOVERED GOVER		VES						
Exclusive Recovered G	ovt. Archives							
RGA LF	0.500		0	0	0	NR	NR	0
RGA LUST	1.000		0	0	0	0	NR	0
- Totals		0	0	1	0	0	0	1

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

Map ID Direction		MAP FINDINGS		
Distance				EDR ID Number
Elevation S	Site		Database(s)	EPA ID Number

1 West 1/8-1/4 0.189 mi. 1000 ft.	10936 IRIS BLOOM DR STOCKTON, CA 95209		EDR Hist Auto	1015149598 N/A	
Relative:	EDR Historical Auto Stati	ions:			
Lower	Name:	WILLOCK & SONS MOBILE MECHANIC			
	Year:	2008			
Actual: 12 ft.	Address:	10936 IRIS BLOOM DR			

Count: 2 records.

ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
LODI STOCKTON	S107541108 S107737350	SITE "E" ELEMENTARY SCHOOL	W SIDE OF THORNTON RD 1/4 MI S DAVIS ROAD/WHISTLER WAY	95209	CDL ENVIROSTOR, SCH

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

Number of Days to Update: Provides confirmation that EDR is reporting records that have been updated within 90 days from the date the government agency made the information available to the public.

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL: National Priority List

National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 03/07/2016 Date Data Arrived at EDR: 04/05/2016 Date Made Active in Reports: 04/15/2016 Number of Days to Update: 10 Source: EPA Telephone: N/A Last EDR Contact: 07/07/2016 Next Scheduled EDR Contact: 10/17/2016 Data Release Frequency: Quarterly

NPL Site Boundaries

Sources:

EPA's Environmental Photographic Interpretation Center (EPIC) Telephone: 202-564-7333

EPA Region 1 Telephone 617-918-1143

EPA Region 3 Telephone 215-814-5418

EPA Region 4 Telephone 404-562-8033

EPA Region 5 Telephone 312-886-6686

EPA Region 10 Telephone 206-553-8665

Proposed NPL: Proposed National Priority List Sites

A site that has been proposed for listing on the National Priorities List through the issuance of a proposed rule in the Federal Register. EPA then accepts public comments on the site, responds to the comments, and places on the NPL those sites that continue to meet the requirements for listing.

EPA Region 6

EPA Region 7

EPA Region 8

EPA Region 9

Telephone: 214-655-6659

Telephone: 913-551-7247

Telephone: 303-312-6774

Telephone: 415-947-4246

Date of Government Version: 03/07/2016 Date Data Arrived at EDR: 04/05/2016 Date Made Active in Reports: 04/15/2016 Number of Days to Update: 10 Source: EPA Telephone: N/A Last EDR Contact: 07/07/2016 Next Scheduled EDR Contact: 10/17/2016 Data Release Frequency: Quarterly

NPL LIENS: Federal Superfund Liens

Federal Superfund Liens. Under the authority granted the USEPA by CERCLA of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner received notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

Date of Government Version: 10/15/1991 Date Data Arrived at EDR: 02/02/1994 Date Made Active in Reports: 03/30/1994 Number of Days to Update: 56 Source: EPA Telephone: 202-564-4267 Last EDR Contact: 08/15/2011 Next Scheduled EDR Contact: 11/28/2011 Data Release Frequency: No Update Planned

Federal Delisted NPL site list

Delisted NPL: National Priority List Deletions

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 03/07/2016 Date Data Arrived at EDR: 04/05/2016 Date Made Active in Reports: 04/15/2016 Number of Days to Update: 10 Source: EPA Telephone: N/A Last EDR Contact: 07/07/2016 Next Scheduled EDR Contact: 10/17/2016 Data Release Frequency: Quarterly

Federal CERCLIS list

FEDERAL FACILITY: Federal Facility Site Information listing

A listing of National Priority List (NPL) and Base Realignment and Closure (BRAC) sites found in the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) Database where EPA Federal Facilities Restoration and Reuse Office is involved in cleanup activities.

Date of Government Version: 11/13/2015	Source: Environmental Protection Agency
Date Data Arrived at EDR: 01/06/2016	Telephone: 703-603-8704
Date Made Active in Reports: 05/20/2016	Last EDR Contact: 07/06/2016
Number of Days to Update: 135	Next Scheduled EDR Contact: 10/17/2016
	Data Release Frequency: Varies

SEMS: Superfund Enterprise Management System

SEMS (Superfund Enterprise Management System) tracks hazardous waste sites, potentially hazardous waste sites, and remedial activities performed in support of EPA's Superfund Program across the United States. The list was formerly know as CERCLIS, renamed to SEMS by the EPA in 2015. The list contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). This dataset also contains sites which are either proposed to or on the National Priorities List (NPL) and the sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 03/07/2016 Date Data Arrived at EDR: 04/05/2016 Date Made Active in Reports: 04/15/2016 Number of Days to Update: 10 Source: EPA Telephone: 800-424-9346 Last EDR Contact: 07/22/2016 Next Scheduled EDR Contact: 10/31/2016 Data Release Frequency: Quarterly

Federal CERCLIS NFRAP site list

SEMS-ARCHIVE: Superfund Enterprise Management System Archive

SEMS-ARCHIVE (Superfund Enterprise Management System Archive) tracks sites that have no further interest under the Federal Superfund Program based on available information. The list was formerly known as the CERCLIS-NFRAP, renamed to SEMS ARCHIVE by the EPA in 2015. EPA may perform a minimal level of assessment work at a site while it is archived if site conditions change and/or new information becomes available. Archived sites have been removed and archived from the inventory of SEMS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list the site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. The decision does not necessarily mean that there is no hazard associated with a given site; it only means that. based upon available information, the location is not judged to be potential NPL site.

Date of Government Version: 03/07/2016 Date Data Arrived at EDR: 04/05/2016 Date Made Active in Reports: 04/15/2016 Number of Days to Update: 10 Source: EPA Telephone: 800-424-9346 Last EDR Contact: 07/22/2016 Next Scheduled EDR Contact: 10/31/2016 Data Release Frequency: Quarterly

Federal RCRA CORRACTS facilities list

CORRACTS: Corrective Action Report

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 12/09/2015	Source: EPA
Date Data Arrived at EDR: 03/02/2016	Telephone: 800-424-9346
Date Made Active in Reports: 04/05/2016	Last EDR Contact: 06/30/2016
Number of Days to Update: 34	Next Scheduled EDR Contact: 10/10/2016
	Data Release Frequency: Quarterly

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF: RCRA - Treatment, Storage and Disposal

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

Date of Government Version: 12/09/2015 Date Data Arrived at EDR: 03/02/2016 Date Made Active in Reports: 04/05/2016 Number of Days to Update: 34 Source: Environmental Protection Agency Telephone: (415) 495-8895 Last EDR Contact: 06/30/2016 Next Scheduled EDR Contact: 10/17/2016 Data Release Frequency: Quarterly

Federal RCRA generators list

RCRA-LQG: RCRA - Large Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

Date of Government Version: 12/09/2015 Date Data Arrived at EDR: 03/02/2016 Date Made Active in Reports: 04/05/2016 Number of Days to Update: 34 Source: Environmental Protection Agency Telephone: (415) 495-8895 Last EDR Contact: 06/30/2016 Next Scheduled EDR Contact: 10/17/2016 Data Release Frequency: Quarterly

RCRA-SQG: RCRA - Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

Date of Government Version: 12/09/2015 Date Data Arrived at EDR: 03/02/2016 Date Made Active in Reports: 04/05/2016 Number of Days to Update: 34 Source: Environmental Protection Agency Telephone: (415) 495-8895 Last EDR Contact: 06/30/2016 Next Scheduled EDR Contact: 10/17/2016 Data Release Frequency: Quarterly

RCRA-CESQG: RCRA - Conditionally Exempt Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Conditionally exempt small quantity generators (CESQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

Date of Government Version: 12/09/2015Source: Environmental Protection AgencyDate Data Arrived at EDR: 03/02/2016Telephone: (415) 495-8895Date Made Active in Reports: 04/05/2016Last EDR Contact: 06/30/2016Number of Days to Update: 34Next Scheduled EDR Contact: 10/17/2016Data Release Frequency: Varies

Federal institutional controls / engineering controls registries

LUCIS: Land Use Control Information System

LUCIS contains records of land use control information pertaining to the former Navy Base Realignment and Closure properties.

Date of Government Version: 05/28/2015Source: Department of the NavyDate Data Arrived at EDR: 05/29/2015Telephone: 843-820-7326Date Made Active in Reports: 06/11/2015Last EDR Contact: 08/12/2016Number of Days to Update: 13Next Scheduled EDR Contact: 11/28/2016Data Release Frequency: Varies

US ENG CONTROLS: Engineering Controls Sites List

A listing of sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

Date of Government Version: 09/10/2015	Source: Environmental Protection Agency
Date Data Arrived at EDR: 09/11/2015	Telephone: 703-603-0695
Date Made Active in Reports: 11/03/2015	Last EDR Contact: 05/25/2016
Number of Days to Update: 53	Next Scheduled EDR Contact: 09/12/2016
	Data Release Frequency: Varies

US INST CONTROL: Sites with Institutional Controls

A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

Date of Government Version: 09/10/2015	
Date Data Arrived at EDR: 09/11/2015	
Date Made Active in Reports: 11/03/2015	
Number of Days to Update: 53	

Source: Environmental Protection Agency Telephone: 703-603-0695 Last EDR Contact: 05/25/2016 Next Scheduled EDR Contact: 09/12/2016 Data Release Frequency: Varies

Federal ERNS list

ERNS: Emergency Response Notification System

Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 03/28/2016 Date Data Arrived at EDR: 03/30/2016 Date Made Active in Reports: 05/20/2016 Number of Days to Update: 51 Source: National Response Center, United States Coast Guard Telephone: 202-267-2180 Last EDR Contact: 06/28/2016 Next Scheduled EDR Contact: 10/10/2016 Data Release Frequency: Annually

State- and tribal - equivalent NPL

RESPONSE: State Response Sites

Identifies confirmed release sites where DTSC is involved in remediation, either in a lead or oversight capacity. These confirmed release sites are generally high-priority and high potential risk.

Date of Government Version: 05/02/2016	Source: Department of Toxic Substances Control
Date Data Arrived at EDR: 05/04/2016	Telephone: 916-323-3400
Date Made Active in Reports: 06/21/2016	Last EDR Contact: 08/02/2016
Number of Days to Update: 48	Next Scheduled EDR Contact: 11/14/2016
	Data Release Frequency: Quarterly

State- and tribal - equivalent CERCLIS

ENVIROSTOR: EnviroStor Database

The Department of Toxic Substances Control's (DTSC's) Site Mitigation and Brownfields Reuse Program's (SMBRP's) EnviroStor database identifes sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. EnviroStor provides similar information to the information that was available in CalSites, and provides additional site information, including, but not limited to, identification of formerly-contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk characterization information that is used to assess potential impacts to public health and the environment at contaminated sites.

Date of Government Version: 05/02/2016 Date Data Arrived at EDR: 05/04/2016 Date Made Active in Reports: 06/21/2016 Number of Days to Update: 48 Source: Department of Toxic Substances Control Telephone: 916-323-3400 Last EDR Contact: 08/02/2016 Next Scheduled EDR Contact: 11/14/2016 Data Release Frequency: Quarterly

State and tribal landfill and/or solid waste disposal site lists

SWF/LF (SWIS): Solid Waste Information System

Active, Closed and Inactive Landfills. SWF/LF records typically contain an inventory of solid waste disposal facilities or landfills. These may be active or i nactive facilities or open dumps that failed to meet RCRA Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 05/16/2016 Date Data Arrived at EDR: 05/18/2016 Date Made Active in Reports: 06/21/2016 Number of Days to Update: 34 Source: Department of Resources Recycling and Recovery Telephone: 916-341-6320 Last EDR Contact: 08/16/2016 Next Scheduled EDR Contact: 11/28/2016 Data Release Frequency: Quarterly

State and tribal leaking storage tank lists

LUST REG 5: Leaking Underground Storage Tank Database Leaking Underground Storage Tank locations. Alameda, Alpine, Amador, Butte, Colusa, Contra Costa, Calveras, El Dorado, Fresno, Glenn, Kern, Kings, Lake, Lassen, Madera, Mariposa, Merced, Modoc, Napa, Nevada, Placer, Plumas, Sacramento, San Joaquin, Shasta, Solano, Stanislaus, Sutter, Tehama, Tulare, Tuolumne, Yolo, Yuba counties.		
Date of Government Version: 07/01/2008 Date Data Arrived at EDR: 07/22/2008 Date Made Active in Reports: 07/31/2008 Number of Days to Update: 9	Source: California Regional Water Quality Control Board Central Valley Region (5) Telephone: 916-464-4834 Last EDR Contact: 07/01/2011 Next Scheduled EDR Contact: 10/17/2011 Data Release Frequency: No Update Planned	
LUST REG 9: Leaking Underground Storage Tank Report Orange, Riverside, San Diego counties. For more current information, please refer to the State Water Resources Control Board's LUST database.		
Date of Government Version: 03/01/2001 Date Data Arrived at EDR: 04/23/2001 Date Made Active in Reports: 05/21/2001 Number of Days to Update: 28	Source: California Regional Water Quality Control Board San Diego Region (9) Telephone: 858-637-5595 Last EDR Contact: 09/26/2011 Next Scheduled EDR Contact: 01/09/2012 Data Release Frequency: No Update Planned	
LUST REG 8: Leaking Underground Storage Tanks California Regional Water Quality Control Boar to the State Water Resources Control Board's	rd Santa Ana Region (8). For more current information, please refer LUST database.	
Date of Government Version: 02/14/2005 Date Data Arrived at EDR: 02/15/2005 Date Made Active in Reports: 03/28/2005 Number of Days to Update: 41	Source: California Regional Water Quality Control Board Santa Ana Region (8) Telephone: 909-782-4496 Last EDR Contact: 08/15/2011 Next Scheduled EDR Contact: 11/28/2011 Data Release Frequency: Varies	
LUST REG 7: Leaking Underground Storage Tank (Leaking Underground Storage Tank locations.	Case Listing Imperial, Riverside, San Diego, Santa Barbara counties.	
Date of Government Version: 02/26/2004 Date Data Arrived at EDR: 02/26/2004 Date Made Active in Reports: 03/24/2004 Number of Days to Update: 27	Source: California Regional Water Quality Control Board Colorado River Basin Region (7) Telephone: 760-776-8943 Last EDR Contact: 08/01/2011 Next Scheduled EDR Contact: 11/14/2011 Data Release Frequency: No Update Planned	
LUST REG 6V: Leaking Underground Storage Tank Leaking Underground Storage Tank locations.	: Case Listing Inyo, Kern, Los Angeles, Mono, San Bernardino counties.	
Date of Government Version: 06/07/2005 Date Data Arrived at EDR: 06/07/2005 Date Made Active in Reports: 06/29/2005 Number of Days to Update: 22	Source: California Regional Water Quality Control Board Victorville Branch Office (6) Telephone: 760-241-7365 Last EDR Contact: 09/12/2011 Next Scheduled EDR Contact: 12/26/2011 Data Release Frequency: No Update Planned	
LUST REG 6L: Leaking Underground Storage Tank Case Listing For more current information, please refer to the State Water Resources Control Board's LUST database.		
Date of Government Version: 09/09/2003 Date Data Arrived at EDR: 09/10/2003 Date Made Active in Reports: 10/07/2003 Number of Days to Update: 27	Source: California Regional Water Quality Control Board Lahontan Region (6) Telephone: 530-542-5572 Last EDR Contact: 09/12/2011 Next Scheduled EDR Contact: 12/26/2011 Data Release Frequency: No Update Planned	
LUST: Geotracker's Leaking Underground Fuel Tan	k Report	

Leaking Underground Storage Tank Incident Reports. LUST records contain an inventory of reported leaking underground storage tank incidents. Not all states maintain these records, and the information stored varies by state. For more information on a particular leaking underground storage tank sites, please contact the appropriate regulatory agency.

	Date of Government Version: 06/13/2016	Source: State Water Resources Control Board
	Date Data Arrived at EDR: 06/14/2016 Date Made Active in Reports: 08/09/2016	Lelephone: see region list Last EDR Contact: 06/14/2016
	Number of Days to Update: 56	Next Scheduled EDR Contact: 09/26/2016 Data Release Frequency: Quarterly
LUS	T REG 4: Underground Storage Tank Leak Lis	t
	Los Angeles, Ventura counties. For more curre Board's LUST database.	ent information, please refer to the State Water Resources Control
	Date of Government Version: 09/07/2004 Date Data Arrived at EDR: 09/07/2004	Source: California Regional Water Quality Control Board Los Angeles Region (4) Telephone: 213-576-6710
	Date Made Active in Reports: 10/12/2004	Last EDR Contact: 09/06/2011 Next Scheduled EDR Contact: 12/19/2011
	Number of Days to Opdate. 35	Data Release Frequency: No Update Planned
LUS	T REG 3: Leaking Underground Storage Tank Leaking Underground Storage Tank locations.	Database Monterey, San Benito, San Luis Obispo, Santa Barbara, Santa Cruz counties.
	Date of Government Version: 05/19/2003 Date Data Arrived at EDR: 05/19/2003	Source: California Regional Water Quality Control Board Central Coast Region (3) Telephone: 805-542-4786
	Date Made Active in Reports: 06/02/2003 Number of Days to Update: 14	Last EDR Contact: 07/18/2011 Next Scheduled EDR Contact: 10/31/2011
		Data Release Frequency: No Update Planned
LUS	T REG 2: Fuel Leak List Leaking Underground Storage Tank locations. Clara, Solano, Sonoma counties.	Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa
	Date of Government Version: 09/30/2004	Source: California Regional Water Quality Control Board San Francisco Bay Region (2)
	Date Data Arrived at EDR: 10/20/2004 Date Made Active in Reports: 11/19/2004	Last EDR Contact: 09/19/2011
	Number of Days to Update: 30	Next Scheduled EDR Contact: 01/02/2012 Data Release Frequency: Quarterly
LUS	T REG 1: Active Toxic Site Investigation	
	Del Norte, Humboldt, Lake, Mendocino, Modo please refer to the State Water Resources Co	c, Siskiyou, Sonoma, Trinity counties. For more current information, ntrol Board's LUST database.
	Date of Government Version: 02/01/2001 Date Data Arrived at EDR: 02/28/2001	Source: California Regional Water Quality Control Board North Coast (1) Telephone: 707-570-3769
	Date Made Active in Reports: 03/29/2001	Last EDR Contact: 08/01/2011
	Number of Days to Opdate: 29	Data Release Frequency: No Update Planned
IND	INDIAN LUST R6: Leaking Underground Storage Tanks on Indian Land LUSTs on Indian land in New Mexico and Oklahoma.	
	Date of Government Version: 12/11/2015	Source: EPA Region 6
	Date Data Arrived at EDR: 02/19/2016 Date Made Active in Reports: 06/03/2016	Last EDR Contact: 07/27/2016
	Number of Days to Update: 105	Next Scheduled EDR Contact: 11/07/2016 Data Release Frequency: Varies
IND	AN LUST R7: Leaking Underground Storage T LUSTs on Indian land in Iowa, Kansas, and Ne	anks on Indian Land ebraska
	Date of Government Version: 10/09/2015	Source: EPA Region 7
	Date Data Arrived at EDR: 02/12/2016 Date Made Active in Reports: 06/03/2016	Telephone: 913-551-7003 Last EDR Contact: 07/27/2016
	Number of Days to Update: 112	Next Scheduled EDR Contact: 11/07/2016

INDIAN LUST R8: Leaking Underground Storage Tanks on Indian Land LUSTs on Indian land in Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming.		
Date of Government Version: 10/13/2015SoDate Data Arrived at EDR: 10/23/2015TeDate Made Active in Reports: 02/18/2016LaNumber of Days to Update: 118NeDate Made Active in Reports: 02/18/2016Date	ource: EPA Region 8 elephone: 303-312-6271 ast EDR Contact: 07/27/2016 ext Scheduled EDR Contact: 11/07/2016 ata Release Frequency: Quarterly	
INDIAN LUST R9: Leaking Underground Storage Tanks LUSTs on Indian land in Arizona, California, New I	s on Indian Land Mexico and Nevada	
Date of Government Version: 02/25/2016SoDate Data Arrived at EDR: 04/27/2016TeDate Made Active in Reports: 06/03/2016LaNumber of Days to Update: 37NeDate Made Active in Reports: 06/03/2016Date	ource: Environmental Protection Agency elephone: 415-972-3372 ast EDR Contact: 07/27/2016 ext Scheduled EDR Contact: 11/07/2016 ata Release Frequency: Quarterly	
INDIAN LUST R10: Leaking Underground Storage Tanl LUSTs on Indian land in Alaska, Idaho, Oregon an	ks on Indian Land nd Washington.	
Date of Government Version: 01/07/2016SoDate Data Arrived at EDR: 01/08/2016TeDate Made Active in Reports: 02/18/2016LaNumber of Days to Update: 41NeDate Made Active in Reports: 02/18/2016Date	ource: EPA Region 10 elephone: 206-553-2857 ast EDR Contact: 07/27/2016 ext Scheduled EDR Contact: 11/07/2016 ata Release Frequency: Quarterly	
INDIAN LUST R1: Leaking Underground Storage Tanks A listing of leaking underground storage tank locat	s on Indian Land tions on Indian Land.	
Date of Government Version: 10/27/2015SoDate Data Arrived at EDR: 10/29/2015TeDate Made Active in Reports: 01/04/2016LaNumber of Days to Update: 67NeDate Made Active in Reports: 01/04/2016Date	ource: EPA Region 1 elephone: 617-918-1313 ast EDR Contact: 07/29/2016 ext Scheduled EDR Contact: 11/07/2016 ata Release Frequency: Varies	
INDIAN LUST R5: Leaking Underground Storage Tanks Leaking underground storage tanks located on Ind	s on Indian Land Jian Land in Michigan, Minnesota and Wisconsin.	
Date of Government Version: 02/17/2016SoDate Data Arrived at EDR: 04/27/2016TeDate Made Active in Reports: 06/03/2016LaNumber of Days to Update: 37NeDate Made Active in Reports: 06/03/2016Date	ource: EPA, Region 5 elephone: 312-886-7439 ast EDR Contact: 07/27/2016 ext Scheduled EDR Contact: 11/07/2016 ata Release Frequency: Varies	
INDIAN LUST R4: Leaking Underground Storage Tanks LUSTs on Indian land in Florida, Mississippi and N	s on Indian Land North Carolina.	
Date of Government Version: 02/05/2016SoDate Data Arrived at EDR: 04/29/2016TeDate Made Active in Reports: 06/03/2016LaNumber of Days to Update: 35NeDate Made Active in Reports: 06/03/2016Date	ource: EPA Region 4 elephone: 404-562-8677 ast EDR Contact: 07/26/2016 ext Scheduled EDR Contact: 11/07/2016 ata Release Frequency: Semi-Annually	
SLIC: Statewide SLIC Cases The SLIC (Spills, Leaks, Investigations and Cleans from spills, leaks, and similar discharges.	up) program is designed to protect and restore water quality	
Date of Government Version: 06/13/2016SoDate Data Arrived at EDR: 06/14/2016TeDate Made Active in Reports: 08/09/2016LaNumber of Days to Update: 56NeDate Made Active in Reports: 08/09/2016Date	ource: State Water Resources Control Board elephone: 866-480-1028 ast EDR Contact: 06/14/2016 ext Scheduled EDR Contact: 09/26/2016 ata Release Frequency: Varies	

LIC REG 1: Active Toxic Site Investigations The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.		
Date of Government Version: 04/03/2003 Date Data Arrived at EDR: 04/07/2003 Date Made Active in Reports: 04/25/2003 Number of Days to Update: 18	Source: California Regional Water Quality Control Board, North Coast Region (1) Telephone: 707-576-2220 Last EDR Contact: 08/01/2011 Next Scheduled EDR Contact: 11/14/2011 Data Release Frequency: No Update Planned	
SLIC REG 2: Spills, Leaks, Investigation & Cleanup The SLIC (Spills, Leaks, Investigations and Cle from spills, leaks, and similar discharges.	Cost Recovery Listing eanup) program is designed to protect and restore water quality	
Date of Government Version: 09/30/2004 Date Data Arrived at EDR: 10/20/2004 Date Made Active in Reports: 11/19/2004 Number of Days to Update: 30	Source: Regional Water Quality Control Board San Francisco Bay Region (2) Telephone: 510-286-0457 Last EDR Contact: 09/19/2011 Next Scheduled EDR Contact: 01/02/2012 Data Release Frequency: Quarterly	
SLIC REG 3: Spills, Leaks, Investigation & Cleanup The SLIC (Spills, Leaks, Investigations and Cle from spills, leaks, and similar discharges.	Cost Recovery Listing eanup) program is designed to protect and restore water quality	
Date of Government Version: 05/18/2006 Date Data Arrived at EDR: 05/18/2006 Date Made Active in Reports: 06/15/2006 Number of Days to Update: 28	Source: California Regional Water Quality Control Board Central Coast Region (3) Telephone: 805-549-3147 Last EDR Contact: 07/18/2011 Next Scheduled EDR Contact: 10/31/2011 Data Release Frequency: Semi-Annually	
SLIC REG 4: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.		
Date of Government Version: 11/17/2004 Date Data Arrived at EDR: 11/18/2004 Date Made Active in Reports: 01/04/2005 Number of Days to Update: 47	Source: Region Water Quality Control Board Los Angeles Region (4) Telephone: 213-576-6600 Last EDR Contact: 07/01/2011 Next Scheduled EDR Contact: 10/17/2011 Data Release Frequency: Varies	
SLIC REG 5: Spills, Leaks, Investigation & Cleanup The SLIC (Spills, Leaks, Investigations and Cle from spills, leaks, and similar discharges.	Cost Recovery Listing eanup) program is designed to protect and restore water quality	
Date of Government Version: 04/01/2005 Date Data Arrived at EDR: 04/05/2005 Date Made Active in Reports: 04/21/2005 Number of Days to Update: 16	Source: Regional Water Quality Control Board Central Valley Region (5) Telephone: 916-464-3291 Last EDR Contact: 09/12/2011 Next Scheduled EDR Contact: 12/26/2011 Data Release Frequency: Semi-Annually	
SLIC REG 6V: Spills, Leaks, Investigation & Cleanu The SLIC (Spills, Leaks, Investigations and Cle from spills, leaks, and similar discharges.	p Cost Recovery Listing anup) program is designed to protect and restore water quality	
Date of Government Version: 05/24/2005 Date Data Arrived at EDR: 05/25/2005 Date Made Active in Reports: 06/16/2005 Number of Days to Update: 22	Source: Regional Water Quality Control Board, Victorville Branch Telephone: 619-241-6583 Last EDR Contact: 08/15/2011 Next Scheduled EDR Contact: 11/28/2011	

Data Release Frequency: Semi-Annually

SLIC REG 6L: SLIC Sites The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.		
Date of Government Version: 09/07/2004 Date Data Arrived at EDR: 09/07/2004 Date Made Active in Reports: 10/12/2004 Number of Days to Update: 35	Source: California Regional Water Quality Control Board, Lahontan Region Telephone: 530-542-5574 Last EDR Contact: 08/15/2011 Next Scheduled EDR Contact: 11/28/2011 Data Release Frequency: No Update Planned	
SLIC REG 7: SLIC List The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.		
Date of Government Version: 11/24/2004 Date Data Arrived at EDR: 11/29/2004 Date Made Active in Reports: 01/04/2005 Number of Days to Update: 36	Source: California Regional Quality Control Board, Colorado River Basin Region Telephone: 760-346-7491 Last EDR Contact: 08/01/2011 Next Scheduled EDR Contact: 11/14/2011 Data Release Frequency: No Update Planned	
SLIC REG 8: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.		
Date of Government Version: 04/03/2008 Date Data Arrived at EDR: 04/03/2008 Date Made Active in Reports: 04/14/2008 Number of Days to Update: 11	Source: California Region Water Quality Control Board Santa Ana Region (8) Telephone: 951-782-3298 Last EDR Contact: 09/12/2011 Next Scheduled EDR Contact: 12/26/2011 Data Release Frequency: Semi-Annually	
SLIC REG 9: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.		
Date of Government Version: 09/10/2007 Date Data Arrived at EDR: 09/11/2007 Date Made Active in Reports: 09/28/2007 Number of Days to Update: 17	Source: California Regional Water Quality Control Board San Diego Region (9) Telephone: 858-467-2980 Last EDR Contact: 08/08/2011 Next Scheduled EDR Contact: 11/21/2011 Data Release Frequency: Annually	
State and tribal registered storage tank lists		
FEMA UST: Underground Storage Tank Listing A listing of all FEMA owned underground stora	age tanks.	
Date of Government Version: 01/01/2010 Date Data Arrived at EDR: 02/16/2010 Date Made Active in Reports: 04/12/2010 Number of Days to Update: 55	Source: FEMA Telephone: 202-646-5797 Last EDR Contact: 07/07/2016 Next Scheduled EDR Contact: 10/24/2016 Data Release Frequency: Varies	

UST: Active UST Facilities

Active UST facilities gathered from the local regulatory agencies

Date of Government Version: 06/13/2016	Source: SWRCB
Date Data Arrived at EDR: 06/14/2016	Telephone: 916-341-5851
Date Made Active in Reports: 08/08/2016	Last EDR Contact: 06/14/2016
Number of Days to Update: 55	Next Scheduled EDR Contact: 09/26/2016
	Data Release Frequency: Semi-Annually

AST:	 Aboveground Petroleum Storage Tank Facilities A listing of aboveground storage tank petroleum storage tank locations. 	
	Date of Government Version: 08/01/2009 Date Data Arrived at EDR: 09/10/2009 Date Made Active in Reports: 10/01/2009 Number of Days to Update: 21	Source: California Environmental Protection Agency Telephone: 916-327-5092 Last EDR Contact: 07/07/2016 Next Scheduled EDR Contact: 10/10/2016 Data Release Frequency: Quarterly
INDI	DIAN UST R10: Underground Storage Tanks on Indian Land The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on land in EPA Region 10 (Alaska, Idaho, Oregon, Washington, and Tribal Nations).	
	Date of Government Version: 01/07/2016 Date Data Arrived at EDR: 01/08/2016 Date Made Active in Reports: 02/18/2016 Number of Days to Update: 41	Source: EPA Region 10 Telephone: 206-553-2857 Last EDR Contact: 07/27/2016 Next Scheduled EDR Contact: 11/07/2016 Data Release Frequency: Quarterly
INDIAN UST R9: Underground Storage Tanks on Indian Land The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indiar land in EPA Region 9 (Arizona, California, Hawaii, Nevada, the Pacific Islands, and Tribal Nations).		
	Date of Government Version: 02/25/2016 Date Data Arrived at EDR: 04/27/2016 Date Made Active in Reports: 06/03/2016 Number of Days to Update: 37	Source: EPA Region 9 Telephone: 415-972-3368 Last EDR Contact: 07/27/2016 Next Scheduled EDR Contact: 11/07/2016 Data Release Frequency: Quarterly
INDIAN UST R8: Underground Storage Tanks on Indian Land The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indiar land in EPA Region 8 (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming and 27 Tribal Nations).		
	Date of Government Version: 01/26/2016 Date Data Arrived at EDR: 02/05/2016 Date Made Active in Reports: 06/03/2016 Number of Days to Update: 119	Source: EPA Region 8 Telephone: 303-312-6137 Last EDR Contact: 07/27/2016 Next Scheduled EDR Contact: 11/07/2016 Data Release Frequency: Quarterly
INDI	AN UST R7: Underground Storage Tanks on Ind The Indian Underground Storage Tank (UST) d Iand in EPA Region 7 (Iowa, Kansas, Missouri,	dian Land atabase provides information about underground storage tanks on Indian Nebraska, and 9 Tribal Nations).
	Date of Government Version: 09/23/2014 Date Data Arrived at EDR: 11/25/2014 Date Made Active in Reports: 01/29/2015 Number of Days to Update: 65	Source: EPA Region 7 Telephone: 913-551-7003 Last EDR Contact: 07/27/2016 Next Scheduled EDR Contact: 11/07/2016 Data Release Frequency: Varies
INDI	AN UST R1: Underground Storage Tanks on In- The Indian Underground Storage Tank (UST) d Iand in EPA Region 1 (Connecticut, Maine, Mas Nations).	dian Land latabase provides information about underground storage tanks on Indian ssachusetts, New Hampshire, Rhode Island, Vermont and ten Tribal
	Date of Government Version: 10/20/2015 Date Data Arrived at EDR: 10/29/2015 Date Made Active in Reports: 01/04/2016	Source: EPA, Region 1 Telephone: 617-918-1313 Last EDR Contact: 07/29/2016

Next Scheduled EDR Contact: 11/07/2016

Data Release Frequency: Varies

Number of Days to Update: 67

INDIAN UST R4: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 4 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee and Tribal Nations)

Date of Government Version: 02/05/2016 Source: EPA Region 4 Date Data Arrived at EDR: 04/29/2016 Telephone: 404-562-9424 Date Made Active in Reports: 06/03/2016 Last EDR Contact: 07/26/2016 Number of Days to Update: 35 Next Scheduled EDR Contact: 11/07/2016 Data Release Frequency: Semi-Annually

INDIAN UST R5: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 5 (Michigan, Minnesota and Wisconsin and Tribal Nations).

Date of Government Version: 11/05/2015	Source: EPA Region 5
Date Data Arrived at EDR: 11/13/2015	Telephone: 312-886-6136
Date Made Active in Reports: 01/04/2016	Last EDR Contact: 07/27/2016
Number of Days to Update: 52	Next Scheduled EDR Contact: 11/07/2016
	Data Release Frequency: Varies

INDIAN UST R6: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 6 (Louisiana, Arkansas, Oklahoma, New Mexico, Texas and 65 Tribes).

Date of Government Version: 12/03/2015	Source: EPA Region 6
Date Data Arrived at EDR: 02/04/2016	Telephone: 214-665-7591
Date Made Active in Reports: 06/03/2016	Last EDR Contact: 07/27/2016
Number of Days to Update: 120	Next Scheduled EDR Contact: 11/07/2016
	Data Release Frequency: Semi-Annually

State and tribal voluntary cleanup sites

INDIAN VCP R7: Voluntary Cleanup Priority Lisitng

A listing of voluntary cleanup priority sites located on Indian Land located in Region 7.

Date of Government Version: 03/20/2008	Source: EPA, Region 7
Date Data Arrived at EDR: 04/22/2008	Telephone: 913-551-7365
Date Made Active in Reports: 05/19/2008	Last EDR Contact: 04/20/2009
Number of Days to Update: 27	Next Scheduled EDR Contact: 07/20/2009
	Data Release Frequency: Varies

INDIAN VCP R1: Voluntary Cleanup Priority Listing

A listing of voluntary cleanup priority sites located on Indian Land located in Region 1.

Date of Government Version: 07/27/2015 Date Data Arrived at EDR: 09/29/2015 Date Made Active in Reports: 02/18/2016 Number of Days to Update: 142

Source: EPA, Region 1 Telephone: 617-918-1102 Last EDR Contact: 07/01/2016 Next Scheduled EDR Contact: 10/10/2016 Data Release Frequency: Varies

VCP: Voluntary Cleanup Program Properties

Contains low threat level properties with either confirmed or unconfirmed releases and the project proponents have request that DTSC oversee investigation and/or cleanup activities and have agreed to provide coverage for DTSC's costs.

Date of Government Version: 05/02/2016 Date Data Arrived at EDR: 05/04/2016 Date Made Active in Reports: 06/21/2016 Number of Days to Update: 48

Source: Department of Toxic Substances Control Telephone: 916-323-3400 Last EDR Contact: 08/02/2016 Next Scheduled EDR Contact: 11/14/2016 Data Release Frequency: Quarterly

State and tribal Brownfields sites

BROWNFIELDS: Considered Brownfieds Sites Listing

A listing of sites the SWRCB considers to be Brownfields since these are sites have come to them through the MOA Process.

Date of Government Version: 02/29/2016 Date Data Arrived at EDR: 03/07/2016 Date Made Active in Reports: 05/04/2016 Number of Days to Update: 58 Source: State Water Resources Control Board Telephone: 916-323-7905 Last EDR Contact: 06/15/2016 Next Scheduled EDR Contact: 09/19/2016 Data Release Frequency: Varies

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS: A Listing of Brownfields Sites

Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties takes development pressures off of undeveloped, open land, and both improves and protects the environment. Assessment, Cleanup and Redevelopment Exchange System (ACRES) stores information reported by EPA Brownfields grant recipients on brownfields properties assessed or cleaned up with grant funding as well as information on Targeted Brownfields Assessments performed by EPA Regions. A listing of ACRES Brownfield sites is obtained from Cleanups in My Community. Cleanups in My Community provides information on Brownfields properties for which information is reported back to EPA, as well as areas served by Brownfields grant programs.

Date of Government Version: 03/21/2016 Date Data Arrived at EDR: 03/22/2016 Date Made Active in Reports: 07/13/2016 Number of Days to Update: 113 Source: Environmental Protection Agency Telephone: 202-566-2777 Last EDR Contact: 06/22/2016 Next Scheduled EDR Contact: 10/03/2016 Data Release Frequency: Semi-Annually

Local Lists of Landfill / Solid Waste Disposal Sites

WMUDS/SWAT: Waste Management Unit Database

Waste Management Unit Database System. WMUDS is used by the State Water Resources Control Board staff and the Regional Water Quality Control Boards for program tracking and inventory of waste management units. WMUDS is composed of the following databases: Facility Information, Scheduled Inspections Information, Waste Management Unit Information, SWAT Program Information, SWAT Report Summary Information, SWAT Report Summary Data, Chapter 15 (formerly Subchapter 15) Information, Chapter 15 Monitoring Parameters, TPCA Program Information, RCRA Program Information, Closure Information, and Interested Parties Information.

Date of Government Version: 04/01/2000 Date Data Arrived at EDR: 04/10/2000 Date Made Active in Reports: 05/10/2000 Number of Days to Update: 30 Source: State Water Resources Control Board Telephone: 916-227-4448 Last EDR Contact: 08/03/2016 Next Scheduled EDR Contact: 11/21/2016 Data Release Frequency: No Update Planned

SWRCY: Recycler Database

A listing of recycling facilities in California.

Date of Government Version: 06/13/2016 Date Data Arrived at EDR: 06/14/2016 Date Made Active in Reports: 08/09/2016 Number of Days to Update: 56 Source: Department of Conservation Telephone: 916-323-3836 Last EDR Contact: 06/14/2016 Next Scheduled EDR Contact: 09/26/2016 Data Release Frequency: Quarterly

HAULERS: Registered Waste Tire Haulers Listing A listing of registered waste tire haulers.

	Date of Government Version: 06/16/2016 Date Data Arrived at EDR: 06/16/2016 Date Made Active in Reports: 08/09/2016 Number of Days to Update: 54	Source: Integrated Waste Management Board Telephone: 916-341-6422 Last EDR Contact: 08/10/2016 Next Scheduled EDR Contact: 11/28/2016 Data Release Frequency: Varies
IND	AN ODI: Report on the Status of Open Dumps of Location of open dumps on Indian land.	on Indian Lands
	Date of Government Version: 12/31/1998 Date Data Arrived at EDR: 12/03/2007 Date Made Active in Reports: 01/24/2008 Number of Days to Update: 52	Source: Environmental Protection Agency Telephone: 703-308-8245 Last EDR Contact: 08/05/2016 Next Scheduled EDR Contact: 11/14/2016 Data Release Frequency: Varies
DEB	RIS REGION 9: Torres Martinez Reservation III A listing of illegal dump sites location on the To County and northern Imperial County, Californi	legal Dump Site Locations prres Martinez Indian Reservation located in eastern Riverside a.
	Date of Government Version: 01/12/2009 Date Data Arrived at EDR: 05/07/2009 Date Made Active in Reports: 09/21/2009 Number of Days to Update: 137	Source: EPA, Region 9 Telephone: 415-947-4219 Last EDR Contact: 07/20/2016 Next Scheduled EDR Contact: 10/07/2016 Data Release Frequency: No Update Planned
ODI	Open Dump Inventory An open dump is defined as a disposal facility t Subtitle D Criteria.	that does not comply with one or more of the Part 257 or Part 258
	Date of Government Version: 06/30/1985 Date Data Arrived at EDR: 08/09/2004 Date Made Active in Reports: 09/17/2004 Number of Days to Update: 39	Source: Environmental Protection Agency Telephone: 800-424-9346 Last EDR Contact: 06/09/2004 Next Scheduled EDR Contact: N/A Data Release Frequency: No Update Planned
Loc	al Lists of Hazardous waste / Contaminated S	Sites
US I	HIST CDL: National Clandestine Laboratory Reg A listing of clandestine drug lab locations that h Register.	gister ave been removed from the DEAs National Clandestine Laboratory
	Date of Government Version: 05/04/2016 Date Data Arrived at EDR: 06/03/2016 Date Made Active in Reports: 07/13/2016 Number of Days to Update: 40	Source: Drug Enforcement Administration Telephone: 202-307-1000 Last EDR Contact: 05/31/2016 Next Scheduled EDR Contact: 06/13/2016 Data Release Frequency: No Update Planned
HIS	FCAL-SITES: Calsites Database The Calsites database contains potential or con EPA reevaluated and significantly reduced the state agency. It has been replaced by ENVIRO	nfirmed hazardous substance release properties. In 1996, California number of sites in the Calsites database. No longer updated by the ISTOR.

Date of Government Version: 08/08/2005 Date Data Arrived at EDR: 08/03/2006 Date Made Active in Reports: 08/24/2006 Number of Days to Update: 21

Source: Department of Toxic Substance Control Telephone: 916-323-3400 Last EDR Contact: 02/23/2009 Next Scheduled EDR Contact: 05/25/2009 Data Release Frequency: No Update Planned

SCH: School Property Evaluation Program

This category contains proposed and existing school sites that are being evaluated by DTSC for possible hazardous materials contamination. In some cases, these properties may be listed in the CalSites category depending on the level of threat to public health and safety or the environment they pose.

Date of Government Version: 05/02/2016 Date Data Arrived at EDR: 05/04/2016 Date Made Active in Reports: 06/21/2016 Number of Days to Update: 48 Source: Department of Toxic Substances Control Telephone: 916-323-3400 Last EDR Contact: 08/02/2016 Next Scheduled EDR Contact: 11/14/2016 Data Release Frequency: Quarterly

CDL: Clandestine Drug Labs

A listing of drug lab locations. Listing of a location in this database does not indicate that any illegal drug lab materials were or were not present there, and does not constitute a determination that the location either requires or does not require additional cleanup work.

Date of Government Version: 12/31/2015 Date Data Arrived at EDR: 05/10/2016 Date Made Active in Reports: 06/17/2016 Number of Days to Update: 38 Source: Department of Toxic Substances Control Telephone: 916-255-6504 Last EDR Contact: 08/15/2016 Next Scheduled EDR Contact: 10/24/2016 Data Release Frequency: Varies

TOXIC PITS: Toxic Pits Cleanup Act Sites

Toxic PITS Cleanup Act Sites. TOXIC PITS identifies sites suspected of containing hazardous substances where cleanup has not yet been completed.

Date of Government Version: 07/01/1995 Date Data Arrived at EDR: 08/30/1995 Date Made Active in Reports: 09/26/1995 Number of Days to Update: 27 Source: State Water Resources Control Board Telephone: 916-227-4364 Last EDR Contact: 01/26/2009 Next Scheduled EDR Contact: 04/27/2009 Data Release Frequency: No Update Planned

US CDL: Clandestine Drug Labs

A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 05/04/2016 Date Data Arrived at EDR: 06/03/2016 Date Made Active in Reports: 07/13/2016 Number of Days to Update: 40 Source: Drug Enforcement Administration Telephone: 202-307-1000 Last EDR Contact: 05/31/2016 Next Scheduled EDR Contact: 09/12/2016 Data Release Frequency: Quarterly

Local Lists of Registered Storage Tanks

SWEEPS UST: SWEEPS UST Listing

Statewide Environmental Evaluation and Planning System. This underground storage tank listing was updated and maintained by a company contacted by the SWRCB in the early 1990's. The listing is no longer updated or maintained. The local agency is the contact for more information on a site on the SWEEPS list.

Date of Government Version: 06/01/1994 Date Data Arrived at EDR: 07/07/2005 Date Made Active in Reports: 08/11/2005 Number of Days to Update: 35 Source: State Water Resources Control Board Telephone: N/A Last EDR Contact: 06/03/2005 Next Scheduled EDR Contact: N/A Data Release Frequency: No Update Planned

UST MENDOCINO: Mendocino County UST Database

A listing of underground storage tank locations in Mendocino County.

Date of Government Version: 06/07/2016 Date Data Arrived at EDR: 06/09/2016 Date Made Active in Reports: 06/23/2016 Number of Days to Update: 14 Source: Department of Public Health Telephone: 707-463-4466 Last EDR Contact: 06/01/2016 Next Scheduled EDR Contact: 09/12/2016 Data Release Frequency: Annually

HIST UST: Hazardous Substance Storage Contai	ner Database
The Hazardous Substance Storage Containe source for current data.	er Database is a historical listing of UST sites. Refer to local/county
Date of Government Version: 10/15/1990	Source: State Water Resources Control Board

Date of Government Version. 10/15/1990Source.Date Data Arrived at EDR: 01/25/1991TelephorDate Made Active in Reports: 02/12/1991Last EDRNumber of Days to Update: 18Next Sch

Source: State Water Resources Control Board Telephone: 916-341-5851 Last EDR Contact: 07/26/2001 Next Scheduled EDR Contact: N/A Data Release Frequency: No Update Planned

CA FID UST: Facility Inventory Database

The Facility Inventory Database (FID) contains a historical listing of active and inactive underground storage tank locations from the State Water Resource Control Board. Refer to local/county source for current data.

Date of Government Version: 10/31/1994Source: California Environmental Protection AgencyDate Data Arrived at EDR: 09/05/1995Telephone: 916-341-5851Date Made Active in Reports: 09/29/1995Last EDR Contact: 12/28/1998Number of Days to Update: 24Next Scheduled EDR Contact: N/AData Release Frequency: No Update Planned

Local Land Records

LIENS: Environmental Liens Listing

A listing of property locations with environmental liens for California where DTSC is a lien holder.

Date of Government Version: 06/02/2016	Source: Department of Toxic Substances Control
Date Data Arrived at EDR: 06/07/2016	Telephone: 916-323-3400
Date Made Active in Reports: 07/20/2016	Last EDR Contact: 06/02/2016
Number of Days to Update: 43	Next Scheduled EDR Contact: 09/19/2016
, i	Data Release Frequency: Varies

LIENS 2: CERCLA Lien Information

A Federal CERCLA ('Superfund') lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties.

Date of Government Version: 02/18/2014 Date Data Arrived at EDR: 03/18/2014 Date Made Active in Reports: 04/24/2014 Number of Days to Update: 37 Source: Environmental Protection Agency Telephone: 202-564-6023 Last EDR Contact: 07/29/2016 Next Scheduled EDR Contact: 11/07/2016 Data Release Frequency: Varies

DEED: Deed Restriction Listing

Site Mitigation and Brownfields Reuse Program Facility Sites with Deed Restrictions & Hazardous Waste Management Program Facility Sites with Deed / Land Use Restriction. The DTSC Site Mitigation and Brownfields Reuse Program (SMBRP) list includes sites cleaned up under the program's oversight and generally does not include current or former hazardous waste facilities that required a hazardous waste facility permit. The list represents deed restrictions that are active. Some sites have multiple deed restrictions. The DTSC Hazardous Waste Management Program (HWMP) has developed a list of current or former hazardous waste facilities that have a recorded land use restriction at the local county recorder's office. The land use restrictions on this list were required by the DTSC HWMP as a result of the presence of hazardous substances that remain on site after the facility (or part of the facility) has been closed or cleaned up. The types of land use restriction include deed notice, deed restriction, or a land use restriction that binds current and future owners.

Date of Government Version: 06/06/2016 Date Data Arrived at EDR: 06/07/2016 Date Made Active in Reports: 07/20/2016 Number of Days to Update: 43 Source: DTSC and SWRCB Telephone: 916-323-3400 Last EDR Contact: 06/07/2016 Next Scheduled EDR Contact: 09/19/2016 Data Release Frequency: Semi-Annually

Records of Emergency Release Reports

HMIRS: Hazardous Materials Information Reporting System Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.		
Date of Government Version: 06/24/2015 Date Data Arrived at EDR: 06/26/2015 Date Made Active in Reports: 09/02/2015 Number of Days to Update: 68	Source: U.S. Department of Transportation Telephone: 202-366-4555 Last EDR Contact: 06/28/2016 Next Scheduled EDR Contact: 10/10/2016 Data Release Frequency: Annually	
CHMIRS: California Hazardous Material Incident Report System California Hazardous Material Incident Reporting System. CHMIRS contains information on reported hazardous material incidents (accidental releases or spills).		
Date of Government Version: 04/11/2016 Date Data Arrived at EDR: 04/27/2016 Date Made Active in Reports: 06/17/2016 Number of Days to Update: 51	Source: Office of Emergency Services Telephone: 916-845-8400 Last EDR Contact: 07/26/2016 Next Scheduled EDR Contact: 11/07/2016 Data Release Frequency: Varies	
LDS: Land Disposal Sites Listing The Land Disposal program regulates of waste discharge to land for treatment, storage and disposal in waste management units.		
Date of Government Version: 06/13/2016 Date Data Arrived at EDR: 06/14/2016 Date Made Active in Reports: 08/09/2016 Number of Days to Update: 56	Source: State Water Qualilty Control Board Telephone: 866-480-1028 Last EDR Contact: 06/14/2016 Next Scheduled EDR Contact: 09/26/2016 Data Release Frequency: Quarterly	
MCS: Military Cleanup Sites Listing The State Water Resources Control Board and nine Regional Water Quality Control Boards partner with the Department of Defense (DoD) through the Defense and State Memorandum of Agreement (DSMOA) to oversee the investigation and remediation of water quality issues at military facilities.		
Date of Government Version: 06/13/2016 Date Data Arrived at EDR: 06/14/2016 Date Made Active in Reports: 08/09/2016 Number of Days to Update: 56	Source: State Water Resources Control Board Telephone: 866-480-1028 Last EDR Contact: 06/14/2016 Next Scheduled EDR Contact: 09/26/2016 Data Release Frequency: Quarterly	
Other Ascertainable Records		
RCRA NonGen / NLR: RCRA - Non Generators / No Longer Regulated RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database		

and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

Date of Government Version: 12/09/2015 Date Data Arrived at EDR: 03/02/2016 Date Made Active in Reports: 04/05/2016 Number of Days to Update: 34 Source: Environmental Protection Agency Telephone: (415) 495-8895 Last EDR Contact: 06/30/2016 Next Scheduled EDR Contact: 10/17/2016 Data Release Frequency: Varies

FUDS: Formerly Used Defense Sites

The listing includes locations of Formerly Used Defense Sites properties where the US Army Corps of Engineers is actively working or will take necessary cleanup actions.
Date of Government Version: 01/31/2015 Date Data Arrived at EDR: 07/08/2015 Date Made Active in Reports: 10/13/2015 Number of Days to Update: 97 Source: U.S. Army Corps of Engineers Telephone: 202-528-4285 Last EDR Contact: 06/10/2016 Next Scheduled EDR Contact: 09/19/2016 Data Release Frequency: Varies

DOD: Department of Defense Sites

This data set consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

Date of Government Version: 12/31/2005 Date Data Arrived at EDR: 11/10/2006 Date Made Active in Reports: 01/11/2007 Number of Days to Update: 62 Source: USGS Telephone: 888-275-8747 Last EDR Contact: 07/15/2016 Next Scheduled EDR Contact: 10/24/2016 Data Release Frequency: Semi-Annually

FEDLAND: Federal and Indian Lands

Federally and Indian administrated lands of the United States. Lands included are administrated by: Army Corps of Engineers, Bureau of Reclamation, National Wild and Scenic River, National Wildlife Refuge, Public Domain Land, Wilderness, Wilderness Study Area, Wildlife Management Area, Bureau of Indian Affairs, Bureau of Land Management, Department of Justice, Forest Service, Fish and Wildlife Service, National Park Service.

Date of Government Version: 12/31/2005Source: U.S. Geological SurveyDate Data Arrived at EDR: 02/06/2006Telephone: 888-275-8747Date Made Active in Reports: 01/11/2007Last EDR Contact: 07/15/2016Number of Days to Update: 339Next Scheduled EDR Contact: 10/24/2016Data Release Frequency: N/A

SCRD DRYCLEANERS: State Coalition for Remediation of Drycleaners Listing

The State Coalition for Remediation of Drycleaners was established in 1998, with support from the U.S. EPA Office of Superfund Remediation and Technology Innovation. It is comprised of representatives of states with established drycleaner remediation programs. Currently the member states are Alabama, Connecticut, Florida, Illinois, Kansas, Minnesota, Missouri, North Carolina, Oregon, South Carolina, Tennessee, Texas, and Wisconsin.

Date of Government Version: 03/07/2011 Date Data Arrived at EDR: 03/09/2011 Date Made Active in Reports: 05/02/2011 Number of Days to Update: 54 Source: Environmental Protection Agency Telephone: 615-532-8599 Last EDR Contact: 08/15/2016 Next Scheduled EDR Contact: 11/28/2016 Data Release Frequency: Varies

US FIN ASSUR: Financial Assurance Information

All owners and operators of facilities that treat, store, or dispose of hazardous waste are required to provide proof that they will have sufficient funds to pay for the clean up, closure, and post-closure care of their facilities.

Date of Government Version: 09/01/2015 Date Data Arrived at EDR: 09/03/2015 Date Made Active in Reports: 11/03/2015 Number of Days to Update: 61 Source: Environmental Protection Agency Telephone: 202-566-1917 Last EDR Contact: 05/18/2016 Next Scheduled EDR Contact: 08/29/2016 Data Release Frequency: Quarterly

EPA WATCH LIST: EPA WATCH LIST

EPA maintains a "Watch List" to facilitate dialogue between EPA, state and local environmental agencies on enforcement matters relating to facilities with alleged violations identified as either significant or high priority. Being on the Watch List does not mean that the facility has actually violated the law only that an investigation by EPA or a state or local environmental agency has led those organizations to allege that an unproven violation has in fact occurred. Being on the Watch List does not represent a higher level of concern regarding the alleged violations that were detected, but instead indicates cases requiring additional dialogue between EPA, state and local agencies - primarily because of the length of time the alleged violation has gone unaddressed or unresolved.

Date of Government Version: 08/30/2013 Date Data Arrived at EDR: 03/21/2014 Date Made Active in Reports: 06/17/2014 Number of Days to Update: 88 Source: Environmental Protection Agency Telephone: 617-520-3000 Last EDR Contact: 08/08/2016 Next Scheduled EDR Contact: 11/21/2016 Data Release Frequency: Quarterly

2020 COR ACTION: 2020 Corrective Action Program List

The EPA has set ambitious goals for the RCRA Corrective Action program by creating the 2020 Corrective Action Universe. This RCRA cleanup baseline includes facilities expected to need corrective action. The 2020 universe contains a wide variety of sites. Some properties are heavily contaminated while others were contaminated but have since been cleaned up. Still others have not been fully investigated yet, and may require little or no remediation. Inclusion in the 2020 Universe does not necessarily imply failure on the part of a facility to meet its RCRA obligations.

Date of Government Version: 04/22/2013 Date Data Arrived at EDR: 03/03/2015 Date Made Active in Reports: 03/09/2015 Number of Days to Update: 6 Source: Environmental Protection Agency Telephone: 703-308-4044 Last EDR Contact: 05/12/2016 Next Scheduled EDR Contact: 08/22/2016 Data Release Frequency: Varies

TSCA: Toxic Substances Control Act

Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

Date of Government Version: 12/31/2012 Date Data Arrived at EDR: 01/15/2015 Date Made Active in Reports: 01/29/2015 Number of Days to Update: 14 Source: EPA Telephone: 202-260-5521 Last EDR Contact: 06/24/2016 Next Scheduled EDR Contact: 10/03/2016 Data Release Frequency: Every 4 Years

TRIS: Toxic Chemical Release Inventory System

Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/2014 Date Data Arrived at EDR: 11/24/2015 Date Made Active in Reports: 04/05/2016 Number of Days to Update: 133 Source: EPA Telephone: 202-566-0250 Last EDR Contact: 05/24/2016 Next Scheduled EDR Contact: 09/05/2016 Data Release Frequency: Annually

SSTS: Section 7 Tracking Systems

Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 12/31/2009SourceDate Data Arrived at EDR: 12/10/2010TelephDate Made Active in Reports: 02/25/2011Last ENumber of Days to Update: 77Next S

Source: EPA Telephone: 202-564-4203 Last EDR Contact: 07/25/2016 Next Scheduled EDR Contact: 11/07/2016 Data Release Frequency: Annually

ROD: Records Of Decision

Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 11/25/2013 Date Data Arrived at EDR: 12/12/2013 Date Made Active in Reports: 02/24/2014 Number of Days to Update: 74

Source: EPA Telephone: 703-416-0223 Last EDR Contact: 06/07/2016 Next Scheduled EDR Contact: 09/19/2016 Data Release Frequency: Annually

RMP: Risk Management Plans

When Congress passed the Clean Air Act Amendments of 1990, it required EPA to publish regulations and guidance for chemical accident prevention at facilities using extremely hazardous substances. The Risk Management Program Rule (RMP Rule) was written to implement Section 112(r) of these amendments. The rule, which built upon existing industry codes and standards, requires companies of all sizes that use certain flammable and toxic substances to develop a Risk Management Program, which includes a(n): Hazard assessment that details the potential effects of an accidental release, an accident history of the last five years, and an evaluation of worst-case and alternative accidental releases; Prevention program that includes safety precautions and maintenance, monitoring, and employee training measures; and Emergency response program that spells out emergency health care, employee training measures and procedures for informing the public and response agencies (e.g the fire department) should an accident occur.

Date of Government Version: 08/01/2015 Date Data Arrived at EDR: 08/26/2015 Date Made Active in Reports: 11/03/2015 Number of Days to Update: 69 Source: Environmental Protection Agency Telephone: 202-564-8600 Last EDR Contact: 07/25/2016 Next Scheduled EDR Contact: 11/07/2016 Data Release Frequency: Varies

RAATS: RCRA Administrative Action Tracking System

RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/1995 Date Data Arrived at EDR: 07/03/1995 Date Made Active in Reports: 08/07/1995 Number of Days to Update: 35 Source: EPA Telephone: 202-564-4104 Last EDR Contact: 06/02/2008 Next Scheduled EDR Contact: 09/01/2008 Data Release Frequency: No Update Planned

PRP: Potentially Responsible Parties

A listing of verified Potentially Responsible Parties

Date of Government Version: 10/25/2013	Source: EPA
Date Data Arrived at EDR: 10/17/2014	Telephone: 202-564-6023
Date Made Active in Reports: 10/20/2014	Last EDR Contact: 08/12/2016
Number of Days to Update: 3	Next Scheduled EDR Contact: 11/21/2016
	Data Release Frequency: Quarterly

PADS: PCB Activity Database System

PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 07/01/2014	Source: EPA
Date Data Arrived at EDR: 10/15/2014	Telephone: 202-566-0500
Date Made Active in Reports: 11/17/2014	Last EDR Contact: 07/15/2016
Number of Days to Update: 33	Next Scheduled EDR Contact: 10/24/2016
	Data Release Frequency: Annually

ICIS: Integrated Compliance Information System

The Integrated Compliance Information System (ICIS) supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollutant Discharge Elimination System (NPDES) program.

Date of Government Version: 01/23/2015
Date Data Arrived at EDR: 02/06/2015
Date Made Active in Reports: 03/09/2015
Number of Days to Update: 31

Source: Environmental Protection Agency Telephone: 202-564-5088 Last EDR Contact: 07/07/2016 Next Scheduled EDR Contact: 10/24/2016 Data Release Frequency: Quarterly

FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act) FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 04/09/2009	Source: EPA/Office of Prevention, Pesticides and Toxic Substances
Date Data Arrived at EDR: 04/16/2009	Telephone: 202-566-1667
Date Made Active in Reports: 05/11/2009	Last EDR Contact: 05/20/2016
Number of Days to Update: 25	Next Scheduled EDR Contact: 09/05/2016
	Data Release Frequency: Quarterly

FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act) A listing of FIFRA/TSCA Tracking System (FTTS) inspections and enforcements.

Date of Government Version: 04/09/2009	Source: EPA
Date Data Arrived at EDR: 04/16/2009	Telephone: 202-566-1667
Date Made Active in Reports: 05/11/2009	Last EDR Contact: 05/20/2016
Number of Days to Update: 25	Next Scheduled EDR Contact: 09/05/2016
	Data Release Frequency: Quarterly

MLTS: Material Licensing Tracking System

MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 03/07/2016	Source: Nuclear Regulatory Commission
Date Data Arrived at EDR: 03/18/2016	Telephone: 301-415-7169
Date Made Active in Reports: 04/15/2016	Last EDR Contact: 09/05/2016
Number of Days to Update: 28	Next Scheduled EDR Contact: 11/21/2016
	Data Release Frequency: Quarterly

COAL ASH DOE: Steam-Electric Plant Operation Data

A listing of power plants that store ash in surface ponds.

Date of Government Version: 12/31/2005	Source: Department of Energy
Date Data Arrived at EDR: 08/07/2009	Telephone: 202-586-8719
Date Made Active in Reports: 10/22/2009	Last EDR Contact: 06/09/2016
Number of Days to Update: 76	Next Scheduled EDR Contact: 09/19/2016
	Data Release Frequency: Varies

COAL ASH EPA: Coal Combustion Residues Surface Impoundments List

A listing of coal combustion residues surface impoundments with high hazard potential ratings.

Date of Government Version: 07/01/2014	
Date Data Arrived at EDR: 09/10/2014	
Date Made Active in Reports: 10/20/2014	
Number of Days to Update: 40	

Source: Environmental Protection Agency Telephone: N/A Last EDR Contact: 06/10/2016 Next Scheduled EDR Contact: 09/19/2016 Data Release Frequency: Varies

PCB TRANSFORMER: PCB Transformer Registration Database

The database of PCB transformer registrations that includes all PCB registration submittals.

Date of Government Version: 02/01/2011	Source: Environmental Protection Agency
Date Data Arrived at EDR: 10/19/2011	Telephone: 202-566-0517
Date Made Active in Reports: 01/10/2012	Last EDR Contact: 07/29/2016
Number of Days to Update: 83	Next Scheduled EDR Contact: 11/07/2016
	Data Release Frequency: Varies

RADINFO: Radiation Information Database

The Radiation Information Database (RADINFO) contains information about facilities that are regulated by U.S. Environmental Protection Agency (EPA) regulations for radiation and radioactivity.

Date of Government Version: 07/07/2015 Date Data Arrived at EDR: 07/09/2015 Date Made Active in Reports: 09/16/2015 Number of Days to Update: 69 Source: Environmental Protection Agency Telephone: 202-343-9775 Last EDR Contact: 07/07/2016 Next Scheduled EDR Contact: 10/17/2016 Data Release Frequency: Quarterly

HIST FTTS: FIFRA/TSCA Tracking System Administrative Case Listing

A complete administrative case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006 Date Data Arrived at EDR: 03/01/2007 Date Made Active in Reports: 04/10/2007 Number of Days to Update: 40

Source: Environmental Protection Agency Telephone: 202-564-2501 Last EDR Contact: 12/17/2007 Next Scheduled EDR Contact: 03/17/2008 Data Release Frequency: No Update Planned

HIST FTTS INSP: FIFRA/TSCA Tracking System Inspection & Enforcement Case Listing

A complete inspection and enforcement case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006 Date Data Arrived at EDR: 03/01/2007 Date Made Active in Reports: 04/10/2007 Number of Days to Update: 40 Source: Environmental Protection Agency Telephone: 202-564-2501 Last EDR Contact: 12/17/2008 Next Scheduled EDR Contact: 03/17/2008 Data Release Frequency: No Update Planned

DOT OPS: Incident and Accident Data

Department of Transporation, Office of Pipeline Safety Incident and Accident data.

Date of Government Version: 07/31/2012	Source: Department of Transporation, Office of Pipeline Safety
Date Data Arrived at EDR: 08/07/2012	Telephone: 202-366-4595
Date Made Active in Reports: 09/18/2012	Last EDR Contact: 08/02/2016
Number of Days to Update: 42	Next Scheduled EDR Contact: 11/14/2016
	Data Release Frequency: Varies

CONSENT: Superfund (CERCLA) Consent Decrees

Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

Date of Government Version: 12/31/2014	Sour
Date Data Arrived at EDR: 04/17/2015	Telep
Date Made Active in Reports: 06/02/2015	Last
Number of Days to Update: 46	Next

Source: Department of Justice, Consent Decree Library Telephone: Varies Last EDR Contact: 07/15/2016 Next Scheduled EDR Contact: 10/10/2016 Data Release Frequency: Varies

BRS: Biennial Reporting System

The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/31/2013 Date Data Arrived at EDR: 02/24/2015 Date Made Active in Reports: 09/30/2015 Number of Days to Update: 218 Source: EPA/NTIS Telephone: 800-424-9346 Last EDR Contact: 05/27/2016 Next Scheduled EDR Contact: 09/05/2016 Data Release Frequency: Biennially

INDIAN RESERV: Indian Reservations

This map layer portrays Indian administered lands of the United States that have any area equal to or greater than 640 acres.

Date of Government Version: 12/31/2005	Source: USGS
Date Data Arrived at EDR: 12/08/2006	Telephone: 202-208-3710
Date Made Active in Reports: 01/11/2007	Last EDR Contact: 07/15/2016
Number of Days to Update: 34	Next Scheduled EDR Contact: 10/24/2016
	Data Release Frequency: Semi-Annually

FUSRAP: Formerly Utilized Sites Remedial Action Program

DOE established the Formerly Utilized Sites Remedial Action Program (FUSRAP) in 1974 to remediate sites where radioactive contamination remained from Manhattan Project and early U.S. Atomic Energy Commission (AEC) operations.

Date of Government Version: 03/11/2016 Date Data Arrived at EDR: 03/15/2016 Date Made Active in Reports: 06/03/2016 Number of Days to Update: 80

Source: Department of Energy Telephone: 202-586-3559 Last EDR Contact: 07/26/2016 Next Scheduled EDR Contact: 11/21/2016 Data Release Frequency: Varies

UMTRA: Uranium Mill Tailings Sites

Uranium ore was mined by private companies for federal government use in national defense programs. When the mills shut down, large piles of the sand-like material (mill tailings) remain after uranium has been extracted from the ore. Levels of human exposure to radioactive materials from the piles are low; however, in some cases tailings were used as construction materials before the potential health hazards of the tailings were recognized.

Date of Government Version: 09/14/2010 Date Data Arrived at EDR: 10/07/2011 Date Made Active in Reports: 03/01/2012 Number of Days to Update: 146 Source: Department of Energy Telephone: 505-845-0011 Last EDR Contact: 05/23/2016 Next Scheduled EDR Contact: 09/05/2016 Data Release Frequency: Varies

LEAD SMELTER 1: Lead Smelter Sites

A listing of former lead smelter site locations.

Date of Government Version: 11/25/2014Source: Environmental Protection AgencyDate Data Arrived at EDR: 11/26/2014Telephone: 703-603-8787Date Made Active in Reports: 01/29/2015Last EDR Contact: 07/08/2016Number of Days to Update: 64Next Scheduled EDR Contact: 10/17/2016Data Release Frequency: Varies

LEAD SMELTER 2: Lead Smelter Sites

A list of several hundred sites in the U.S. where secondary lead smelting was done from 1931and 1964. These sites may pose a threat to public health through ingestion or inhalation of contaminated soil or dust

Date of Government Version: 04/05/2001 Date Data Arrived at EDR: 10/27/2010 Date Made Active in Reports: 12/02/2010 Number of Days to Update: 36 Source: American Journal of Public Health Telephone: 703-305-6451 Last EDR Contact: 12/02/2009 Next Scheduled EDR Contact: N/A Data Release Frequency: No Update Planned

US AIRS (AFS): Aerometric Information Retrieval System Facility Subsystem (AFS)

The database is a sub-system of Aerometric Information Retrieval System (AIRS). AFS contains compliance data on air pollution point sources regulated by the U.S. EPA and/or state and local air regulatory agencies. This information comes from source reports by various stationary sources of air pollution, such as electric power plants, steel mills, factories, and universities, and provides information about the air pollutants they produce. Action, air program, air program pollutant, and general level plant data. It is used to track emissions and compliance data from industrial plants.

	Date of Government Version: 10/20/2015 Date Data Arrived at EDR: 10/27/2015 Date Made Active in Reports: 01/04/2016 Number of Days to Update: 69	Source: EPA Telephone: 202-564-2496 Last EDR Contact: 06/22/2016 Next Scheduled EDR Contact: 10/10/2016 Data Release Frequency: Annually
US /	AIRS MINOR: Air Facility System Data A listing of minor source facilities.	
	Date of Government Version: 10/20/2015 Date Data Arrived at EDR: 10/27/2015 Date Made Active in Reports: 01/04/2016 Number of Days to Update: 69	Source: EPA Telephone: 202-564-2496 Last EDR Contact: 06/22/2016 Next Scheduled EDR Contact: 10/10/2016 Data Release Frequency: Annually
US MINES: Mines Master Index File Contains all mine identification numbers issued for mines active or opened since 1971. The data also includes violation information.		
	Date of Government Version: 02/09/2016 Date Data Arrived at EDR: 03/02/2016 Date Made Active in Reports: 04/15/2016 Number of Days to Update: 44	Source: Department of Labor, Mine Safety and Health Administration Telephone: 303-231-5959 Last EDR Contact: 06/02/2016 Next Scheduled EDR Contact: 09/12/2016 Data Release Frequency: Semi-Annually
US MINES 2: Ferrous and Nonferrous Metal Mines Database Listing This map layer includes ferrous (ferrous metal mines are facilities that extract ferrous metals, such as iron ore or molybdenum) and nonferrous (Nonferrous metal mines are facilities that extract nonferrous metals, such as gold, silver, copper, zinc, and lead) metal mines in the United States.		
	Date of Government Version: 12/05/2005 Date Data Arrived at EDR: 02/29/2008 Date Made Active in Reports: 04/18/2008 Number of Days to Update: 49	Source: USGS Telephone: 703-648-7709 Last EDR Contact: 06/03/2016 Next Scheduled EDR Contact: 09/12/2016 Data Release Frequency: Varies
US MINES 3: Active Mines & Mineral Plants Database Listing Active Mines and Mineral Processing Plant operations for commodities monitored by the Minerals Information Team of the USGS.		
	Date of Government Version: 04/14/2011 Date Data Arrived at EDR: 06/08/2011 Date Made Active in Reports: 09/13/2011 Number of Days to Update: 97	Source: USGS Telephone: 703-648-7709 Last EDR Contact: 06/03/2016 Next Scheduled EDR Contact: 09/12/2016 Data Release Frequency: Varies
FINI	FINDS: Facility Index System/Facility Registry System Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Crimina Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).	
	Date of Government Version: 07/20/2015 Date Data Arrived at EDR: 09/09/2015 Date Made Active in Reports: 11/03/2015	Source: EPA Telephone: (415) 947-8000 Last EDR Contact: 06/08/2016

Next Scheduled EDR Contact: 09/19/2016 Data Release Frequency: Quarterly

Number of Days to Update: 55

DOCKET HWC: Hazardous Waste Compliance Docket Listing A complete list of the Federal Agency Hazardous Waste Compliance Docket Facilities.		
Date of Government Version: 03/01/2016 Date Data Arrived at EDR: 03/03/2016 Date Made Active in Reports: 04/05/2016 Number of Days to Update: 33	Source: Environmental Protection Agency Telephone: 202-564-0527 Last EDR Contact: 05/25/2016 Next Scheduled EDR Contact: 09/12/2016 Data Release Frequency: Varies	
UXO: Unexploded Ordnance Sites A listing of unexploded ordnance site locations		
Date of Government Version: 10/25/2015 Date Data Arrived at EDR: 01/29/2016 Date Made Active in Reports: 04/05/2016 Number of Days to Update: 67	Source: Department of Defense Telephone: 571-373-0407 Last EDR Contact: 06/20/2016 Next Scheduled EDR Contact: 10/03/2016 Data Release Frequency: Varies	
CA BOND EXP. PLAN: Bond Expenditure Plan Department of Health Services developed a site-specific expenditure plan as the basis for an appropriation of Hazardous Substance Cleanup Bond Act funds. It is not updated.		
Date of Government Version: 01/01/1989 Date Data Arrived at EDR: 07/27/1994 Date Made Active in Reports: 08/02/1994 Number of Days to Update: 6	Source: Department of Health Services Telephone: 916-255-2118 Last EDR Contact: 05/31/1994 Next Scheduled EDR Contact: N/A Data Release Frequency: No Update Planned	
CORTESE: "Cortese" Hazardous Waste & Substances Sites List The sites for the list are designated by the State Water Resource Control Board (LUST), the Integrated Waste Board (SWF/LS), and the Department of Toxic Substances Control (Cal-Sites).		
Date of Government Version: 03/28/2016 Date Data Arrived at EDR: 03/30/2016 Date Made Active in Reports: 05/09/2016 Number of Days to Update: 40	Source: CAL EPA/Office of Emergency Information Telephone: 916-323-3400 Last EDR Contact: 06/28/2016 Next Scheduled EDR Contact: 10/10/2016 Data Release Frequency: Quarterly	
DRYCLEANERS: Cleaner Facilities A list of drycleaner related facilities that have EPA ID numbers. These are facilities with certain SIC codes: power laundries, family and commercial; garment pressing and cleaner's agents; linen supply; coin-operated laundries and cleaning; drycleaning plants, except rugs; carpet and upholster cleaning; industrial launderers; laundry and garment services.		
Date of Government Version: 02/08/2016 Date Data Arrived at EDR: 02/24/2016 Date Made Active in Reports: 04/01/2016 Number of Days to Update: 37	Source: Department of Toxic Substance Control Telephone: 916-327-4498 Last EDR Contact: 06/02/2016 Next Scheduled EDR Contact: 09/19/2016 Data Release Frequency: Annually	
EMI: Emissions Inventory Data Toxics and criteria pollutant emissions data col	llected by the ARB and local air pollution agencies.	
Date of Government Version: 12/31/2015 Date Data Arrived at EDR: 06/22/2016 Date Made Active in Reports: 08/09/2016 Number of Days to Update: 48	Source: California Air Resources Board Telephone: 916-322-2990 Last EDR Contact: 06/22/2016 Next Scheduled EDR Contact: 10/03/2016	

Data Release Frequency: Varies

ENF: Enforcement Action Listing

A listing of Water Board Enforcement Actions. Formal is everything except Oral/Verbal Communication, Notice of Violation, Expedited Payment Letter, and Staff Enforcement Letter.

Date of Government Version: 05/25/2016	Source: State Water Resoruces Control Board
Date Data Arrived at EDR: 05/27/2016	Telephone: 916-445-9379
Date Made Active in Reports: 07/20/2016	Last EDR Contact: 08/03/2016
Number of Days to Update: 54	Next Scheduled EDR Contact: 10/07/2016
	Data Release Frequency: Varies

Financial Assurance 1: Financial Assurance Information Listing

Financial Assurance information

Date of Government Version: 04/25/2016	Source: Department of Toxic Substances Control
Date Data Arrived at EDR: 04/29/2016	Telephone: 916-255-3628
Date Made Active in Reports: 06/21/2016	Last EDR Contact: 07/20/2016
Number of Days to Update: 53	Next Scheduled EDR Contact: 10/07/2016
	Data Release Frequency: Varies

Financial Assurance 2: Financial Assurance Information Listing

A listing of financial assurance information for solid waste facilities. Financial assurance is intended to ensure that resources are available to pay for the cost of closure, post-closure care, and corrective measures if the owner or operator of a regulated facility is unable or unwilling to pay.

Date of Government Version: 05/25/2016	Source: California Integrated Waste Management Board
Date Data Arrived at EDR: 06/01/2016	Telephone: 916-341-6066
Date Made Active in Reports: 07/20/2016	Last EDR Contact: 08/10/2016
Number of Days to Update: 49	Next Scheduled EDR Contact: 11/28/2016
	Data Release Frequency: Varies

HAZNET: Facility and Manifest Data

Facility and Manifest Data. The data is extracted from the copies of hazardous waste manifests received each year by the DTSC. The annual volume of manifests is typically 700,000 - 1,000,000 annually, representing approximately 350,000 - 500,000 shipments. Data are from the manifests submitted without correction, and therefore many contain some invalid values for data elements such as generator ID, TSD ID, waste category, and disposal method. This database begins with calendar year 1993.

Date of Government Version: 12/31/2014 Date Data Arrived at EDR: 10/14/2015 Date Made Active in Reports: 12/11/2015 Number of Days to Update: 58 Source: California Environmental Protection Agency Telephone: 916-255-1136 Last EDR Contact: 07/15/2016 Next Scheduled EDR Contact: 10/24/2016 Data Release Frequency: Annually

HIST CORTESE: Hazardous Waste & Substance Site List

The sites for the list are designated by the State Water Resource Control Board [LUST], the Integrated Waste Board [SWF/LS], and the Department of Toxic Substances Control [CALSITES]. This listing is no longer updated by the state agency.

Date of Government Version: 04/01/2001 Date Data Arrived at EDR: 01/22/2009 Date Made Active in Reports: 04/08/2009 Number of Days to Update: 76 Source: Department of Toxic Substances Control Telephone: 916-323-3400 Last EDR Contact: 01/22/2009 Next Scheduled EDR Contact: N/A Data Release Frequency: No Update Planned

HWP: EnviroStor Permitted Facilities Listing

Detailed information on permitted hazardous waste facilities and corrective action ("cleanups") tracked in EnviroStor.

Date of Government Version: 05/23/2016	Source: Department of Toxic Substances Control
Date Data Arrived at EDR: 05/25/2016	Telephone: 916-323-3400
Date Made Active in Reports: 07/20/2016	Last EDR Contact: 05/25/2016
Number of Days to Update: 56	Next Scheduled EDR Contact: 09/05/2016
	Data Release Frequency: Quarterly

HWT: Registered Hazardous Waste Transporter Database

A listing of hazardous waste transporters. In California, unless specifically exempted, it is unlawful for any person to transport hazardous wastes unless the person holds a valid registration issued by DTSC. A hazardous waste transporter registration is valid for one year and is assigned a unique registration number.

Date of Government Version: 04/11/2016	Source: Department of Toxic Substances Control
Date Data Arrived at EDR: 04/12/2016	Telephone: 916-440-7145
Date Made Active in Reports: 06/01/2016	Last EDR Contact: 07/13/2016
Number of Days to Update: 50	Next Scheduled EDR Contact: 10/24/2016
	Data Release Frequency: Quarterly

MINES: Mines Site Location Listing

A listing of mine site locations from the Office of Mine Reclamation.

Date of Government Version: 06/13/2016	Source: Department of Conservation
Date Data Arrived at EDR: 06/14/2016	Telephone: 916-322-1080
Date Made Active in Reports: 08/09/2016	Last EDR Contact: 06/14/2016
Number of Days to Update: 56	Next Scheduled EDR Contact: 09/26/2016
	Data Release Frequency: Varies

MWMP: Medical Waste Management Program Listing

The Medical Waste Management Program (MWMP) ensures the proper handling and disposal of medical waste by permitting and inspecting medical waste Offsite Treatment Facilities (PDF) and Transfer Stations (PDF) throughout the state. MWMP also oversees all Medical Waste Transporters.

Date of Government Version: 05/25/2016	
Date Data Arrived at EDR: 06/07/2016	
Date Made Active in Reports: 07/20/2016	
Number of Days to Update: 43	

Source: Department of Public Health Telephone: 916-558-1784 Last EDR Contact: 06/07/2016 Next Scheduled EDR Contact: 09/19/2016 Data Release Frequency: Varies

NPDES: NPDES Permits Listing

A listing of NPDES permits, including stormwater.

Date of Government Version: 05/16/2016	Source: State Water Resources Control Board
Date Data Arrived at EDR: 05/18/2016	Telephone: 916-445-9379
Date Made Active in Reports: 06/23/2016	Last EDR Contact: 08/16/2016
Number of Days to Update: 36	Next Scheduled EDR Contact: 11/28/2016
	Data Release Frequency: Quarterly

PEST LIC: Pesticide Regulation Licenses Listing

A listing of licenses and certificates issued by the Department of Pesticide Regulation. The DPR issues licenses and/or certificates to: Persons and businesses that apply or sell pesticides; Pest control dealers and brokers; Persons who advise on agricultural pesticide applications.

Date of Government Version: 06/06/2016 Date Data Arrived at EDR: 06/07/2016 Date Made Active in Reports: 07/20/2016 Number of Days to Update: 43

PROC: Certified Processors Database A listing of certified processors.

Date of Government Version: 06/13/2016 Date Data Arrived at EDR: 06/14/2016 Date Made Active in Reports: 08/09/2016 Number of Days to Update: 56 Source: Department of Pesticide Regulation Telephone: 916-445-4038 Last EDR Contact: 06/07/2016 Next Scheduled EDR Contact: 09/19/2016 Data Release Frequency: Quarterly

Source: Department of Conservation Telephone: 916-323-3836 Last EDR Contact: 06/14/2016 Next Scheduled EDR Contact: 09/26/2016 Data Release Frequency: Quarterly

NOTIFY 65: Proposition 65 Records

Listings of all Proposition 65 incidents reported to counties by the State Water Resources Control Board and the Regional Water Quality Control Board. This database is no longer updated by the reporting agency.

Date of Government Version: 09/10/2015	Source: State Water Resources Control Board
Date Data Arrived at EDR: 01/05/2016	Telephone: 916-445-3846
Date Made Active in Reports: 02/12/2016	Last EDR Contact: 06/30/2016
Number of Days to Update: 38	Next Scheduled EDR Contact: 10/03/2016
	Data Release Frequency: No Update Planned

UIC: UIC Listing

A listing of wells identified as underground injection wells, in the California Oil and Gas Wells database.

Date of Government Version: 02/12/2016 Date Data Arrived at EDR: 03/16/2016 Date Made Active in Reports: 06/13/2016 Number of Days to Update: 89 Source: Deaprtment of Conservation Telephone: 916-445-2408 Last EDR Contact: 06/16/2016 Next Scheduled EDR Contact: 09/26/2016 Data Release Frequency: Varies

WASTEWATER PITS: Oil Wastewater Pits Listing

Water officials discovered that oil producers have been dumping chemical-laden wastewater into hundreds of unlined pits that are operating without proper permits. Inspections completed by the Central Valley Regional Water Quality Control Board revealed the existence of previously unidentified waste sites. The water board?s review found that more than one-third of the region?s active disposal pits are operating without permission.

Source: RWQCB, Central Valley Region
Telephone: 559-445-5577
Last EDR Contact: 07/15/2016
Next Scheduled EDR Contact: 10/24/2016
Data Release Frequency: Varies

WDS: Waste Discharge System

Sites which have been issued waste discharge requirements.

Date of Government Version: 06/19/2007	Source: State Water Resources Control Board
Date Data Arrived at EDR: 06/20/2007	Telephone: 916-341-5227
Date Made Active in Reports: 06/29/2007	Last EDR Contact: 05/20/2016
Number of Days to Update: 9	Next Scheduled EDR Contact: 09/05/2016
	Data Release Frequency: Quarterly

WIP: Well Investigation Program Case List

Well Investigation Program case in the San Gabriel and San Fernando Valley area.

Date of Government Version: 07/03/2009 Date Data Arrived at EDR: 07/21/2009 Date Made Active in Reports: 08/03/2009 Number of Days to Update: 13 Source: Los Angeles Water Quality Control Board Telephone: 213-576-6726 Last EDR Contact: 06/24/2016 Next Scheduled EDR Contact: 10/10/2016 Data Release Frequency: Varies

ECHO: Enforcement & Compliance History Information

ECHO provides integrated compliance and enforcement information for about 800,000 regulated facilities nationwide.

Date of Government Version: 09/20/2015	
Date Data Arrived at EDR: 09/23/2015	
Date Made Active in Reports: 01/04/2016	
Number of Days to Update: 103	

Source: Environmental Protection Agency Telephone: 202-564-2280 Last EDR Contact: 06/22/2016 Next Scheduled EDR Contact: 10/03/2016 Data Release Frequency: Quarterly

FUELS PROGRAM: EPA Fuels Program Registered Listing

This listing includes facilities that are registered under the Part 80 (Code of Federal Regulations) EPA Fuels Programs. All companies now are required to submit new and updated registrations.

Date of Government Version: 05/24/2016 Date Data Arrived at EDR: 05/25/2016 Date Made Active in Reports: 07/13/2016 Number of Days to Update: 49 Source: EPA Telephone: 800-385-6164 Last EDR Contact: 05/25/2016 Next Scheduled EDR Contact: 09/05/2016 Data Release Frequency: Quarterly

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP: EDR Proprietary Manufactured Gas Plants

The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

Date of Government Version: N/A Date Data Arrived at EDR: N/A Date Made Active in Reports: N/A Number of Days to Update: N/A Source: EDR, Inc. Telephone: N/A Last EDR Contact: N/A Next Scheduled EDR Contact: N/A Data Release Frequency: No Update Planned

EDR Hist Auto: EDR Exclusive Historic Gas Stations

EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A Date Data Arrived at EDR: N/A Date Made Active in Reports: N/A Number of Days to Update: N/A Source: EDR, Inc. Telephone: N/A Last EDR Contact: N/A Next Scheduled EDR Contact: N/A Data Release Frequency: Varies

EDR Hist Cleaner: EDR Exclusive Historic Dry Cleaners

EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A Date Data Arrived at EDR: N/A Date Made Active in Reports: N/A Number of Days to Update: N/A Source: EDR, Inc. Telephone: N/A Last EDR Contact: N/A Next Scheduled EDR Contact: N/A Data Release Frequency: Varies

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA LF: Recovered Government Archive Solid Waste Facilities List

The EDR Recovered Government Archive Landfill database provides a list of landfills derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Resources Recycling and Recovery in California.

Date of Government Version: N/A Date Data Arrived at EDR: 07/01/2013 Date Made Active in Reports: 01/13/2014 Number of Days to Update: 196 Source: Department of Resources Recycling and Recovery Telephone: N/A Last EDR Contact: 06/01/2012 Next Scheduled EDR Contact: N/A Data Release Frequency: Varies

RGA LUST: Recovered Government Archive Leaking Underground Storage Tank The EDR Recovered Government Archive Leaking Underground Storage Tank database provides a list of LUST incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the State Water Resources Control Board in California.

Date of Government Version: N/A Date Data Arrived at EDR: 07/01/2013 Date Made Active in Reports: 12/30/2013 Number of Days to Update: 182 Source: State Water Resources Control Board Telephone: N/A Last EDR Contact: 06/01/2012 Next Scheduled EDR Contact: N/A Data Release Frequency: Varies

COUNTY RECORDS

ALAMEDA COUNTY:

Contaminated Sites

A listing of contaminated sites overseen by the Toxic Release Program (oil and groundwater contamination from chemical releases and spills) and the Leaking Underground Storage Tank Program (soil and ground water contamination from leaking petroleum USTs).

Date of Government Version: 04/12/2016 Date Data Arrived at EDR: 04/14/2016 Date Made Active in Reports: 06/01/2016 Number of Days to Update: 48 Source: Alameda County Environmental Health Services Telephone: 510-567-6700 Last EDR Contact: 07/07/2016 Next Scheduled EDR Contact: 10/24/2016 Data Release Frequency: Semi-Annually

Underground Tanks

Underground storage tank sites located in Alameda county.

Date of Government Version: 07/07/2016 Date Data Arrived at EDR: 07/12/2016 Date Made Active in Reports: 08/08/2016 Number of Days to Update: 27 Source: Alameda County Environmental Health Services Telephone: 510-567-6700 Last EDR Contact: 07/07/2016 Next Scheduled EDR Contact: 10/24/2016 Data Release Frequency: Semi-Annually

AMADOR COUNTY:

CUPA Facility List

Cupa Facility List

Date of Government Version: 06/06/2016 Date Data Arrived at EDR: 06/09/2016 Date Made Active in Reports: 06/21/2016 Number of Days to Update: 12 Source: Amador County Environmental Health Telephone: 209-223-6439 Last EDR Contact: 06/02/2016 Next Scheduled EDR Contact: 09/19/2016 Data Release Frequency: Varies

BUTTE COUNTY:

CUPA Facility Listing

Cupa facility list.

Date of Government Version: 06/02/2016 Date Data Arrived at EDR: 06/03/2016 Date Made Active in Reports: 06/21/2016 Number of Days to Update: 18 Source: Public Health Department Telephone: 530-538-7149 Last EDR Contact: 07/07/2016 Next Scheduled EDR Contact: 10/24/2016 Data Release Frequency: No Update Planned

CALVERAS COUNTY:

CUPA Facility Listing Cupa Facility Listing

Date of Government Version: 04/29/2016 Date Data Arrived at EDR: 05/03/2016 Date Made Active in Reports: 06/17/2016 Number of Days to Update: 45

Source: Calveras County Environmental Health Telephone: 209-754-6399 Last EDR Contact: 06/27/2016 Next Scheduled EDR Contact: 10/10/2016 Data Release Frequency: Quarterly

COLUSA COUNTY:

CUPA Facility List

Cupa facility list.

Date of Government Version: 05/25/2016 Date Data Arrived at EDR: 05/26/2016 Date Made Active in Reports: 06/17/2016 Number of Days to Update: 22 Source: Health & Human Services Telephone: 530-458-0396 Last EDR Contact: 08/03/2016 Next Scheduled EDR Contact: 11/21/2016 Data Release Frequency: Varies

CONTRA COSTA COUNTY:

Site List

List includes sites from the underground tank, hazardous waste generator and business plan/2185 programs.

Date of Government Version: 05/24/2016 Date Data Arrived at EDR: 05/26/2016 Date Made Active in Reports: 07/20/2016 Number of Days to Update: 55

Source: Contra Costa Health Services Department Telephone: 925-646-2286 Last EDR Contact: 08/01/2016 Next Scheduled EDR Contact: 11/14/2016 Data Release Frequency: Semi-Annually

DEL NORTE COUNTY:

CUPA Facility List

Cupa Facility list

Date of Government Version: 04/08/2016 Date Data Arrived at EDR: 05/03/2016 Date Made Active in Reports: 06/22/2016 Number of Days to Update: 50 Source: Del Norte County Environmental Health Division Telephone: 707-465-0426 Last EDR Contact: 07/27/2016 Next Scheduled EDR Contact: 11/14/2016 Data Release Frequency: Varies

EL DORADO COUNTY:

CUPA Facility List

CUPA facility list.

Date of Government Version: 05/24/2016 Date Data Arrived at EDR: 05/26/2016 Date Made Active in Reports: 08/09/2016 Number of Days to Update: 75 Source: El Dorado County Environmental Management Department Telephone: 530-621-6623 Last EDR Contact: 07/27/2016 Next Scheduled EDR Contact: 11/14/2016 Data Release Frequency: Varies

FRESNO COUNTY:

CUPA Resources List

Certified Unified Program Agency. CUPA's are responsible for implementing a unified hazardous materials and hazardous waste management regulatory program. The agency provides oversight of businesses that deal with hazardous materials, operate underground storage tanks or aboveground storage tanks.

Date of Government Version: 07/13/2016 Date Data Arrived at EDR: 07/19/2016 Date Made Active in Reports: 08/09/2016 Number of Days to Update: 21 Source: Dept. of Community Health Telephone: 559-445-3271 Last EDR Contact: 07/13/2016 Next Scheduled EDR Contact: 10/17/2016 Data Release Frequency: Semi-Annually

HUMBOLDT COUNTY:

CUPA Facility List CUPA facility list.

> Date of Government Version: 03/16/2016 Date Data Arrived at EDR: 03/21/2016 Date Made Active in Reports: 05/04/2016 Number of Days to Update: 44

Source: Humboldt County Environmental Health Telephone: N/A Last EDR Contact: 05/23/2016 Next Scheduled EDR Contact: 09/05/2016 Data Release Frequency: Varies

IMPERIAL COUNTY:

CUPA Facility List Cupa facility list.

> Date of Government Version: 04/26/2016 Date Data Arrived at EDR: 04/28/2016 Date Made Active in Reports: 06/17/2016 Number of Days to Update: 50

Source: San Diego Border Field Office Telephone: 760-339-2777 Last EDR Contact: 07/20/2016 Next Scheduled EDR Contact: 10/07/2016 Data Release Frequency: Varies

INYO COUNTY:

CUPA Facility List Cupa facility list.

> Date of Government Version: 09/10/2013 Date Data Arrived at EDR: 09/11/2013 Date Made Active in Reports: 10/14/2013 Number of Days to Update: 33

Source: Inyo County Environmental Health Services Telephone: 760-878-0238 Last EDR Contact: 05/23/2016 Next Scheduled EDR Contact: 09/05/2016 Data Release Frequency: Varies

KERN COUNTY:

Underground Storage Tank Sites & Tank Listing Kern County Sites and Tanks Listing.

> Date of Government Version: 05/16/2016 Date Data Arrived at EDR: 05/20/2016 Date Made Active in Reports: 08/08/2016 Number of Days to Update: 80

Source: Kern County Environment Health Services Department Telephone: 661-862-8700 Last EDR Contact: 08/03/2016 Next Scheduled EDR Contact: 11/21/2016 Data Release Frequency: Quarterly

KINGS COUNTY:

CUPA Facility List

A listing of sites included in the county's Certified Unified Program Agency database. California's Secretary for Environmental Protection established the unified hazardous materials and hazardous waste regulatory program as required by chapter 6.11 of the California Health and Safety Code. The Unified Program consolidates the administration, permits, inspections, and enforcement activities.

Date of Government Version: 05/25/2016 Date Data Arrived at EDR: 05/27/2016 Date Made Active in Reports: 06/22/2016 Number of Days to Update: 26 Source: Kings County Department of Public Health Telephone: 559-584-1411 Last EDR Contact: 05/23/2016 Next Scheduled EDR Contact: 09/05/2016 Data Release Frequency: Varies

LAKE COUNTY:

CUPA Facility List

Cupa facility list

Date of Government Version: 04/26/2016 Date Data Arrived at EDR: 04/27/2016 Date Made Active in Reports: 06/17/2016 Number of Days to Update: 51 Source: Lake County Environmental Health Telephone: 707-263-1164 Last EDR Contact: 04/18/2016 Next Scheduled EDR Contact: 08/01/2016 Data Release Frequency: Varies

LOS ANGELES COUNTY:

San Gabriel Valley Areas of Concern

San Gabriel Valley areas where VOC contamination is at or above the MCL as designated by region 9 EPA office.

Date of Covernment Version: 03/30/2009	Source: EBA Region 9
Date Data Arrived at EDR: 03/31/2009	Telephone: 415-972-3178
Date Made Active in Reports: 10/23/2009	Last EDR Contact: 06/15/2016
Number of Days to Update: 206	Next Scheduled EDR Contact: 07/04/2016
	Data Release Frequency: No Update Planned

HMS: Street Number List

Industrial Waste and Underground Storage Tank Sites.

Date of Government Version: 03/30/2016
Date Data Arrived at EDR: 04/01/2016
Date Made Active in Reports: 05/09/2016
Number of Days to Update: 38

Source: Department of Public Works Telephone: 626-458-3517 Last EDR Contact: 07/07/2016 Next Scheduled EDR Contact: 10/24/2016 Data Release Frequency: Semi-Annually

List of Solid Waste Facilities

Solid Waste Facilities in Los Angeles County.

Date of Government Version: 04/18/2016 Date Data Arrived at EDR: 04/20/2016 Date Made Active in Reports: 06/01/2016 Number of Days to Update: 42 Source: La County Department of Public Works Telephone: 818-458-5185 Last EDR Contact: 07/19/2016 Next Scheduled EDR Contact: 10/31/2016 Data Release Frequency: Varies

City of Los Angeles Landfills

Landfills owned and maintained by the City of Los Angeles.

Date of Government Version: 01/01/2016	Source: Engineering & Construction Division
Date Data Arrived at EDR: 01/26/2016	Telephone: 213-473-7869
Date Made Active in Reports: 03/22/2016	Last EDR Contact: 07/18/2016
Number of Days to Update: 56	Next Scheduled EDR Contact: 10/31/2016
	Data Release Frequency: Varies

Site Mitigation List

Industrial sites that have had some sort of spill or complaint.

Date of Government Version: 03/29/2016	Source: Community Health Services
Date Data Arrived at EDR: 04/06/2016	Telephone: 323-890-7806
Date Made Active in Reports: 06/13/2016	Last EDR Contact: 07/13/2016
Number of Days to Update: 68	Next Scheduled EDR Contact: 10/31/2016
	Data Release Frequency: Annually

City of El Segundo Underground Storage Tank

Underground storage tank sites located in El Segundo city.

Date of Government Version: 03/30/2015 Date Data Arrived at EDR: 04/02/2015 Date Made Active in Reports: 04/13/2015 Number of Days to Update: 11 Source: City of El Segundo Fire Department Telephone: 310-524-2236 Last EDR Contact: 07/13/2016 Next Scheduled EDR Contact: 10/31/2016 Data Release Frequency: Semi-Annually

City of Long Beach Underground Storage Tank

Underground storage tank sites located in the city of Long Beach.

Date of Government Version: 11/04/2015	Source: C
Date Data Arrived at EDR: 11/13/2015	Telephone
Date Made Active in Reports: 12/17/2015	Last EDR (
Number of Days to Update: 34	Next Schee

Source: City of Long Beach Fire Department Telephone: 562-570-2563 Last EDR Contact: 07/25/2016 Next Scheduled EDR Contact: 11/07/2016 Data Release Frequency: Annually

City of Torrance Underground Storage Tank

Underground storage tank sites located in the city of Torrance.

Date of Government Version: 06/23/2016 Date Data Arrived at EDR: 07/12/2016 Date Made Active in Reports: 08/09/2016 Number of Days to Update: 28 Source: City of Torrance Fire Department Telephone: 310-618-2973 Last EDR Contact: 07/07/2016 Next Scheduled EDR Contact: 10/24/2016 Data Release Frequency: Semi-Annually

MADERA COUNTY:

CUPA Facility List

A listing of sites included in the county's Certified Unified Program Agency database. California's Secretary for Environmental Protection established the unified hazardous materials and hazardous waste regulatory program as required by chapter 6.11 of the California Health and Safety Code. The Unified Program consolidates the administration, permits, inspections, and enforcement activities.

Date of Government Version: 06/02/2016 Date Data Arrived at EDR: 06/03/2016 Date Made Active in Reports: 08/09/2016 Number of Days to Update: 67 Source: Madera County Environmental Health Telephone: 559-675-7823 Last EDR Contact: 05/23/2016 Next Scheduled EDR Contact: 09/05/2016 Data Release Frequency: Varies

MARIN COUNTY:

Underground Storage Tank Sites Currently permitted USTs in Marin County.

> Date of Government Version: 04/07/2016 Date Data Arrived at EDR: 04/26/2016 Date Made Active in Reports: 06/01/2016 Number of Days to Update: 36

Source: Public Works Department Waste Management Telephone: 415-499-6647 Last EDR Contact: 06/30/2016 Next Scheduled EDR Contact: 10/17/2016 Data Release Frequency: Semi-Annually

MERCED COUNTY:

CUPA Facility List CUPA facility list.

> Date of Government Version: 02/26/2016 Date Data Arrived at EDR: 03/01/2016 Date Made Active in Reports: 05/04/2016 Number of Days to Update: 64

Source: Merced County Environmental Health Telephone: 209-381-1094 Last EDR Contact: 06/15/2016 Next Scheduled EDR Contact: 09/05/2016 Data Release Frequency: Varies

MONO COUNTY:

CUPA Facility List CUPA Facility List

> Date of Government Version: 05/25/2016 Date Data Arrived at EDR: 06/01/2016 Date Made Active in Reports: 06/22/2016 Number of Days to Update: 21

Source: Mono County Health Department Telephone: 760-932-5580 Last EDR Contact: 05/25/2016 Next Scheduled EDR Contact: 09/12/2016 Data Release Frequency: Varies

MONTEREY COUNTY:

CUPA Facility Listing

CUPA Program listing from the Environmental Health Division.

Date of Government Version: 06/24/2016 Date Data Arrived at EDR: 06/27/2016 Date Made Active in Reports: 08/09/2016 Number of Days to Update: 43 Source: Monterey County Health Department Telephone: 831-796-1297 Last EDR Contact: 05/23/2016 Next Scheduled EDR Contact: 09/05/2016 Data Release Frequency: Varies

NAPA COUNTY:

Sites With Reported Contamination

A listing of leaking underground storage tank sites located in Napa county.

Date of Government Version: 12/05/2011 Date Data Arrived at EDR: 12/06/2011 Date Made Active in Reports: 02/07/2012 Number of Days to Update: 63 Source: Napa County Department of Environmental Management Telephone: 707-253-4269 Last EDR Contact: 05/25/2016 Next Scheduled EDR Contact: 09/12/2016 Data Release Frequency: No Update Planned

Closed and Operating Underground Storage Tank Sites Underground storage tank sites located in Napa county.

Date of Government Version: 01/15/2008	Source: Napa County Department of Environmental Management
Date Data Arrived at EDR: 01/16/2008	Telephone: 707-253-4269
Date Made Active in Reports: 02/08/2008	Last EDR Contact: 05/25/2016
Number of Days to Update: 23	Next Scheduled EDR Contact: 09/12/2016
	Data Release Frequency: No Update Planned

NEVADA COUNTY:

CUPA Facility List CUPA facility list.

> Date of Government Version: 04/18/2016 Date Data Arrived at EDR: 05/06/2016 Date Made Active in Reports: 06/17/2016 Number of Days to Update: 42

Source: Community Development Agency Telephone: 530-265-1467 Last EDR Contact: 07/27/2016 Next Scheduled EDR Contact: 11/14/2016 Data Release Frequency: Varies

ORANGE COUNTY:

List of Industrial Site Cleanups

Petroleum and non-petroleum spills.

Date of Government Version: 05/01/2016 Date Data Arrived at EDR: 05/17/2016 Date Made Active in Reports: 06/21/2016 Number of Days to Update: 35 Source: Health Care Agency Telephone: 714-834-3446 Last EDR Contact: 08/08/2016 Next Scheduled EDR Contact: 11/21/2016 Data Release Frequency: Annually

List of Underground Storage Tank Cleanups

Orange County Underground Storage Tank Cleanups (LUST).

Date of Government Version: 05/01/2016 Date Data Arrived at EDR: 05/17/2016 Date Made Active in Reports: 06/21/2016 Number of Days to Update: 35 Source: Health Care Agency Telephone: 714-834-3446 Last EDR Contact: 08/08/2016 Next Scheduled EDR Contact: 11/21/2016 Data Release Frequency: Quarterly

List of Underground Storage Tank Facilities

Orange County Underground Storage Tank Facilities (UST).

Date of Government Version: 05/01/2016	
Date Data Arrived at EDR: 05/11/2016	
Date Made Active in Reports: 06/01/2016	
Number of Days to Update: 21	

Source: Health Care Agency Telephone: 714-834-3446 Last EDR Contact: 08/09/2016 Next Scheduled EDR Contact: 11/21/2016 Data Release Frequency: Quarterly

PLACER COUNTY:

Master List of Facilities

List includes aboveground tanks, underground tanks and cleanup sites.

Date of Government Version: 06/16/2016	Source: Placer County Health and Human Services
Date Data Arrived at EDR: 06/20/2016	Telephone: 530-745-2363
Date Made Active in Reports: 08/09/2016	Last EDR Contact: 06/15/2016
Number of Days to Update: 50	Next Scheduled EDR Contact: 09/19/2016
	Data Release Frequency: Semi-Annually

RIVERSIDE COUNTY:

Listing of Underground Tank Cleanup Sites

Riverside County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 04/13/2016 Date Data Arrived at EDR: 04/15/2016 Date Made Active in Reports: 05/09/2016 Number of Days to Update: 24 Source: Department of Environmental Health Telephone: 951-358-5055 Last EDR Contact: 06/20/2016 Next Scheduled EDR Contact: 10/03/2016 Data Release Frequency: Quarterly

Underground Storage Tank Tank List

Underground storage tank sites located in Riverside county.

Date of Government Version: 07/13/2016	Source: Department of Environmental Health
Date Data Arrived at EDR: 07/18/2016	Telephone: 951-358-5055
Date Made Active in Reports: 08/08/2016	Last EDR Contact: 06/20/2016
Number of Days to Update: 21	Next Scheduled EDR Contact: 10/03/2016
	Data Release Frequency: Quarterly

SACRAMENTO COUNTY:

Toxic Site Clean-Up List

List of sites where unauthorized releases of potentially hazardous materials have occurred.

Date of Government Version: 02/02/2016	Source: Sacramento County Environmental Management
Date Data Arrived at EDR: 04/06/2016	Telephone: 916-875-8406
Date Made Active in Reports: 06/01/2016	Last EDR Contact: 07/06/2016
Number of Days to Update: 56	Next Scheduled EDR Contact: 10/17/2016
	Data Release Frequency: Quarterly

Master Hazardous Materials Facility List

Any business that has hazardous materials on site - hazardous material storage sites, underground storage tanks, waste generators.

Date of Government Version: 02/02/2016 Date Data Arrived at EDR: 04/06/2016 Date Made Active in Reports: 06/01/2016 Number of Days to Update: 56 Source: Sacramento County Environmental Management Telephone: 916-875-8406 Last EDR Contact: 07/05/2016 Next Scheduled EDR Contact: 10/17/2016 Data Release Frequency: Quarterly

SAN BERNARDINO COUNTY:

Hazardous Material Permits

This listing includes underground storage tanks, medical waste handlers/generators, hazardous materials handlers, hazardous waste generators, and waste oil generators/handlers.

Date of Government Version: 06/09/2016 Date Data Arrived at EDR: 06/10/2016 Date Made Active in Reports: 07/20/2016 Number of Days to Update: 40 Source: San Bernardino County Fire Department Hazardous Materials Division Telephone: 909-387-3041 Last EDR Contact: 08/08/2016 Next Scheduled EDR Contact: 11/21/2016 Data Release Frequency: Quarterly

SAN DIEGO COUNTY:

Hazardous Materials Management Division Database

The database includes: HE58 - This report contains the business name, site address, business phone number, establishment 'H' permit number, type of permit, and the business status. HE17 - In addition to providing the same information provided in the HE58 listing, HE17 provides inspection dates, violations received by the establishment, hazardous waste generated, the quantity, method of storage, treatment/disposal of waste and the hauler, and information on underground storage tanks. Unauthorized Release List - Includes a summary of environmental contamination cases in San Diego County (underground tank cases, non-tank cases, groundwater contamination, and soil contamination are included.)

Date of Government Version: 09/23/2013Source: Hazardous Materials Management DivisionDate Data Arrived at EDR: 09/24/2013Telephone: 619-338-2268Date Made Active in Reports: 10/17/2013Last EDR Contact: 06/02/2016Number of Days to Update: 23Next Scheduled EDR Contact: 09/19/2016Data Release Frequency: Quarterly

Solid Waste Facilities

San Diego County Solid Waste Facilities.

Date of Government Version: 10/31/2015 Date Data Arrived at EDR: 11/07/2015 Date Made Active in Reports: 01/04/2016 Number of Days to Update: 58 Source: Department of Health Services Telephone: 619-338-2209 Last EDR Contact: 07/20/2016 Next Scheduled EDR Contact: 10/07/2016 Data Release Frequency: Varies

Environmental Case Listing

The listing contains all underground tank release cases and projects pertaining to properties contaminated with hazardous substances that are actively under review by the Site Assessment and Mitigation Program.

Date of Government Version: 03/23/2010 Date Data Arrived at EDR: 06/15/2010 Date Made Active in Reports: 07/09/2010 Number of Days to Update: 24 Source: San Diego County Department of Environmental Health Telephone: 619-338-2371 Last EDR Contact: 06/02/2016 Next Scheduled EDR Contact: 09/19/2016 Data Release Frequency: No Update Planned

SAN FRANCISCO COUNTY:

Local Oversite Facilities

A listing of leaking underground storage tank sites located in San Francisco county.

Date of Government Version: 09/19/2008	Source: Department Of Public Health San Francisco County
Date Data Arrived at EDR: 09/19/2008	Telephone: 415-252-3920
Date Made Active in Reports: 09/29/2008	Last EDR Contact: 08/03/2016
Number of Days to Update: 10	Next Scheduled EDR Contact: 11/21/2016
	Data Release Frequency: Quarterly

Underground Storage Tank Information

Underground storage tank sites located in San Francisco county.

Date of Government Version: 11/29/2010 Date Data Arrived at EDR: 03/10/2011 Date Made Active in Reports: 03/15/2011 Number of Days to Update: 5 Source: Department of Public Health Telephone: 415-252-3920 Last EDR Contact: 08/03/2016 Next Scheduled EDR Contact: 11/21/2016 Data Release Frequency: Quarterly

SAN JOAQUIN COUNTY:

San Joaquin Co. UST

A listing of underground storage tank locations in San Joaquin county.

Date of Government Version: 06/16/2016 Date Data Arrived at EDR: 06/20/2016 Date Made Active in Reports: 08/08/2016 Number of Days to Update: 49 Source: Environmental Health Department Telephone: N/A Last EDR Contact: 06/15/2016 Next Scheduled EDR Contact: 10/03/2016 Data Release Frequency: Semi-Annually

SAN LUIS OBISPO COUNTY:

CUPA Facility List

Cupa Facility List.

Date of Government Version: 05/23/2016 Date Data Arrived at EDR: 05/24/2016 Date Made Active in Reports: 06/21/2016 Number of Days to Update: 28 Source: San Luis Obispo County Public Health Department Telephone: 805-781-5596 Last EDR Contact: 05/23/2016 Next Scheduled EDR Contact: 09/05/2016 Data Release Frequency: Varies

SAN MATEO COUNTY:

Business Inventory

List includes Hazardous Materials Business Plan, hazardous waste generators, and underground storage tanks.

Date of Government Version: 06/02/2016 Date Data Arrived at EDR: 06/07/2016 Date Made Active in Reports: 06/22/2016 Number of Days to Update: 15 Source: San Mateo County Environmental Health Services Division Telephone: 650-363-1921 Last EDR Contact: 05/27/2016 Next Scheduled EDR Contact: 09/26/2016 Data Release Frequency: Annually

Fuel Leak List

A listing of leaking underground storage tank sites located in San Mateo county.

Date of Government Version: 06/09/2016Source: San Mateo County Environmental Health Services DivisionDate Data Arrived at EDR: 06/13/2016Telephone: 650-363-1921Date Made Active in Reports: 08/09/2016Last EDR Contact: 06/08/2016Number of Days to Update: 57Next Scheduled EDR Contact: 09/26/2016Data Release Frequency: Semi-Annually

SANTA BARBARA COUNTY:

CUPA Facility Listing

CUPA Program Listing from the Environmental Health Services division.

Date of Government Version: 09/08/2011SDate Data Arrived at EDR: 09/09/2011DDate Made Active in Reports: 10/07/2011Number of Days to Update: 28

Source: Santa Barbara County Public Health Department Telephone: 805-686-8167 Last EDR Contact: 05/23/2016 Next Scheduled EDR Contact: 09/05/2016 Data Release Frequency: Varies

SANTA CLARA COUNTY:

Cupa Facility List Cupa facility list

Date of Government Version: 05/25/2016 Date Data Arrived at EDR: 05/26/2016 Date Made Active in Reports: 06/22/2016 Number of Days to Update: 27 Source: Department of Environmental Health Telephone: 408-918-1973 Last EDR Contact: 05/23/2016 Next Scheduled EDR Contact: 09/05/2016 Data Release Frequency: Varies

HIST LUST - Fuel Leak Site Activity Report

A listing of open and closed leaking underground storage tanks. This listing is no longer updated by the county. Leaking underground storage tanks are now handled by the Department of Environmental Health.

Date of Government Version: 03/29/2005 Date Data Arrived at EDR: 03/30/2005 Date Made Active in Reports: 04/21/2005 Number of Days to Update: 22 Source: Santa Clara Valley Water District Telephone: 408-265-2600 Last EDR Contact: 03/23/2009 Next Scheduled EDR Contact: 06/22/2009 Data Release Frequency: No Update Planned

LOP Listing

A listing of leaking underground storage tanks located in Santa Clara county.

Date of Government Version: 03/03/2014 Date Data Arrived at EDR: 03/05/2014 Date Made Active in Reports: 03/18/2014 Number of Days to Update: 13 Source: Department of Environmental Health Telephone: 408-918-3417 Last EDR Contact: 05/25/2016 Next Scheduled EDR Contact: 09/12/2016 Data Release Frequency: Annually

Hazardous Material Facilities

Hazardous material facilities, including underground storage tank sites.

Date of Government Version: 05/26/2016	Source: City of San Jose Fire Department
Date Data Arrived at EDR: 06/01/2016	Telephone: 408-535-7694
Date Made Active in Reports: 07/20/2016	Last EDR Contact: 08/03/2016
Number of Days to Update: 49	Next Scheduled EDR Contact: 11/21/2016
	Data Release Frequency: Annually

SANTA CRUZ COUNTY:

CUPA Facility List CUPA facility listing.

> Date of Government Version: 05/31/2016 Date Data Arrived at EDR: 06/02/2016 Date Made Active in Reports: 06/21/2016 Number of Days to Update: 19

Source: Santa Cruz County Environmental Health Telephone: 831-464-2761 Last EDR Contact: 05/23/2016 Next Scheduled EDR Contact: 09/05/2016 Data Release Frequency: Varies

SHASTA COUNTY:

CUPA Facility List

Cupa Facility List.

Date of Government Version: 06/14/2016 Date Data Arrived at EDR: 06/16/2016 Date Made Active in Reports: 08/09/2016 Number of Days to Update: 54 Source: Shasta County Department of Resource Management Telephone: 530-225-5789 Last EDR Contact: 05/23/2016 Next Scheduled EDR Contact: 09/05/2016 Data Release Frequency: Varies

SOLANO COUNTY:

Leaking Underground Storage Tanks A listing of leaking underground storage tank sites located in Solano county. Date of Government Version: 06/09/2016 Source: Solano County Department of Environmental Management Date Data Arrived at EDR: 06/13/2016 Telephone: 707-784-6770 Date Made Active in Reports: 08/09/2016 Last EDR Contact: 06/08/2016 Next Scheduled EDR Contact: 09/26/2016 Number of Days to Update: 57 Data Release Frequency: Quarterly **Underground Storage Tanks** Underground storage tank sites located in Solano county. Date of Government Version: 06/09/2016 Source: Solano County Department of Environmental Management Date Data Arrived at EDR: 06/14/2016 Telephone: 707-784-6770 Last EDR Contact: 06/08/2016 Date Made Active in Reports: 08/08/2016 Number of Days to Update: 55 Next Scheduled EDR Contact: 09/26/2016 Data Release Frequency: Quarterly SONOMA COUNTY: Cupa Facility List Cupa Facility list Date of Government Version: 07/10/2016 Source: County of Sonoma Fire & Emergency Services Department Date Data Arrived at EDR: 07/12/2016 Telephone: 707-565-1174 Last EDR Contact: 07/07/2016 Date Made Active in Reports: 08/09/2016 Next Scheduled EDR Contact: 10/10/2016 Number of Days to Update: 28 Data Release Frequency: Varies Leaking Underground Storage Tank Sites A listing of leaking underground storage tank sites located in Sonoma county. Date of Government Version: 04/01/2016 Source: Department of Health Services

Date of Government Version: 04/01/2016 Date Data Arrived at EDR: 04/05/2016 Date Made Active in Reports: 05/09/2016 Number of Days to Update: 34

Source: Department of Health Services Telephone: 707-565-6565 Last EDR Contact: 06/24/2016 Next Scheduled EDR Contact: 10/10/2016 Data Release Frequency: Quarterly

SUTTER COUNTY:

Underground Storage Tanks Underground storage tank sites located in Sutter county.

Date of Government Version: 06/02/2016 Date Data Arrived at EDR: 06/07/2016 Date Made Active in Reports: 06/23/2016 Number of Days to Update: 16 Source: Sutter County Department of Agriculture Telephone: 530-822-7500 Last EDR Contact: 06/02/2016 Next Scheduled EDR Contact: 09/19/2016 Data Release Frequency: Semi-Annually

TUOLUMNE COUNTY:

CUPA Facility List

Cupa facility list

Date of Government Version: 05/03/2016 Date Data Arrived at EDR: 05/10/2016 Date Made Active in Reports: 06/17/2016 Number of Days to Update: 38 Source: Divison of Environmental Health Telephone: 209-533-5633 Last EDR Contact: 08/03/2016 Next Scheduled EDR Contact: 10/07/2016 Data Release Frequency: Varies

VENTURA COUNTY:

Business Plan, Hazardous Waste Producers, and O The BWT list indicates by site address whethe Producer (W), and/or Underground Tank (T) ir	perating Underground Tanks r the Environmental Health Division has Business Plan (B), Waste oformation.	
Date of Government Version: 03/28/2016 Date Data Arrived at EDR: 04/29/2016 Date Made Active in Reports: 06/17/2016 Number of Days to Update: 49	Source: Ventura County Environmental Health Division Telephone: 805-654-2813 Last EDR Contact: 07/25/2016 Next Scheduled EDR Contact: 11/07/2016 Data Release Frequency: Quarterly	
Inventory of Illegal Abandoned and Inactive Sites Ventura County Inventory of Closed, Illegal Abandoned, and Inactive Sites.		
Date of Government Version: 12/01/2011 Date Data Arrived at EDR: 12/01/2011 Date Made Active in Reports: 01/19/2012 Number of Days to Update: 49	Source: Environmental Health Division Telephone: 805-654-2813 Last EDR Contact: 06/28/2016 Next Scheduled EDR Contact: 10/17/2016 Data Release Frequency: Annually	
Listing of Underground Tank Cleanup Sites Ventura County Underground Storage Tank C	leanup Sites (LUST).	
Date of Government Version: 05/29/2008 Date Data Arrived at EDR: 06/24/2008 Date Made Active in Reports: 07/31/2008 Number of Days to Update: 37	Source: Environmental Health Division Telephone: 805-654-2813 Last EDR Contact: 08/10/2016 Next Scheduled EDR Contact: 11/28/2016 Data Release Frequency: Quarterly	
Medical Waste Program List To protect public health and safety and the en Environmental Health Division Medical Waste disposal of medical waste throughout the Cour	vironment from potential exposure to disease causing agents, the Program regulates the generation, handling, storage, treatment and nty.	
Date of Government Version: 03/28/2016 Date Data Arrived at EDR: 04/29/2016 Date Made Active in Reports: 06/22/2016 Number of Days to Update: 54	Source: Ventura County Resource Management Agency Telephone: 805-654-2813 Last EDR Contact: 07/25/2016 Next Scheduled EDR Contact: 11/07/2016 Data Release Frequency: Quarterly	
Underground Tank Closed Sites List Ventura County Operating Underground Storage Tank Sites (UST)/Underground Tank Closed Sites List.		
Date of Government Version: 05/26/2016 Date Data Arrived at EDR: 06/16/2016 Date Made Active in Reports: 08/09/2016 Number of Days to Update: 54	Source: Environmental Health Division Telephone: 805-654-2813 Last EDR Contact: 06/16/2016 Next Scheduled EDR Contact: 09/26/2016 Data Release Frequency: Quarterly	
YOLO COUNTY:		
Underground Storage Tank Comprehensive Facility Underground storage tank sites located in Yole	Report o county.	
Date of Government Version: 06/30/2016 Date Data Arrived at EDR: 07/05/2016 Date Made Active in Reports: 08/09/2016 Number of Days to Update: 35	Source: Yolo County Department of Health Telephone: 530-666-8646 Last EDR Contact: 06/30/2016 Next Scheduled EDR Contact: 10/17/2016	

Data Release Frequency: Annually

YUBA COUNTY:

CUPA Facility List

CUPA facility listing for Yuba County.

Date of Government Version: 04/29/2016 Date Data Arrived at EDR: 05/03/2016 Date Made Active in Reports: 06/17/2016 Number of Days to Update: 45 Source: Yuba County Environmental Health Department Telephone: 530-749-7523 Last EDR Contact: 07/27/2016 Next Scheduled EDR Contact: 11/14/2016 Data Release Frequency: Varies

OTHER DATABASE(S)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

CT MANIFEST:	Hazardous	Waste	Manifest Data

Facility and manifest data. Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a tsd facility.

	Date of Government Version: 07/30/2013 Date Data Arrived at EDR: 08/19/2013 Date Made Active in Reports: 10/03/2013 Number of Days to Update: 45	Source: Department of Energy & Environmental Protection Telephone: 860-424-3375 Last EDR Contact: 08/10/2016 Next Scheduled EDR Contact: 11/28/2016 Data Release Frequency: No Update Planned
NJ M	IANIFEST: Manifest Information Hazardous waste manifest information.	
	Date of Government Version: 12/31/2013 Date Data Arrived at EDR: 07/17/2015 Date Made Active in Reports: 08/12/2015 Number of Days to Update: 26	Source: Department of Environmental Protection Telephone: N/A Last EDR Contact: 07/11/2016 Next Scheduled EDR Contact: 10/24/2016 Data Release Frequency: Annually
NYN	IANIFEST: Facility and Manifest Data Manifest is a document that lists and tracks haz facility.	zardous waste from the generator through transporters to a TSD
	Date of Government Version: 05/01/2016 Date Data Arrived at EDR: 05/06/2016 Date Made Active in Reports: 06/17/2016 Number of Days to Update: 42	Source: Department of Environmental Conservation Telephone: 518-402-8651 Last EDR Contact: 08/03/2016 Next Scheduled EDR Contact: 11/14/2016 Data Release Frequency: Annually
PAN	IANIFEST: Manifest Information Hazardous waste manifest information.	

Date of Government Version: 12/31/2014 Date Data Arrived at EDR: 07/24/2015 Date Made Active in Reports: 08/18/2015 Number of Days to Update: 25

RI MANIFEST: Manifest information Hazardous waste manifest information

> Date of Government Version: 12/31/2013 Date Data Arrived at EDR: 06/19/2015 Date Made Active in Reports: 07/15/2015 Number of Days to Update: 26

Source: Department of Environmental Protection Telephone: 717-783-8990 Last EDR Contact: 07/18/2016 Next Scheduled EDR Contact: 10/31/2016 Data Release Frequency: Annually

Source: Department of Environmental Management Telephone: 401-222-2797 Last EDR Contact: 08/01/2016 Next Scheduled EDR Contact: 09/05/2016 Data Release Frequency: Annually

WI MANIFEST: Manifest Information Hazardous waste manifest information.

Date of Government Version: 12/31/2015 Date Data Arrived at EDR: 04/14/2016 Date Made Active in Reports: 06/03/2016 Number of Days to Update: 50 Source: Department of Natural Resources Telephone: N/A Last EDR Contact: 06/13/2016 Next Scheduled EDR Contact: 09/26/2016 Data Release Frequency: Annually

Oil/Gas Pipelines

Source: PennWell Corporation

Petroleum Bundle (Crude Oil, Refined Products, Petrochemicals, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)) N = Natural Gas Bundle (Natural Gas, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)). This map includes information copyrighted by PennWell Corporation. This information is provided on a best effort basis and PennWell Corporation does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of PennWell.

Electric Power Transmission Line Data

Source: PennWell Corporation

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Sensitive Receptors: There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

AHA Hospitals:

Source: American Hospital Association, Inc.

Telephone: 312-280-5991

The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals.

Medical Centers: Provider of Services Listing

Source: Centers for Medicare & Medicaid Services

Telephone: 410-786-3000

A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services,

a federal agency within the U.S. Department of Health and Human Services.

Nursing Homes

Source: National Institutes of Health

Telephone: 301-594-6248

Information on Medicare and Medicaid certified nursing homes in the United States.

Public Schools

Source: National Center for Education Statistics

Telephone: 202-502-7300

The National Center for Education Statistics' primary database on elementary

and secondary public education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states.

Private Schools

Source: National Center for Education Statistics

Telephone: 202-502-7300

The National Center for Education Statistics' primary database on private school locations in the United States.

Daycare Centers: Licensed Facilities

Source: Department of Social Services

Telephone: 916-657-4041

Flood Zone Data: This data, available in select counties across the country, was obtained by EDR in 2003 & 2011 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetland Inventory Source: Department of Fish & Game Telephone: 916-445-0411

Current USGS 7.5 Minute Topographic Map Source: U.S. Geological Survey

STREET AND ADDRESS INFORMATION

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GEOCHECK ®- PHYSICAL SETTING SOURCE ADDENDUM

TARGET PROPERTY ADDRESS

APN 070-670-01 THORNTON ROAD AND 8 MILE ROAD STOCKTON, CA 95209

TARGET PROPERTY COORDINATES

Latitude (North):	38.057015 - 38° 3' 25.25"
Longitude (West):	121.349355 - 121° 20' 57.68"
Universal Tranverse Mercator:	Zone 10
UTM X (Meters):	644818.4
UTM Y (Meters):	4213221.5
Elevation:	14 ft. above sea level

USGS TOPOGRAPHIC MAP

Target Property Map:	5619734 LODI SOUTH, CA
Version Date:	2012

EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principal investigative components:

- 1. Groundwater flow direction, and
- 2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.

GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

TOPOGRAPHIC INFORMATION

Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

TARGET PROPERTY TOPOGRAPHY

General Topographic Gradient: General SW

SURROUNDING TOPOGRAPHY: ELEVATION PROFILES



Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

FEMA FLOOD ZONE

Ν

Target Property County SAN JOAQUIN, CA	FEMA Flood <u>Electronic Data</u> YES - refer to the Overview Map and Detail Map
Flood Plain Panel at Target Property:	06077C - FEMA DFIRM Flood data
Additional Panels in search area:	Not Reported
ATIONAL WETLAND INVENTORY	NWI Electronic
NWI Quad at Target Property LODI SOUTH	Data Coverage YES - refer to the Overview Map and Detail Map

HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Site-Specific Hydrogeological Data*:

Search Radius:	1.:	25 miles
Status:	No	ot found

AQUIFLOW®

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

MAP ID Not Reported LOCATION FROM TP GENERAL DIRECTION GROUNDWATER FLOW

GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

ROCK STRATIGRAPHIC UNIT

GEOLOGIC AGE IDENTIFICATION

Era:	Cenozoic	Category:	Stratifed Sequence
System:	Quaternary	0,	
Series:	Quaternary		
Code:	Q (decoded above as Era, System &	Series)	

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).



SITE NAME:	APN 070-670-01
ADDRESS:	Thornton Road and 8 Mile Road
	Stockton CA 95209
LAT/LONG:	38.057015 / 121.349355

DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. The following information is based on Soil Conservation Service SSURGO data.

Soil Map ID: 1	
Soil Component Name:	RIOBLANCHO
Soil Surface Texture:	clay loam
Hydrologic Group:	Class C - Slow infiltration rates. Soils with layers impeding downward movement of water, or soils with moderately fine or fine textures.
Soil Drainage Class:	Somewhat poorly drained
Hydric Status: Partially hydric	
Corrosion Potential - Uncoated Steel:	High
Depth to Bedrock Min:	> 0 inches
Depth to Watertable Min:	> 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic	
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil	conductivity micro m/sec	Soil Reaction (pH)
1	0 inches	16 inches	clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 4 Min: 1.4	Max: 8.4 Min: 7.4
2	16 inches	27 inches	clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 4 Min: 1.4	Max: 8.4 Min: 7.4
3	27 inches	38 inches	sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay. FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 14 Min: 4	Max: 8.4 Min: 7.9

Soil Layer Information							
Boundary			Classification		Saturated hydraulic		
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil	conductivity micro m/sec	Soil Reaction (pH)
4	38 inches	79 inches	cemented	Not reported	Not reported	Max: 0 Min: 0	Max: Min:

LOCAL / REGIONAL WATER AGENCY RECORDS

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

WELL SEARCH DISTANCE INFORMATION

DATABASE	SEARCH DISTANCE (miles)		
Federal USGS	1.000		
Federal FRDS PWS	Nearest PWS within 1 mile		
State Database	1.000		

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
1	USGS40000186747	1/8 - 1/4 Mile SE
2	USGS40000186775	1/2 - 1 Mile NNW
3	USGS40000186732	1/2 - 1 Mile SE
4	USGS40000186750	1/2 - 1 Mile West
A6	USGS40000186749	1/2 - 1 Mile West

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

		LOCATION
MAP ID	WELL ID	FROM TP
No PWS System Found		

Note: PWS System location is not always the same as well location.

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
A5	CADW60000001599	1/2 - 1 Mile West

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
7	CADW60000019659	1/2 - 1 Mile ENE

OTHER STATE DATABASE INFORMATION

STATE OIL/GAS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
1	CAOG11000236558	1/4 - 1/2 Mile SSE
2	CAOG11000236522	1/4 - 1/2 Mile ENE
3	CAOG11000236566	1/4 - 1/2 Mile East
4	CAOG11000236526	1/2 - 1 Mile NW
PHYSICAL SETTING SOURCE MAP - 4703290.2s



SITE NAME: A	PN 070-670-01	CLIENT:	Bole and Associates
ADDRESS: T	hornton Road and 8 Mile Road	CONTACT:	David Bole
S	tockton CA 95209	INQUIRY #:	4703290.2s
LAT/LONG: 3	8.057015 / 121.349355	DATE:	August 17, 2016 2:02 pm
		Convri	sht © 2016 EDB, Inc. © 2015 TomTom Bel, 2015

Map ID Direction Distance				
Elevation			Database	EDR ID Number
1 SE 1/8 - 1/4 Mile Lower			FED USGS	USGS40000186747
Org. Identifier: Formal name: Monloc Identifier: Monloc name: Monloc type: Monloc type: Monloc desc: Huc code: Drainagearea Units: Contrib drainagearea units: Longitude: Horiz Acc measure: Horiz Collection method: Horiz coord refsys: Vert measure units: Vert accmeasure units: Vert accmeasure units: Vert accmeasure units: Vert coord refsys: Aquifername: Formation type: Aquifer type: Construction date: Wellbeledenth units:	USGS-CA USGS California Water Science USGS-380318121204301 002N006E05D001M Well Not Reported 18020109 Not Reported -121.3463374 1 Interpolated from map NAD83 feet feet feet Interpolated from topographic ma NGVD29 Central Valley aquifer system Flood-Basin Deposits Not Reported 19570330 ft	Center Drainagearea value: Contrib drainagearea: Latitude: Sourcemap scale: Horiz Acc measure units: Vert measure val: Vertacc measure val: ap Countrycode: Welldepth: Welldepth:	Not Reported Not Reported 38.0549211 24000 seconds 12.00 2.5 US 130 186	
Ground-water levels, Numb Feet below Date Surface	her of Measurements: 1 Feet to Sealevel			
2 NNW 1/2 - 1 Mile Higher			FED USGS	USGS40000186775
Org. Identifier: Formal name: Monloc Identifier: Monloc name: Monloc type: Monloc desc: Huc code: Drainagearea Units: Contrib drainagearea units: Longitude: Horiz Acc measure: Horiz Collection method: Horiz coord refsys: Vert measure units: Vert accmeasure units: Vert accmeasure units: Vert accmeasure units: Vert coord refsys: Aquifername: Formation type:	USGS-CA USGS California Water Science USGS-380354121210501 003N006E31J001M Well Not Reported 18040005 Not Reported -121.3524487 1 Interpolated from map NAD83 feet feet Interpolated from topographic man NGVD29 Central Valley aquifer system Not Reported	Center Drainagearea value: Contrib drainagearea: Latitude: Sourcemap scale: Horiz Acc measure units: Vert measure val: Vertacc measure val: vertacc measure val:	Not Reported Not Reported 38.0649208 24000 seconds 12.00 2.5 US	

Aquifer type: Construction Welldepth un	date: hits:	Not Reported 19770127 ft	Welldepth: Wellholedepth:	450 515	
Wellholedept	th units:	ft			
Ground-wate	er levels, Numb	er of Measurements: 1			
Data	Feet below	Feet to			
Date	Surface				
1977-01-27	37.20				
3					1150540000496722
5E 1/2 - 1 Mile Lower				FED 0363	056540000186732
Org. Identifie	er:	USGS-CA			
Formal name	e:	USGS California Water Science	Center		
Monloc Ident	tifier:	USGS-380302121203201			
Monloc name	e:	002N006E05F001M			
Monloc type:		Well			
Monloc desc	:	Not Reported			
Huc code:		Not Reported	Drainagearea value:	Not Reported	
Drainagearea	a Units:	Not Reported	Contrib drainagearea:	Not Reported	
Contrib drain	agearea units:	Not Reported	Latitude:	38.0505556	
Longitude:		-121.3423056	Sourcemap scale:	24000	
Horiz Acc me	easure:	.5	Horiz Acc measure units:	seconds	
Horiz Collect	ion method:	Global positioning system (GPS)), uncorrected		
Horiz coord r	refsys:	NAD83	Vert measure val:	12	
Vert measure	e units:	feet	Vertacc measure val:	2.5	
Vert accmea	sure units:	feet			
Vertcollectior	n method:	Interpolated from topographic ma	ар		
Vert coord re	efsys:	NGVD29	Countrycode:	US	
Aquifername	:	Central Valley aquifer system			
Formation type	pe:	Not Reported			
Aquifer type:		Not Reported			
Construction	date:	20000418	Welldepth:	364	
Welldepth un	nits:	ft	Wellholedepth:	500	
Wellholedept	th units:	ft			

Ground-water levels, Number of Measurements: 0

4 West 1/2 - 1 Mile Lower

Jwer				
Org. Identifier:	USGS-CA			
Formal name:	USGS California Water Science (Center		
Monloc Identifier:	USGS-380321121214001	USGS-380321121214001		
Monloc name:	002N006E06B001M			
Monloc type:	Well			
Monloc desc:	Not Reported			
Huc code:	18040003	Drainagearea value:	Not Reported	
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported	
Contrib drainagearea units:	Not Reported	Latitude:	38.0559167	
Longitude:	-121.3610278	Sourcemap scale:	24000	

FED USGS USGS40000186750

Horiz Acc measure:	.5	Horiz Acc measure units:	seconds
Horiz Collection method:	Global positioning system (GPS),	uncorrected	
Horiz coord refsys:	NAD83	Vert measure val:	8
Vert measure units:	feet	Vertacc measure val:	2.5
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic ma	р	
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	Central Valley aquifer system		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	Not Reported	Welldepth:	Not Reported
Welldepth units:	Not Reported	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

A5 West 1/2 - 1 Mile Lower

CA WELLS CADW6000001599

Objectid:	1599
Latitude:	38.0552
Longitude:	-121.3649
Site code:	380552N1213649W001
State well numbe:	02N06E06C002M
Local well name:	'02N06E06C002'
Well use id:	3
Well use descrip:	Irrigation
County id:	39
County name:	San Joaquin
Basin code:	'5-22.01'
Basin desc:	Eastern San Joaquin
Dwr region id:	80236
Dwr region:	North Central Region Office
Site id:	CADW6000001599

A6 West 1/2 - 1 Mile Lower

FED USGS USGS40000186749

Org. Identifier: Formal name: Monloc Identifier: Monloc name: Monloc type:	USGS-CA USGS California Water Science C USGS-380319121215401 002N006E06C003M Well Not Reported	Center	
Huc code:	18040003	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	38.05525
Longitude:	-121.3649167	Sourcemap scale:	24000
Horiz Acc measure:	.5	Horiz Acc measure units:	seconds
Horiz Collection method:	Global positioning system (GPS),	uncorrected	
Horiz coord refsys:	NAD83	Vert measure val:	6.5
Vert measure units:	feet	Vertacc measure val:	2.5
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic ma	р	
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	Central Valley aquifer system		
Formation type:	Not Reported		

Aquiter ty	pe:	Not Reported		
Construct	ion date:	Not Reported	Welldepth:	60
Welldepth	n units:	ft	Wellholedepth:	Not Reported
Wellholed	lepth units:	Not Reported		
	ater levels Num	ber of Measurements: 1		
Ground-w	alei ieveis, inuiti			
Ground-w	Feet below	Feet to		

2004-05-26 19.9

7 ENE 1/2 - 1 Mile Higher

Objectid: Latitude: Longitude: Site code: State well numbe: Local well name: Well use id: Well use descrip: County id: County name: Basin code: Basin desc: Dwr region id: Dwr region: Site id:

19659 38.0603 -121.3335 380603N1213335W001 03N06E32R001M '03N06E32R001' 7 Other 39 San Joaquin '5-22.01' Eastern San Joaquin 80236 North Central Region Office CADW60000019659

CADW60000019659 CA WELLS

Map ID
Direction
Distance

EDR ID Number Database

1 SSE 1/4 - 1/2 Mile			OIL_GAS	CAOG11000236558
District nun:	6	Api number:	07720481	
Blm well:	Ν	Redrill can:	Not Reported	
Dryhole:	Y	Well status:	P	
Operator name:	Arkoma Prod. Co. of Calif.			
County name:	San Joaquin	Fieldname:	Harte Gas (ABD)	
Area name:	Northwest	Section:	5	
Township:	02N	Range:	06E	
Base meridian:	MD	Elevation:	Not Reported	
Locationde:	Not Reported			
Gissourcec:	hud			
Comments:	Status Code 006			
Leasename:	Ruemnler	Wellnumber:	5-1	
Epawell:	N	Hydraulica:	N	
Confidenti:	N	Spuddate:	31-MAY-86	
Welldeptha:	4753			
Redrillfoo:	0			
Abandonedd:	06-JUN-86	Completion:	Not Reported	
Directiona:	Unknown	Gissymbol:	PDH	
Site id:	CAOG11000236558			

2 EN 1/4

NE /4 - 1/2 Mile			OIL_GAS	CAOG11000236522
District nun:	6	Api number:	07720453	
Blm well:	Ν	Redrill can:	Not Reported	
Dryhole:	Ν	Well status:	P	
Operator name:	G-W Resources Oper. Co.			
County name:	San Joaquin	Fieldname:	Harte Gas (ABD)	
Area name:	Northwest	Section:	32	
Township:	03N	Range:	06E	
Base meridian:	MD	Elevation:	26	
Locationde:	Not Reported			
Gissourcec:	hud			
Comments:	Status Code 024			
Leasename:	Champlin-Isola	Wellnumber:	1	
Epawell:	Ν	Hydraulica:	Ν	
Confidenti:	Ν	Spuddate:	14-JAN-85	
Welldeptha:	7010			
Redrillfoo:	0			
Abandonedd:	23-APR-87	Completion:	29-JAN-85	
Directiona:	Unknown	Gissymbol:	PDG	
Site id:	CAOG11000236522			

3 East 1/4 - 1/2 Mile

OIL_GAS CAOG11000236566

N Y	Redrill can:	Not Reported
Υ		•
	vveli status:	Р
G-W Resources Oper. Co.		
San Joaquin	Fieldname:	Harte Gas (ABD)
Northwest	Section:	5
02N	Range:	06E
MD	Elevation:	Not Reported
Not Reported		
hud		
Status Code 006		
Champlin-Isola	Wellnumber:	2
N	Hydraulica:	Ν
Ν	Spuddate:	06-NOV-86
4750		
0		
11-NOV-86	Completion:	Not Reported
Unknown	Gissymbol:	PDH
CAOG11000236566	-	
	San Joaquin Northwest 02N MD Not Reported hud Status Code 006 Champlin-Isola N N 4750 0 11-NOV-86 Unknown CAOG11000236566	San JoaquinFieldname:NorthwestSection:02NRange:MDElevation:Not ReportedElevation:hudStatus Code 006Champlin-IsolaWellnumber:NHydraulica:NSpuddate:4750011-NOV-86Completion:UnknownGissymbol:CAOG11000236566

4 NW 1/2 - 1 Mile

> District nun: Blm well: Dryhole: Operator name: County name: Area name: Township: Base meridian: Locationde: Gissourcec: Comments: Leasename: Epawell: Confidenti: Welldeptha: Redrillfoo: Abandonedd: Directiona: Site id:

CAOG11000236526

07720456 6 Api number: Ν Redrill can: Not Reported Υ Well status: Ρ Prima Oil & Gas Co. San Joaquin Fieldname: Any Field Any Area Section: 31 03Ň 06E Range: MD Elevation: 20 Not Reported hud Status Code 006 CPC-Hatch Wellnumber: 31-1 Ν Hydraulica: Ν Ν Spuddate: 25-FEB-85 6230 0 28-MAR-85 Completion: Not Reported Unknown Gissymbol: PDH

OIL_GAS (

CAOG11000236526

AREA RADON INFORMATION

State Database: CA Radon

Radon Test Results

Zipcode	Num Tests	> 4 pCi/L
95209	18	4

Federal EPA Radon Zone for SAN JOAQUIN County: 3

```
Note: Zone 1 indoor average level > 4 pCi/L.
: Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.
: Zone 3 indoor average level < 2 pCi/L.
```

Federal Area Radon Information for Zip Code: 95209

Number of sites tested: 2

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	4.150 pCi/L	50%	50%	0%
Living Area - 2nd Floor	Not Reported	Not Reported	Not Reported	Not Reported
Basement	Not Reported	Not Reported	Not Reported	Not Reported

TOPOGRAPHIC INFORMATION

USGS 7.5' Digital Elevation Model (DEM)

Source: United States Geologic Survey

EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

Current USGS 7.5 Minute Topographic Map Source: U.S. Geological Survey

HYDROLOGIC INFORMATION

Flood Zone Data: This data, available in select counties across the country, was obtained by EDR in 2003 & 2011 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetland Inventory Source: Department of Fish & Game

Telephone: 916-445-0411

HYDROGEOLOGIC INFORMATION

AQUIFLOW^R Information System

Source: EDR proprietary database of groundwater flow information

EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

GEOLOGIC INFORMATION

Geologic Age and Rock Stratigraphic Unit

Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

STATSGO: State Soil Geographic Database

Source: Department of Agriculture, Natural Resources Conservation Service (NRCS) The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

SSURGO: Soil Survey Geographic Database

Source: Department of Agriculture, Natural Resources Conservation Service (NRCS) Telephone: 800-672-5559

SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Service, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

LOCAL / REGIONAL WATER AGENCY RECORDS

FEDERAL WATER WELLS

PWS: Public Water Systems

Source: EPA/Office of Drinking Water

Telephone: 202-564-3750

Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data

Source: EPA/Office of Drinking Water

Telephone: 202-564-3750

Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

USGS Water Wells: USGS National Water Inventory System (NWIS) This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

STATE RECORDS

Water Well Database Source: Department of Water Resources Telephone: 916-651-9648

California Drinking Water Quality Database Source: Department of Public Health

Telephone: 916-324-2319

The database includes all drinking water compliance and special studies monitoring for the state of California since 1984. It consists of over 3,200,000 individual analyses along with well and water system information.

OTHER STATE DATABASE INFORMATION

California Oil and Gas Well Locations Source: Department of Conservation Telephone: 916-323-1779 Oil and Gas well locations in the state.

RADON

State Database: CA Radon Source: Department of Health Services Telephone: 916-324-2208 Radon Database for California

Area Radon Information

Source: USGS Telephone: 703-356-4020 The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

EPA Radon Zones Source: EPA Telephone: 703-356-4020 Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

OTHER

Airport Landing Facilities: Private and public use landing facilities Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater Source: Department of Commerce, National Oceanic and Atmospheric Administration

California Earthquake Fault Lines: The fault lines displayed on EDR's Topographic map are digitized quaternary fault lines, prepared in 1975 by the United State Geological Survey. Additional information (also from 1975) regarding activity at specific fault lines comes from California's Preliminary Fault Activity Map prepared by the California Division of Mines and Geology.

STREET AND ADDRESS INFORMATION

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APPENDIX D: HISTORICAL RESEARCH DOCUMENTATION

APN 070-670-01 Thornton Road and 8 Mile Road Stockton, CA 95209

Inquiry Number: 4703290.3 August 17, 2016

Certified Sanborn® Map Report



6 Armstrong Road, 4th floor Shelton, CT 06484 Toll Free: 800.352.0050 www.edrnet.com

Certified Sanborn® Map Report

Site Name:

APN 070-670-01 Thornton Road and 8 Mile Roa Stockton, CA 95209 EDR Inquiry # 4703290.3 Client Name:

Bole and Associates 6898 Penny Way Brown Valley, CA 95918 Contact: David Bole



08/17/16

The Sanborn Library has been searched by EDR and maps covering the target property location as provided by Bole and Associates were identified for the years listed below. The Sanborn Library is the largest, most complete collection of fire insurance maps. The collection includes maps from Sanborn, Bromley, Perris & Browne, Hopkins, Barlow, and others. Only Environmental Data Resources Inc. (EDR) is authorized to grant rights for commercial reproduction of maps by the Sanborn Library LLC, the copyright holder for the collection. Results can be authenticated by visiting www.edrnet.com/sanborn.

The Sanborn Library is continually enhanced with newly identified map archives. This report accesses all maps in the collection as of the day this report was generated.

Certified Sanborn Results:

Certification #	06E9-4DA4-99D3
PO #	NA
Project	1501

UNMAPPED PROPERTY

This report certifies that the complete holdings of the Sanborn Library, LLC collection have been searched based on client supplied target property information, and fire insurance maps covering the target property were not found.



Certification #: 06E9-4DA4-99D3

The Sanborn Library includes more than 1.2 million fire insurance maps from Sanborn, Bromley, Perris & Browne, Hopkins, Barlow and others which track historical property usage in approximately 12,000 American cities and towns. Collections searched:

Library of Congress
 University Publications of America
 EDR Private Collection

The Sanborn Library LLC Since 1866™

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APN 070-670-01 Thornton Road and 8 Mile Road Stockton, CA 95209

Inquiry Number: 4703290.4 August 17, 2016

EDR Historical Topo Map Report with QuadMatch™



6 Armstrong Road, 4th floor Shelton, CT 06484 Toll Free: 800.352.0050 www.edmet.com













S

SW

SE

APN 070-670-01 Thornton Road and 8 Mile Road Stockton, CA 95209

Inquiry Number: 4703290.12 August 17, 2016

The EDR Aerial Photo Decade Package



6 Armstrong Road, 4th floor Shelton, CT 06484 Toll Free: 800.352.0050 www.edmet.com



























APN 070-670-01

Thornton Road and 8 Mile Road Stockton, CA 95209

Inquiry Number: 4703290.5 August 17, 2016

The EDR-City Directory Abstract



6 Armstrong Road Shelton, CT 06484 800.352.0050 www.edrnet.com
TABLE OF CONTENTS

SECTION

Executive Summary

Findings

City Directory Images

Thank you for your business. Please contact EDR at 1-800-352-0050 with any questions or comments.

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EXECUTIVE SUMMARY

DESCRIPTION

Environmental Data Resources, Inc.'s (EDR) City Directory Abstract is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's City Directory Abstract includes a search and abstract of available city directory data. For each address, the directory lists the name of the corresponding occupant at five year intervals.

Business directories including city, cross reference and telephone directories were reviewed, if available, at approximately five year intervals for the years spanning 1906 through 2013. This report compiles information gathered in this review by geocoding the latitude and longitude of properties identified and gathering information about properties within 660 feet of the target property.

A summary of the information obtained is provided in the text of this report.

RECORD SOURCES

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RESEARCH SUMMARY

The following research sources were consulted in the preparation of this report. An "X" indicates where information was identified in the source and provided in this report.

<u>Year</u>	<u>Source</u>	<u>TP</u>	<u>Adjoining</u>	<u>Text Abstract</u>	<u>Source Image</u>
2013	Cole Information Services	-	-	-	-
2008	Cole Information Services	-	-	-	-
2003	SBC PACIFIC BELL	-	-	-	-
1999	R. L. Polk Co., Publishers	-	х	х	х
1996	R. L. Polk Co., Publishers	-	-	-	-
1990	R. L. Polk Co., Publishers	-	-	-	-
1984	R. L. Polk Co., Publishers	-	-	-	-
1979	R.L. Polk CO.	-	-	-	-
1975	R.L. Polk CO.	-	-	-	-
1970	R. L. Polk Co., Publishers	-	-	-	-
1965	R. L. Polk Co., Publishers	-	-	-	-
1960	R. L. Polk Co., Publishers	-	-	-	-
1955	R. L. Polk Co.	-	-	-	-
1950	R. L. Polk Co., Publishers	-	-	-	-
1946	R. L. Polk Co., Publishers	-	-	-	-

EXECUTIVE SUMMARY

<u>Year</u>	<u>Source</u>	<u>TP</u>	<u>Adjoining</u>	<u>Text Abstract</u>	Source Image
1940	R. L. Polk Co., Publishers	-	-	-	-
1935	R. L. Polk Co. of California, Publishers	-	-	-	-
1930	R. L. Polk Co. of California, Publishers	-	-	-	-
1925	R. L. Polk Co. of California, Publishers	-	-	-	-
1921	Polk-Husted Directory Co., Publishers	-	-	-	-
1916	Polk-Husted Directory Co.	-	-	-	-
1911	Polk-Husted Directory	-	-	-	-
1906	A. KINGSBURY CO	-	-	-	-

EXECUTIVE SUMMARY

SELECTED ADDRESSES

The following addresses were selected by the client, for EDR to research. An "X" indicates where information was identified.

<u>Address</u>

Thornton Road

8 Mile Road

<u>Type</u>

<u>Findings</u>

Client Entered Client Entered

FINDINGS

TARGET PROPERTY INFORMATION

ADDRESS

Thornton Road and 8 Mile Road Stockton, CA 95209

FINDINGS DETAIL

Target Property research detail.

FINDINGS

ADJOINING PROPERTY DETAIL

The following Adjoining Property addresses were researched for this report. Detailed findings are provided for each address.

W EIGHT MILE RD

2632 W EIGHT MILE RD

<u>Year</u>	<u>Uses</u>	<u>Source</u>	
1999	Jimenez Dolores V JIMENEZ L wheat	R. L. Polk Co., Publishers	Image pg. A1
	Jimenez Louis 0	R. L. Polk Co., Publishers	Image pg. A1

FINDINGS

TARGET PROPERTY: ADDRESS NOT IDENTIFIED IN RESEARCH SOURCE

The following Target Property addresses were researched for this report, and the addresses were not identified in the research source.

Address Researched	Address Not Identified in Research Source
Thornton Road and 8 Mile Road	2013, 2008, 2003, 1999, 1996, 1990, 1984, 1979, 1975, 1970, 1965, 1960, 1955, 1950, 1946, 1940, 1935, 1930, 1925, 1921, 1916, 1911, 1906

ADJOINING PROPERTY: ADDRESSES NOT IDENTIFIED IN RESEARCH SOURCE

The following Adjoining Property addresses were researched for this report, and the addresses were not identified in research source.

Address Researched	Address Not Identified in Research Source
Thornton Road	2013, 2008, 2003, 1999, 1996, 1990, 1984, 1979, 1975, 1970, 1965, 1960, 1955, 1950, 1946, 1940, 1935, 1930, 1925, 1921, 1916, 1911, 1906
2632 W EIGHT MILE RD	2013, 2008, 2003, 1996, 1990, 1984, 1979, 1975, 1970, 1965, 1960, 1955, 1950, 1946, 1940, 1935, 1930, 1925, 1921, 1916, 1911, 1906
8 Mile Road	2013, 2008, 2003, 1999, 1996, 1990, 1984, 1979, 1975, 1970, 1965, 1960, 1955, 1950, 1946, 1940, 1935, 1930, 1925, 1921, 1916, 1911, 1906

Source Page Images Appendix

<u>TP</u> -

.

<u>Source</u>

R. L. Polk Co., Publishers

W EIGHT MILE RD 1999

EDAN AVE +INGLEWOOD AVE INTERSECTS	EDGEFIELD WAY	N EDISON ST +W FLORA ST INTERSECTS	E EIGHT MILE RD 2300 PACIFIC BELL FLEET MGT	E EIGHT MILE RD
ZIP CODE 95207 CAR-RT C016	8350 Not Verified 8351 Fries Patricia M 10+	- ZIP CODE 95203 CAR-RT COOI	+THORNTON RD INTERSECTS	11901 Alvarez Jorge 12 12014 Vance Richard A 19+
Jones Paulette A 478-3925	8356 Bylsma John D 🗐+ 🛦 Bylsma Virginia L	Sanchez Noreen A 822 Moldoch Nancy S III+	· ZIP CODE 95212 CAR-RT R007	12023 Bava Julian O 🗐+ 💧
621 Neese Phyllis A 🗵+ 🌢 624@Eddings Lydia M 🌢	8361 Ruiz Carlos D Sr 🗐+ 🌲 Buiz Alicia M	Moldoch John J 830 Omalza Daniel Al	+N MICKE GROVE RD BEGINS	931-0426 Baya Lillian L
Eddings Jason R 627 Villanueva Erank N Jr 17	8368 Holley Diane M (9+ ▲ 8373 Wong Ging B (9+ ▲	Omalza Nora C 835 Eikes John J III+	4793 Not Verified 4865 Lindstrom Robert A & Joanne	12100 Guido Joe T E ▲ 12267 Silva Oldemiro E & Maria E
630 Lake-Richardson Paris A ⓓ ▲ @Sanford Denise	Wong Mamie 8404 Young Fran W 5	Fikes Coreen A 840 Provost Jenean M [2]	19+ ▲ 4874 GENUTSA FINE FOODS grors	- ZIP CODE 95215 CAR-RT R003
633 Purio Marianne 12] 636 Coomes William F 10+ ▲	8405 Douglas Edwin R Jr 12+ ▲ Douglas Linda L	844 Not Verified 848 Griffith Mary R @+ 4	ritd prds931-8662 Hitt Lonnie F Ø+ ▲	12600 Doscher Ella M (2)+ 12701 Not Verified
	8416 Kinyon William S 🛛 🌢 8417 Shepherd James G 🛛	848 Not Verified +W POPLAR ST INTERSECTS	Hitt Jeannie F 4901 Reider Jackie L & La 190+ 🌢	13020 Campigli Beth 🖪 ੇ Campigli Greg M
639 Sherman Teresita C 2+ ▲ 	Shepherd Deanna L 8428 Kim Roger T 19+	922 Not Verified 927 SWIFT JANITORIAL biding	4946 Not Verified 4951 BIANCHI MANOR TOWN &	13251 Freeman Billy J & Shirley
Sherman Russell G473-3600 642 Ward Howard W & Wanda D+	Kim Lydia L 8429 Salgado Armando 🙆 🛦	Whigham James L 2+	931-5848	13342 Gyr Walter H Jr & Joanne 121+ ▲
703 Goo Stephen K 19+ ▲ 706 Morfin Actorio C Sr 121 ▲	Salgado Ventura K 8441 Roley Craig T ⊡+ ▲	Whigham Sharon S 465-4200	5020 Geigle Alvin & Vermona 🗐+	GYR W tree nuts931-3417 13393 Moore Ernest C III (到+ ▲
Morfin Eligio C 951-7002	Roley Gary E II +MARSEILLE WAY ENDS	Bones Janice M	5150 Pugh Alene 19+	Moore Denise L 13500 Stagi Guido 91+ ≜957-0256
709 James Anthony C 2 ≜ 956-0746	8501 Garcia Huben J Jr 19i+ ▲ Garcia Barbara J	Taser Annette C	+N HIGHWAY 99 BEGINS	13625 Martin Irma C (9)+ - 931-2555
712 Sertich Audrey E 風+ ▲ 718@Gogna Joline R	8511 Calomarde Don H & Susan [Z] 8516@Carolino Marites 478-9176	Conner Ruby R	931-0520 Bunch Ellen B 931-0520	Arima Hisad
21 Casey Howard T Jr 191+ ▲ Casey Betty J	BER Cald Alfred 12 +	+W ACACIA ST INTERSECTS	BUNCH LELAND real prpty	@Cardona Patricia 931-5633
27 Siaban Brian [2] ●	Gold Seima	463-7501 1025 Fine Harvey M & Virginia ⊠+	· ZIP CODE 95212 CAR-RT R002	Warquez Gonzalo931-6046 Meza Rafaela A 🛛 🛦
Heidi 1914 A	8547 Not Verified	1028@Martin L M 462-4778	6101 Daniel Guy E 19 + ▲	@Rivera A
41 Willingham Danny I & Sharon	HOUSEHOLDS 21	1035 VALLEY MORTGAGE REALTY mtg bkrs corrspndn 477-1200	Daniel Delores M 6187 Delhierro Horatio 3 ▲	+N JACK TONE RD BEGINS BUSINESSES 10 HOUSEHOLDS 76
(9)+ ▲	EDGEWATER CT (STOCKTON)-	1037 Lozano George & Theresa 194 ▲	6188 Duquette Todd L [2]	W EIGHT MILE RD (STOCKTON)-
752 Yanes Susan A 6 754@Scelzi Richard E	BLVD	Nelson Leta 943-2540	6215 Not Verified	FROM & MIDDLE RIV WEST
FERMA AVE ENDS	· ZIP CODE 95204 CAR-RT C006 2023 BEN BEN PROPERTIES real	+W MAGNOLIA ST INTERSECTS	Sisiev Deborah J	800 Gates Martin W 🖽 🖕
940 Fleming Steve C 6 952-9537	est agtsingrs948-6566 Bennett Lonnie H 12+ ▲	1111 Floriddia Joseph G & Lucy 10+ 466-4416	6488 Leffler L S ⊡+ ●	lawn garden svcs
3 Cardenas Michael A 🕅+ 🛦	Bennett Carolyn B 2049 Williams Arlen W & Betty 19+	1115 Canete Julian V Jr ⊠+ ▲ Canete Lillian C	+RAILROAD CROSSES	2632 Jimenez Louie 2+ ▲
5 Inreet Ken L & Teresa 19 	463-5654 2075@Taylor Earl ▲	1122 Easter Dennis L 19+ 1 1130@Baylor Eric	931-1055	JIMENEZ L wheat 477-0897
6 Not Verified 7 Williams Candy R (5)	TAYLOR EARL MD phys	Rollins Charles R 19+ ▲ Workman Paul E 19+ ▲	LEFFLER ORCHARDS decid	· ZIP CODE 95209 CAR-RT R012
8 Not Verified 956 Jenson Melvin D & Diane 19+	2101@Norris Michael W Norris Joann A	Workman Patsy L 32 Not Verified	7149 Haney Rev Kenneth F [2] 931-1499	4522 Winchester Sharon K 回+ ▲ 4999 Not Verified
1008 ALL SEASONS	2127 Guardado Edward A 🛛 🛔 Guardado Lisa L	1139 Ordez David A & Trens 10+	Haney Joy L	· ZIP CODE 95219 CAR-RT H001 6301 SPANO PARK GOLF CENTER
CONSTRUCTION concrete	2153@Koussaya Michele C.547-9359 2179 Hunt John S & Donna 🕮+ 🔺	+W ROSE ST INTERSECTS	Eaton Randy L	Amusement rorin
Haskett Cyndi A [2]	2205 Tarwater Vernon E 19+ ▲	Antuna Saily A		+HILDRETH LN ENDS 8050 Negrete Demetri G 3478-2185
Nyberg Robin K 1025 Godi Arthur I. 1934	Tarwater Linda TARWATER APPRAISAL CO	1215 Valibebber Alchald F & Sally 1225 Gadier Lilibeth B 12	7200 Bernazzani Joe & Brooke D+	Negrete Frederico 0. 478-2185 +RIO BLANCO RD INTERSECTS
Godi Barbara J	real est agts'mgrs 467-0404	1230 Wilson Jacqueline M I A 1245@Robinson Lucile	7201 Not Verified 7240 Erlenbusch Clarence 3+	+E EIGHT MILE AD BEGINS +MIDDLE RIV CONTINUES
1059@Garr Michael D ▲ 101 Nelson Donaid W 91+ ▲	2241 Wahl Betty L D+ 2293 COLONIAL LIFE & ACCIDENT	+W VINE ST INTERSECTS 1301 Weasner Mary L D+.944-5734	Erlenbusch Laura J 7262 Atkinson David E & Annabelle	8458 KING ISLAND WHOLESALE NURSERY flwrs firsts sppls
Nelson Mary E 957-8677	INSURANCE ins agts'svcs 463-2434	1315 Larrouy Richard F 💁 🔺	0+ ▲	Santos Ann G [9]+ 464-6638
102000'Brien L D	Scott William D & Katherine ⊡+	1322 Judson Paul K Jr 19+ 📤	7651 AL'S TRUCK & TRAILER BEPAIR auto ror	8475 MARCHETTI BROS gen farms prim crop
Kerns Susan M 134 Lewis George H 🗵 🌢	2345 Hallett Bobby C 19+ ▲ Hallett Michelle	Judson Harriet A 463-6951 1329@Gipson Martin T 948-3433	Gonzalves Virginia C 🗐+ 🔺	9950 CALIFORNIA-OREGON SEED
Lewis Cheryl M	2397 Steward James B 9)+ Steward Constance J	+W WILLOW ST INTERSECTS	7651 Ferreira John A 🕮+ ੇ Ferreira Margarida O	9980 Contreras Antonio P 🔄 11440 BIAGI G FARMS EMPIRE
1145 Eberhardt Douglass M 🗊 角 BUSINESSES 2 HOUSEHOLDS 75	BUSINESSES 4 HOUSEHOLDS 12		7663@Barcelos Antonio M & Ana Ferreira Joho D M	SHOP gen farms prim crop 474-7850
DGEBROOK AVE (STOCKTON)-	N EDISON ST (STOCKTON)-FROM 699 W LINDSAY ST	1430@Johnson Ryan	+HILDRETH LN ENDS 7922 Kolber Robert K & Anne 19+	11500 HONKER CUT MARINE boat dealers
FROM 999 WATERFORD AVE SOUTH	· ZIP CODE 95203 CAR-RT C016	1431@Storrs Wayne E ▲ 1438 Not Verified	≜ 8120 Norgard Brad J ⊡+ ≜	Karnofel Rodney A 29+ ▲ 11510 Chattin Robert C Jr & Rose
ZIP CODE 95206 CAR-RT R011	STOCKTON IRON WORKS	hangin	Norgard Janell E +RIO BLANCO RD INTERSECTS	ত্র+ ≜ 11520 Bostwick Jill A ত্র+ ≜
711 Powell Darrell J Jr [2] 4 983-9086	405 Fowler Roy P Jr 19+ ▲	+W HARDING WAY INTERSECTS	+W EIGHT MILE RD BEGINS 8713 Whitesides John G 🗐+ 🌢	Bostwick Kenneth W. 952-8823
717@McCartney Troy McCartney Nancy I	& body rpr948-4036	ZIP CODE 95204 CAR-RT C005 1503@Hopkins Linda	Whitesides Catherine A	OBuffington Larry
723 Kaul Craig J 🖪	444 GEHMAN AUTO SERVICE auto rpr	1507 Not Ventied 1509 Campbell Jim R [2]	8787@Cutts Bronke Janica.931-0379	Daloado Islas H 477-8832
729 Terzian Ron J 3 A234-2585 Terzian Linda F	+W FREMONT ST INTERSECTS	1523@Gagelonia Marciana V	9011 Henwick William H & Eunice 191+ ▲	OFearrand Terrell P & Mary
732 Perry Jeff & Frances 5 735 Christi Henry 3 ▲	527@Boyer A F	+ W ELM ST INTERSECTS 1619@McGrath Catherine J	RENWICK FARM dentist	Garcia Edward G 🗐+
Christi Cherle Y 1740 Leslie Anthony C [2]	5 Not Verified	1627@Ewing Lyvia S 1630@Cruz Izura P	9460 Nelson Yvonne M 🛛+ ▲ +PEZZI RD ENDS	Garcia Gomie E
Area Darrera John J & Melinda [2]	Wilson Margaret A	GOOD SAMARITAN REHAB CARE CTR nrsno prsni	9910 Garcia Cella 19+	H & H BOAT SALES boat dealers
1757 Sanpablo Marino E [2]	- ZIP CODE 95203 CAR-RT C004	care	Garcia John P 9950 Kays Marlene M ⊡+ ▲	OHoff Frank
1760 Novoa Anthony B 🗈 🔺	603 Not Verified 611 @Pollard J	@Spears Helen	9988 Gossman George E & Susan	KING ISLAND THAILER PARK
1778 Porep Barbara A [2] 🐽	1-3 Not Verified (2 Apts) 622 Not Verified	1800 Wirth Dorothy J 19+ 4	10032 Not Verified	QLeinicke Michael 478-7165
Winston Sharniece T 803 Meggerson Joseph J 🕅 🌢	©Martinez Gloria	Wirth Lucile P	Bischburn Leri C	@Mead John
Meggerson Renay L 1810 Munoz Stephen A 31	Shahenian Timothy. 467-3529 Vang Chay C 5	1809 Dozier Bill J 19+ ▲463-5043 Dozier Shirley R	SEARCH RESOURCES bush	ØOgletree Chlois R957-9829 ØOgletree William E475-9412
811 Tompkins Catherine L 2 A 819 Cordone Steven M A	8 Mahmood Khalid 12 A 627@Leon Isidoro II	1818 Serre Delia Ć 2 1821 Scholwin Pamela J 3 ▲	10116 Walker Nolan W 10+	@Papadimatos Mark G
827 Burrell Darrell L 🛛 A234-1309 Johnson Gloria 🗷	19 Not Verified 22 Woodward Francelia E IZ	1825 King David R 4	Walker Lois M	Santos Robert A 474-6965 Wan Wagoner C. E. 474-1593
Johnson Geraldine 905 Pestana Michelle L [3] ▲	628 Woelfel Al L ⊡+ ▲ Woelfel Evelve G	1840 Mintun David A 19+	10216 Not Vorified	Verduzco Rebeca956-1704
983-9350 919 ALL LOVE CARE HOME child	700@Vicente Rosario	1849@Sperry Carol F	10256 Lozano Sam R 10+ ▲ 10298@Dow Raquel / ▲	38@Gravesbuck Ingle
day care svcs	702 Not Verified 704@Hinojosa Antonio	1850 Aaron William L III 🕄 🌲	10832 Cabrera Fidel M 3 11026@Cowan Jim D ▲	41 WUUcray Kimm A 46 Randali Walt C & Vicky
Quíruz Robert R ØRipoyla Marína B	706@Frazler Floyd	1856 Junker Richard F 19+	Cowan Anthony J 11221@Wilsey Curtis	[9]+ ▲
933 Handel Ronald W 🗐+ 🛦 Handel Kathy M	724 Billy Helen E 2	Mahaffay Surance T 467-0572	Wilsey Linda J 11320 Brandstad Richard D #	11530@Conway Steven
WOODSTREAM ST ENDS 945 McCall Margie D 团 ▲	OTurner Katrina N 462-0714 30 EDISON PARK APTS	1864@Grimm M	Melanie 19+ Melanie 931-2572 11354 Wagner Douglass F 31	@Jobbles Ralph
957 Morris Erma J 🖾 🔺 WINDSAIL LN ENDS	apmnt bldg oprtrs	1877@Demarest Donna G A +BEDFORD RD INTERSECTS	11502@Gerlomes Gregory P	marinas
USINESSES 1 HOUSEHOLDS 27	33@Dinkins Nicholas	BUSINESSES 8 HOUSEHOLDS 113	Gerlomes Jeanette 11711 Carrílio Marcos R ⊠+ ▲	McCasland Christopher
FROM 2801 BEAUFORT AVE	34 Goodwin Arcadious S [5]	FROM 10525 THORNTON	Carrillo Conatanza 11717 Rubalcaba Bonifacio P 🗐+	Potter Joe H & Carolyn 🖾 🛔
NORTH ZIP CODE 95209 CAP-PT CODE	731 Gunneil Barbara E 19+	WEST	Rubalcaba Anita	Schmidgall Michael A &
		- CIT COULE SE210 CAR-BT ROOS	11720@Coronado Joaquin S	Cupthie III A

APN 070-670-01

Thornton Road and 8 Mile Road Stockton, CA 95209

Inquiry Number: 4703290.6 August 17, 2016

The EDR Property Tax Map Report



6 Armstrong Road Shelton, CT 06484 800.352.0050 www.edrnet.com

EDR Property Tax Map Report

Environmental Data Resources, Inc.'s EDR Property Tax Map Report is designed to assist environmental professionals in evaluating potential environmental conditions on a target property by understanding property boundaries and other characteristics. The report includes a search of available property tax maps, which include information on boundaries for the target property and neighboring properties, addresses, parcel identification numbers, as well as other data typically used in property location and identification.

Thank you for your business. Please contact EDR at 1-800-352-0050 with any guestions or comments.

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APPENDIX E: QUALIFICATIONS

DAVID H. BOLE, Principal, Bole & Associates

EXPERTISE:

Environmental Project Management Environmental Site Assessments (Phase I & II) Threatened and Endangered Species Wetland Delineation, Mitigation and Permitting

EDUCATION:

Baccalaureate in Biology & Environmental Science California State University Long Beach, 2000
Graduate Studies leading to a Master's Degree, Environmental Science California State University Long Beach, In Progress
Certified Wetland Delineator, U. S. Army Corps of Engineers
Registered Environmental Property Assessor (REPA# 762718)

PROFESSIONAL HISTORY:

Bole & Associates, Principal, 2000 - Present Consultant, Veterans Administration, National Cemetery Administration, 2005-Present Consultant, Regulatory Permitting, US Army Corps of Engineers 2000 - Present

REPRESENTATIVE EXPERIENCE:

As an Environmental Professional, Mr. Bole has over sixteen years of experience in environmental project management, environmental site evaluations and consulting. A recognized expert in research development and management, he has supervised work forces of professional scientists and technicians responsible for a wide array of environmental issues throughout California. His areas of expertise include environmental site assessments (Phase I & Phase II), wildlife ecology, regulatory compliance, natural resource and habitat conservation planning, and the delineation of waters of the United States. As a biologist, Mr. Bole has conducted numerous Biological Assessments in accordance with United States Fish & Wildlife Service and California Department of Fish & Wildlife protocols and regulations. Mr. Bole has conducted over one hundred Phase I Environmental Site Assessments in accordance with ASTM and federal standards. He is a Senior Environmental Scientist under contract with the Department of Veterans Affairs, National Cemetery Administration, responsible for the environmental review of cemetery expansions at over fifty VA National Cemeteries.

PROFESSIONAL ORGANIZATIONS AND MEMBERSHIPS:

Member, Association of Environmental Professionals Member, Redbud Chapter, California Native Plant Society

MARCUS H. BOLE, Environmental Scientist

EXPERTISE:

Environmental Project Management Natural Resource Management Environmental Site Assessment, Phase I and Phase II Wetland Delineation, Mitigation, and Permitting

EDUCATION:

Master's Degree in Environmental Science
North Dakota State University, Fargo, 1976
Baccalaureate in Social Science, Political Science & Geography California State University, Sacramento, 1970
Registered Environmental Property Assessor (REPA, #647913)
Certified (OSMB) Disabled Veteran Business Enterprise (DVBE) California Department of General Services (#0000847)
Service Disabled Veteran Owned Small Business (VA)
Awarded GSA Contract Number: GS10F101BA Environmental Schedule 899, DUNS Number 943646430

PROFESSIONAL HISTORY:

Bole & Associates, Principal, 1993 - Present
U. S. Federal Government Manager of Environmental Engineering, Compliance and Community Planning, 1970 - 1993
California State Division of Forestry, Engineer, 1966 - 1970

REPRESENTATIVE EXPERIENCE:

Mr. Bole has over thirty-five years of experience in environmental project management. He has supervised work forces of professional engineers, scientists and technicians responsible for pollution monitoring, permitting, abatement, environmental impact analysis, natural resource evaluation and restoration programs and preserve habitat management. As a biologist, Mr. Bole has conducted numerous Biological Assessments in accordance with United States Fish & Wildlife Service and California Department of Fish & Wildlife protocols and regulations. He has conducted wetland delineations in accordance with the United States Army Corps of Engineers regulations throughout California. Mr. Bole has conducted hundreds of Phase I Environmental Site Assessments in accordance with ASTM and federal standards. As lead environmental scientist for the Department of Veterans Affairs, National Cemetery Administration, he has been directly responsible for coordinating environmental assessments and the Environmental Management System (EMS) for over 160 National Cemeteries in the United States. As Chief, Environmental Management Division, Beale AFB, California, he managed the compliance issues and the restoration of natural resources within a 23,000 acre federal military installation, retiring in 1993 in the rank of Lieutenant Colonel. As Principal, Marcus H. Bole & Associates, he manages allocation of personnel, client development and strategic planning. He is an active member of the National Association of Environmental Professionals and a certified Guiding Principles Compliance Professional (GPC).

APPENDIX F: SUPPORTING DOCUMENTATION

APN 070-670-01

Thornton Road and 8 Mile Road Stockton, CA 95209

Inquiry Number: 4703290.7 August 18, 2016

EDR Environmental Lien and AUL Search



6 Armstrong Road Shelton, CT 06484 800.352.0050 www.edrnet.com

EDR Environmental Lien and AUL Search

The EDR Environmental Lien and AUL Search Report provides results from a search of available current land title records for environmental cleanup liens and other activity and use limitations, such as engineering controls and institutional controls.

A network of professional, trained researchers, following established procedures, uses client supplied address information to:

- · search for parcel information and/or legal description;
- search for ownership information;
- research official land title documents recorded at jurisdictional agencies such as recorders' offices, registries of deeds, county clerks' offices, etc.;
- access a copy of the deed;
- search for environmental encumbering instrument(s) associated with the deed;
- provide a copy of any environmental encumbrance(s) based upon a review of key words in the instrument(s) (title, parties involved, and description); and
- provide a copy of the deed or cite documents reviewed.

Thank you for your business.

Please contact EDR at 1-800-352-0050 with any guestions or comments.

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EDR Environmental Lien and AUL Search

TARGET PROPERTY INFORMATION

ADDRESS

Thornton Road and 8 Mile Road APN 070-670-01 Stockton, CA 95209

RESEARCH SOURCE

Source 1:

San Joaquin Recorder San Joaquin, CA

PROPERTY INFORMATION

Deed 1:

Type of Deed:	deed						
Title is vested in:	Jimenez Thornton Road Ranch Prop LLC						
Title received from:	Dolores Jimenez Trustee						
Deed Dated	5/8/2006						
Deed Recorded:	5/22/2006						
Book:	NA						
Page:	na						
Volume:	na						
Instrument:	na						
Docket:	NA						
Land Record Comments:	apn chg						
Miscellaneous Comments:							
Legal Description:	See Exhibit						
Legal Current Owner:	Jimenez Thornton Road Ranch Prop LLC						
Parcel # / Property Identifier:	070-670-01						
Comments:	See Exhibit						
ENVIRONMENTAL LIEN							
Environmental Lien:	Found D Not Found X						
OTHER ACTIVITY AND USE LIMITAT	OTHER ACTIVITY AND USE LIMITATIONS (AULs)						
AULs:	Found 🔲 Not Found 🔀						

Deed Exhibit 1

WHEN RECORDED RETURN TO: Jimenez-Thornton Road Properties, LLC 11052 N. Micke Grove Rd Lodi, CA 95240 DOC # 2006-110599 05/22/2006 10:41A Fee:7.00 Page 1 of 1 Recorded in Official Records County of San Joaquin GARY W. FREEMAN Assessor-Recorder-County Clerk Paid by ATTORNEY ON DOCUMENT

MAIL TAX STATEMENTS TO:

same as above

DOCUMENTARY TRANSFER TAX \$_____

GRANT DEED

For a valuable consideration, receipt of which is hereby acknowledged, DOLORES JIMENEZ, TRUSTEE OF THE LOUIE AND DOLORES JIMENEZ FAMILY TRUST, hereby **GRANT(S)** to JIMENEZ-THORNTON ROAD RANCH PROPERTIES, LLC, the real property in the City of Stockton, County of San Joaquin, State of California, described as follows:

(APN: 070-040-0)

LOTS 270 AND 271 AS SHOWN ON THE MAP OF TRACT NO. 3452, SILVER SPRINGS, FILED FOR RECORD OCTOBER 28, 2005 IN BOOK 40 OF MAPS AND PLATS, PAGE 39, SAN JOAQUIN COUNTY RECORDS.

Dated: May 8, 2006

STATE OF CALIFORNIA COUNTY OF SAN JOAQUIN

SS.

)

On May 8, 2006, before me, BETTY DOBLER, Notary Public, personally appeared _DOLORES JIMENEZ

personally known to me (or proved on the basis of satisfactory evidence) to be the person(s) whose names(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal.

Signature bh\doc\corp\jimeneztha







Т	DATA:

N.:	070-670-01
AL ACREAGE:	439,520 SF (10.09 AC)
STING PARCELS: POSED PARCELS:	1 2
STING ZONE:	10.09 AC RH - RESIDENTIAL HIGH DENSITY
POSED ZONE:	PARCEL 1 2.0 AC CG - GENERAL COMMERCIAL
	PARCEL 2 8.09 AC RH - RESIDENTIAL HIGH DENSITY
STING USE:	UNDEVELOPED



http://sjcpw.maps.arcgis.com/apps/webappviewer/index.html?id=30623860e746400ebdd9c7147aa20a8f

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APPENDIX E ENVIRONMENTAL NOISE ASSESSMENT

Environmental Noise Assessment

ARCO AM/PM Car Wash at West Eight Mile Road & Thornton Road

Stockton, California

BAC Job # 2016-148

Prepared For:

Norcal Cajun Foods II, Inc.

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Prepared By:

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Paul Bollard, President

August 7, 2017



Introduction

The proposed project consists of the construction of a new ARCO AM/PM minimart, gas station, and car wash located at the southeast corner of West Eight Mile Road and Thornton Road in the City of Stockton, California. Existing land uses in the project vicinity include residential uses to the east and west, commercial/office zoning to the south, and agricultural zoning to the north. The project site area with identified land uses is shown on Figure 1. Figure 2 provides the proposed project site plan.

Due to the proximity of the proposed project to the existing residences, as well as future residential uses to the immediate east and south of the project site, the project applicant has retained Bollard Acoustical Consultants, Inc. (BAC) to prepare an acoustical analysis for this project. The purposes of this analysis are to quantify noise levels associated with the proposed project, to assess the state of compliance of those noise levels with applicable noise standards, and if necessary, to recommend measures to reduce those noise levels to acceptable limits at the nearest noise sensitive uses.

Background on Noise and Acoustical Terminology

Noise is often described as unwanted sound. Sound is defined as any pressure variation in air that the human ear can detect. If the pressure variations occur frequently enough (at least 20 times per second), they can be heard and are called sound. The number of pressure variations per second is called the frequency of sound, and is expressed as cycles per second, called Hertz (Hz).

Measuring sound directly in terms of pressure would require a very large and awkward range of numbers. To avoid this, the decibel scale was devised. The decibel scale uses the hearing threshold (20 micropascals of pressure), as a point of reference, defined as 0 dB. Other sound pressures are then compared to the reference pressure, and the logarithm is taken to keep the numbers in a practical range. The decibel scale allows a million-fold increase in pressure to be expressed as 120 dB. Another useful aspect of the decibel scale is that changes in decibel levels correspond closely to human perception of relative loudness.

The perceived loudness of sound is dependent upon many factors, including sound pressure level and frequency content. However, within the usual range of environmental noise levels, perception of loudness is relatively predictable, and can be approximated by weighing the frequency response of a sound level meter by means of the standardized A-weighing network. There is a strong correlation between A-weighted sound levels (expressed as dBA) and community response to noise. For this reason, the A-weighted sound level has become the standard tool of environmental noise assessment. All noise levels reported in this section are in terms of Aweighted levels. Please see Appendix A for definitions of acoustical terminology used in this report. Appendix B illustrates common noise levels associated with various sources.





Criteria for Acceptable Noise Exposure

City of Stockton Municipal Code

Part II of Table 3-1 from Section 16.60.040 of the City of Stockton Municipal Code establishes acceptable noise level limits for non-transportation (stationary) noise sources applicable at the property line of noise-sensitive land uses. That table is reproduced below as Table 1.

	Table 1 Maximum Allowable Noise Exposure for Stationary Noise Sources City of Stockton Municipal Code							
	DaytimeNighttimeNoise Level Descriptor7 a.m. to 10 p.m.10 p.m. to 7 a.m.							
	Hourly L _{eq} , dB	55	45					
	Maximum Level (L _{max}), dB	75	65					
1.	 The noise standard shall be applied at the property line of the receiving land use. When determining the effectiveness of noise mitigation measures, the standards shall be applied on the receiving side of noise barriers or other property line noise mitigation measures. 							
2.	 Each of the noise level standards specified shall be decreased by five (5) for impulse noise, simple tone noise, or noise consisting primarily of speech or music. 							
So	urce: Section 16.60.040, Table 3-1, Part II	, of the City of Stockton Municipal Code.						

The noise level standards provided above in Table 1 were applied at the nearest residential property lines. Specifically, the existing residences to the west, across Thornton Road, were identified as noise-sensitive property lines. As shown in Figures 1 and 2, the project parcel is located adjacent to planned multi-family residences to the south and east. Because the project shares a property line with a planned noise-sensitive land use, the Table 1 standards were also applied at those property lines. Satisfaction of the City's noise level standards at the adjacent noise-sensitive property lines would ensure satisfaction of the City's standards at the more distant existing residential land uses to the east.

Existing Ambient Noise Environment

The noise environment in the vicinity of the nearest noise-sensitive receivers is defined primarily by traffic noise from the local roadways. To generally quantify background noise levels at the nearest noise-sensitive locations, Bollard Acoustical Consultants, Inc. conducted two long-term (24-hour) ambient noise level measurements in the project vicinity from August 18 to 21, 2016. Noise level measurements at Site A, representative of the existing ambient noise exposure at the residences to the west, were conducted in the backyard of 10928 Peony Place Drive. Noise level measurements at Site B were intended to be representative of the existing ambient noise exposure at the residentially zoned parcel to the south. The noise measurement locations are depicted on Figure 1 and a summary of the measurement results is provided in Table 2. Detailed noise measurement results can be seen numerically and graphically in Appendix C and D, respectively.

Larson Davis Laboratories (LDL) Model 820 precision integrating sound level meters were used to complete the noise level measurement survey. The meters were calibrated before use with an LDL Model CAL200 acoustical calibrator to ensure the accuracy of the measurements. The equipment used meets all pertinent specifications of the American National Standards Institute for Type 1 sound level meters (ANSI S1.4).

Table 2 Summary of Continuous Hourly Ambient Noise Monitoring ARCO AM/PM Car Wash at West Eight Mile Road & Thornton Road – Stockton, California								
	Average Measured Hourly Noise Levels ² (dBA)							
			Daytime	; (7 a.m. to	- 10 p.m.)	Nighttim	<u>ie (10 p.m.</u>	to 7 a.m.)
Site ¹	Date	L _{dn} (dBA)	L _{eq}	L ₅₀	Lmax	L _{eq}	L ₅₀	Lmax
А	8/18/16	60	57	55	75	52	49	69
	8/19/16	61	57	55	78	53	51	69
	8/20/16	64	58	57	76	56	54	74
	8/21/16	61	57	55	76	54	54	69
В	8/18/16	61	56	55	72	54	52	68
	8/19/16	62	57	55	76	55	53	70
	8/20/16	63	57	55	74	54	51	72
	8/21/16	61	56	54	74	53	50	69
Notes: ¹ Nois ² Deta	Notes: 1 Noise monitoring locations identified on Figure 1. 2 Detailed poise monitoring results are provided in Appendices C and D.							

Source: Bollard Acoustical Consultants, Inc. (2017)

The background noise level data provided in Table 2 indicate that noise levels measured at the nearest noise-sensitive receiver locations are in close agreement with the daytime and nighttime exterior noise level standards for residential uses shown in Table 1. As a result, compliance with the Table 1 noise standards will ensure that the project does not result in a significant noise level increase in the community.

Evaluation of Car Wash Noise Levels

Based on the experience of Bollard Acoustical Consultants, noise levels generated by car wash facilities are primarily due to the drying portion of the operation. According to the project applicant, the proposed car wash will utilize an AquaDri Dryer Model FS-40D. The manufacturer's specifications, provided as Appendix E, indicate that the reference sound level varies relative to the tunnel entrance or exit. In addition, it has been BAC's experience that dryer noise levels vary relative to the position of the tunnel opening. For example, at a position 45 degrees and 90 degrees off-axis, blower noise levels are typically 5 and 10 dB less, respectively, due to the screening provided by the tunnel building structure. Figure 1 illustrates the location of the proposed car wash tunnel and the direction vehicles will move through the tunnel, east to west.

When the car wash is at its worst-case maximum capacity, the dryers are anticipated to operate for no more than 15 minutes during that hour. The reference noise levels provided in Appendix E represent maximum (L_{max}) dryer noise levels. Because the dryers would be in operation for no more than 15 minutes during any hour, average (L_{eq}) noise levels would be approximately 6 dB less than maximum noise levels. Assuming standard spherical spreading loss (-6 dB per doubling of distance), car wash dryer noise exposure at the nearest residential property lines was calculated and the results of those calculations are presented below in Table 3.

Table 3 Predicted Car Wash Noise Levels – Unmitigated ARCO AM/PM Car Wash at West Eight Mile Road & Thornton Road – Stockton, California							
Predicted Noise Levels (dBA)							
Residential Property Line	Reference Noise Level	Property Line (feet)	Offset (dBA) ^{1,2}	Hourly Average, L _{eq} ³	Maximum, L _{max}		
East	78 dB at 50 feet	100	0	66	72		
South	81 dB at 30 feet	30	-10	65	71		
West	77 dB at 50 feet	260	-7	50	56		
Notes:							

¹ Because the residential property line the south is located 90 degrees off-axis from the exit of the tunnel, a -10 dB offset was applied to account for the shielding provided by the tunnel.

² A -7 dB offset was applied at the property line to the west to account for the shielding provided by the existing 7-foot tall CMU wall. The location of the existing CMU wall is illustrated on Figure 1. The barrier insertion loss calculations for the existing barrier can be found in Appendix F.

³ Hourly average L_{eq} based on 15 minutes of dryer operation during a worst-case hour.

Source: Bollard Acoustical Consultants, Inc. (2017)

The Table 3 data indicate that predicted maximum car wash noise levels at the nearest residential property lines would range from 56-73 dB L_{max} , satisfying the City of Stockton's daytime 75 dB L_{max} standard. However, at the eastern and southern property lines, predicted car wash noise levels of 71-72 dB L_{max} would exceed the nighttime 65 dB L_{max} standard by 6-7 dB. As a result, consideration of additional noise mitigation measures would be warranted for this aspect of the project.

At the residential property line to the west, the predicted car wash hourly average noise level of 50 dB L_{eq} would satisfy the City's daytime noise level standard of 55 dB L_{eq} , but would exceed the nighttime noise level standard of 45 dB L_{eq} by 5 dB. At the property lines to the south and east, predicted car wash hourly average noise levels of 65-66 dB L_{eq} would exceed the 55 dB L_{eq} daytime noise level standard by 10-11 dB and exceed the 45 dB L_{eq} nighttime noise level standard by 20-21 dB. As a result, consideration of additional noise mitigation measures would be warranted for this aspect of the project. Mitigation measures are discussed later in this report.

Evaluation of Vacuum Noise Levels

According to the project applicant, the proposed vacuum will be a JE Adams Super Vac Model #9209LD. The manufacturer's specifications, provided as Appendix G, indicate that the reference noise level depends on whether the vacuum hose is in the wide open position or the sealed position. During a worst-case hour, it was assumed that the vacuum would be operated with the hose in the wide open position for 30 minutes and with the hose in the sealed position for the remaining 30 minutes. Table 4 provides the vacuum reference noise level based on this assumption. Because the vacuums were assumed to be in continuous operation for a full hour, hourly average (Leq) and maximum (Lmax) noise levels would be equivalent.

Based upon the manufacturer's data, the proposed location of the vacuum units, and assuming the continuous use of the vacuum for a given hour, vacuum noise exposure at the nearest residential property lines was calculated and the results of those calculations are presented below in Table 4. At the existing residences to the west, the predicted vacuum noise levels take into consideration the attenuation due to the existing 7-foot tall CMU wall.

Table 4 Predicted Vacuum Noise Levels ¹ – Unmitigated ARCO AM/PM Car Wash at West Eight Mile Road & Thornton Road – Stockton, California							
Nearest Residential Property Line	Reference Noise Level ²	Distance to Property Line (feet)	Barrier Insertion Loss (dBA) ³	Predicted Vacuum Noise Levels, L _{eq} / L _{max} (dBA) ⁴			
South	63 dBA at 60 feet	60	0	63			
West	55 dBA at 150 feet	250	-7	44			
Notes:							
¹ The proposed vacuum location is illustrated on Figure 2.							
² Reference noise levels assume the vacuum operation will consist of the vacuum hose open for 50% of a given hour and with the vacuum hose sealed for 50% of the hour.							
³ An offset of -7 dB was applied due to shielding provided by the existing 7-foot tall CMU wall. The barrier insertion loss calculations for the existing barrier can be found in Appendix F.							
⁴ Because the vacuums were assumed to be in continuous operation for a full hour, hourly average (L _{eq}) and maximum (L _{max}) noise levels would be equivalent.							

Source: Bollard Acoustical Consultants, Inc. (2017)

As shown above in Table 4, predicted vacuum operation noise levels at the residential property line to the west would satisfy the City of Stockton average and maximum, daytime and nighttime noise level criteria. However, predicted average vacuum noise levels of 63 dB L_{eq} at the residential property line to the south would exceed the daytime and nighttime criteria by 8 dB and 18 dB, respectively. As a result, further consideration of noise mitigation measures would be warranted for this aspect of the project.

Mitigation Measures

Car Wash Noise Mitigation

Car wash noise exposure at the nearest residential property lines is predicted to exceed the City of Stockton noise level criteria. To mitigate these identified exceedances, the effectiveness of a property line noise barrier and the inclusion of a car wash entrance and exit doors was considered. The manufacturer has indicated that closed entrance and exit doors during the car wash cycle provides approximately 10-20 dB of noise reduction. A conservative offset of -10 dB was applied to the reference noise levels shown in Table 3 to account for the tunnel doors being in the closed position during the drying cycle of the car wash. Based upon the barrier insertion loss calculations provided in Appendix F, an 8-foot tall CMU wall should be constructed at the location shown on Figure 2. The predicted car wash noise levels are summarized in Table 5.

Table 5 Predicted Car Wash Noise Levels – Mitigated ARCO AM/PM Car Wash at West Eight Mile Road & Thornton Road – Stockton, California							
			Tunnel	Barrier	Predicted Noise Levels (dBA)		
Nearest Residential Property Line	Reference Noise Level ¹	Distance to Property Line (feet)	Orientation Offset (dBA) ²	Insertion Loss (dBA) ³	Hourly Average, L _{eq} ⁴	Maximum, L _{max}	
East	68 dB at 50 feet	100	0	-8	48	54	
South	71 dB at 30 feet	25	-10	-7	48	54	
West	67 dB at 50 feet	260	0	-7	40	46	

Notes:

¹ Maximum dryer noise levels assuming closed entrance and exit doors during drying cycle. Doors were conservatively assumed to provide a noise reduction of 10 dB.

² Because the residential property line the south is located 90 degrees off-axis from the exit of the tunnel, a -10 dB offset was applied to account for the shielding provided by the tunnel.

³ An offset of -8 dB at the eastern property line and an offset of -7 dB at the southern property line were applied due to shielding provided by the recommended 8-foot tall CMU wall. An offset of -7 dB was applied at the western property line due to shielding provided by the existing 7-foot tall CMU wall. Barrier insertion loss calculations are provided in Appendix F.

⁴ Hourly average L_{eq} based on 15 minutes of dryer operation during worst-case hour.

Source: Bollard Acoustical Consultants, Inc. (2016)

Provided the project incorporates the recommended property line noise barrier and car wash doors, car wash noise exposure at the nearest noise-sensitive property lines would satisfy the City's daytime noise level standards. However, even after implementation of the recommended mitigation measures, hourly average car wash noise levels could still exceed the nighttime 45 dB L_{eq} standard by 3 dB at both the eastern and southern property lines. If the car wash entry and exit doors provide 10 dB of noise reduction, car wash operations should be limited to daytime hours (7 a.m. to 10 p.m.). However, if the applicant opts for nighttime car wash operations, one of the two following mitigation measures would be recommended in order to ensure satisfaction of the more strict nighttime noise level standard:

1. Select car wash dryers that are 5 dB quieter than the AquaDri Dryer Model FS-40D.

OR

2. Ensure that the entry and exit doors provide a minimum noise level reduction of 15 dB.

Vacuum Noise Mitigation

Vacuum noise exposure at the adjacent residential property line to the south is predicted to exceed the City of Stockton daytime and nighttime noise level criteria. To mitigate these identified exceedances, the effectiveness of a property line noise barrier was considered. Based upon the barrier insertion loss calculations provided in Appendix F, the previously recommended 8-foot tall CMU wall would result in vacuum noise levels of 54 dB L_{eq} at the residential property line to the south. However, even after consideration of the 8-foot tall CMU wall, hourly average vacuum noise levels would still exceed the nighttime 45 dB L_{eq} . Therefore, in order to satisfy the City's standards presented in Table 1, vacuum operations should be limited to daytime hours (7 a.m. to 10 p.m.). However, if the applicant opts for nighttime vacuum operations, the project should incorporate a vacuum system that is 10 dB quieter than the proposed JE Adams Super Vac Model #9209LD. A vacuum system that is 10 dB quieter would ensure satisfaction of the more strict nighttime noise level standard.

Conclusions

Noise levels generated by the proposed ARCO AM/PM Car Wash at West Eight Mile Road & Thornton Road are predicted to satisfy the City of Stockton daytime and nighttime noise standards at the nearest residential property lines provided the following noise mitigation measures are incorporated in the project design:

- 1. An 8-foot tall CMU wall should be constructed along the southern and eastern property lines as shown on Figure 2.
- 2. Car Wash Recommendations
 - a. Ensure that the car wash is equipped with both entry and exit doors which would be closed during the drying cycle and which would provide a minimum 15 dB noise reduction.

OR

- b. Ensure that the car wash is equipped with both entry and exit doors which would be closed during the drying cycle and which would provide a minimum 10 dB noise reduction and procure car wash dryers that are 5 dB quieter than the proposed system, AquaDri Dryer Model FS-40D.
- 3. Vacuum Recommendations
 - a. Procure a vacuum system which is 10 dB quieter than the proposed system, JE Adams Super Vac Model #9209LD.

The mitigation measures listed above are primarily due to the proximity of the project to the planned multi-family development adjacent to the south. Satisfaction of the City's property line noise level standards necessitate the implementation of the above listed mitigation measures. If the property to the south was not a noise-sensitive land use, the project would satisfy the City's noise level criteria at the nearest existing residences by restricting the hours of operation to daytime hours without the need for noise barriers or entry/exit doors.

These conclusions are based on the site plan shown in Figure 2, the manufacturers' noise level data, and on the assumptions stated herein. Deviations from these plans or data could cause noise levels to differ from those predicted in this assessment. Please contact BAC at (916) 663-0500 or <u>paulb@bacnoise.com</u> with any questions or requests for additional information.

Appendix A Acoustical Terminology

Acoustics	The science of sound.		
Ambient Noise	The distinctive acoustical characteristics of a given space consisting of all noise sources audible at that location. In many cases, the term ambient is used to describe an existing or pre-project condition such as the setting in an environmental noise study.		
Attenuation	The reduction of an acoustic signal.		
A-Weighting	A frequency-response adjustment of a sound level meter that conditions the output signal to approximate human response.		
Decibel or dB	Fundamental unit of sound, A Bell is defined as the logarithm of the ratio of the sound pressure squared over the reference pressure squared. A Decibel is one-tenth of a Bell		
CNEL	Community Noise Equivalent Level. Defined as the 24-hour average noise level with noise occurring during evening hours (7 - 10 p.m.) weighted by a factor of three and nighttime hours weighted by a factor of 10 prior to averaging.		
Frequency	The measure of the rapidity of alterations of a periodic signal, expressed in cycles per second or hertz.		
Lơn	Day/Night Average Sound Level. Similar to CNEL but with no evening weighting.		
Leq	Equivalent or energy-averaged sound level.		
Lmax	The highest root-mean-square (RMS) sound level measured over a given period of time.		
Loudness	A subjective term for the sensation of the magnitude of sound.		
Masking	The amount (or the process) by which the threshold of audibility is for one sound is raised by the presence of another (masking) sound.		
Noise	Unwanted sound.		
Peak Noise	The level corresponding to the highest (not RMS) sound pressure measured over a given period of time. This term is often confused with the Maximum level, which is the highest RMS level.		
RT ₆₀	The time it takes reverberant sound to decay by 60 dB once the source has been removed.		
Sabin	The unit of sound absorption. One square foot of material absorbing 100% of incident sound has an absorption of 1 sabin.		
SEL	A rating, in decibels, of a discrete event, such as an aircraft flyover or train passby, that compresses the total sound energy of the event into a 1-s time period.		
Threshold of Hearing	The lowest sound that can be perceived by the human auditory system, generally considered to be 0 dB for persons with perfect hearing.		
Threshold of Pain	Approximately 120 dB above the threshold of hearing.		

BOLLARD Acoustical Consultants

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Appendix C-1 **Ambient Noise Monitoring Results - Site A** ARCO AM/PM Car Wash at 8 Mile Road & Thorton Road - Stockton, CA Thursday, August 18, 2016

12:00 AM 52 68 43 58 55 52 49 1:00 AM 50 66 40 57 53 51 48 2:00 AM 49 67 39 56 52 48 44 3:00 AM 50 67 40 57 54 50 47	45 45 42 42
1:00 AM 50 66 40 57 53 51 48 2:00 AM 49 67 39 56 52 48 44 3:00 AM 50 67 40 57 54 50 47	45 42 42
2:00 AM 49 67 39 56 52 48 44 3:00 AM 50 67 40 57 54 50 47	42 42
3.00 AM 50 67 40 57 54 50 47	42
4:00 AM 51 66 41 58 56 52 48	44
5:00 AM 54 74 44 59 57 54 51	46
6:00 AM 56 72 44 63 60 57 54	47
7:00 AM 58 73 46 64 61 59 56	50
8:00 AM 57 79 44 63 60 57 55	49
9:00 AM 55 69 46 62 59 56 53	48
10:00 AM 56 72 46 62 59 57 54	50
11:00 AM 57 78 45 63 59 56 53	49
12:00 PM 55 70 45 61 58 56 54	49
1:00 PM 56 79 46 61 59 57 54	51
2:00 PM 57 75 48 64 61 58 56	52
3:00 PM 57 72 48 63 60 58 56	52
4:00 PM 57 69 49 62 60 58 56	53
5:00 PM 58 77 51 63 60 59 57	53
6:00 PM 58 77 44 63 60 58 56	52
7:00 PM 57 76 49 63 60 58 56	52
8:00 PM 60 87 49 63 59 57 55	51
9:00 PM 55 75 48 60 58 56 53	50
10:00 PM 53 69 45 59 57 54 51	47
11:00 PM 53 75 46 59 56 52 50	48
Daytime Leq Lmax Lmin L02 L08 L25 L50) L90
Average 57 75 47 62 60 57 55	51
High 60 87 51 64 61 59 57	53
Low 55 69 39 60 58 56 53	48
Nighttime Leq Lmax Lmin LO2 LO8 L25 L50) L90
Average 52 69 42 58 56 52 49	45
High 56 75 46 63 60 57 54	48
Low 49 66 39 56 52 48 44	42

Ldn: 60 % Daytime Energy: % Nighttime Energy: 82%

18%

Appendix C-2 Ambient Noise Monitoring Results - Site A ARCO AM/PM Car Wash at 8 Mile Road & Thorton Road - Stockton, CA Friday, August 19, 2016

Hour	Leq	Lmax	Lmin	L02	L08	L25	L50	L90
12:00 AM	51	66	45	58	55	51	49	47
1:00 AM	51	64	46	56	54	51	50	48
2:00 AM	50	68	46	56	53	51	49	47
3:00 AM	51	64	45	57	54	51	49	47
4:00 AM	52	66	45	58	55	52	50	47
5:00 AM	53	65	47	59	56	54	52	49
6:00 AM	55	72	46	61	59	56	54	49
7:00 AM	57	74	46	63	60	58	56	51
8:00 AM	56	72	46	62	59	57	54	49
9:00 AM	56	86	47	61	58	55	53	49
10:00 AM	55	77	47	61	58	56	53	49
11:00 AM	56	76	47	61	58	56	53	50
12:00 PM	55	74	48	61	58	56	53	50
1:00 PM	56	76	47	61	58	56	54	50
2:00 PM	60	85	48	65	59	57	55	51
3:00 PM	61	89	45	64	61	58	56	52
4:00 PM	58	75	44	63	60	59	56	52
5:00 PM	61	86	48	65	61	58	56	52
6:00 PM	57	74	47	64	60	58	56	51
7:00 PM	57	74	47	63	60	57	55	50
8:00 PM	56	72	46	62	59	56	54	49
9:00 PM	56	76	44	62	58	56	53	48
10:00 PM	56	84	46	61	58	55	53	48
11:00 PM	56	75	45	64	59	56	53	49
Daytime	Leq	Lmax	Lmin	L02	L08	L25	L50	L90
Average	57	78	46	62	59	57	55	50
High	61	89	48	65	61	59	56	52
Low	55	72	44	61	58	55	53	48
Nighttime	Leq	Lmax	Lmin	L02	L08	L25	L50	L90
Average	53	69	46	59	56	53	51	48
High	56	84	47	64	59	56	54	49
Low	50	64	45	56	53	51	49	47

Ldn: 61 % Daytime Energy: % Nighttime Energy: 81%

19%

Appendix C-3 Ambient Noise Monitoring Results - Site A ARCO AM/PM Car Wash at 8 Mile Road & Thorton Road - Stockton, CA Saturday, August 20, 2016

Hour	Leq	Lmax	Lmin	L02	L08	L25	L50	L90
12:00 AM	58	72	48	64	62	59	57	53
1:00 AM	55	67	50	60	58	56	54	52
2:00 AM	55	66	48	60	58	55	53	50
3:00 AM	55	70	48	60	57	55	53	51
4:00 AM	53	67	48	57	56	54	52	50
5:00 AM	53	62	48	57	56	54	52	49
6:00 AM	60	89	50	61	58	55	54	51
7:00 AM	58	81	50	62	60	58	56	53
8:00 AM	58	76	49	64	60	58	56	52
9:00 AM	57	73	50	62	60	58	56	54
10:00 AM	58	79	51	62	60	58	57	54
11:00 AM	58	72	51	63	61	59	58	55
12:00 PM	58	72	51	62	60	58	57	55
1:00 PM	58	75	50	63	61	59	57	54
2:00 PM	63	90	51	64	61	59	57	54
3:00 PM	57	70	50	62	60	58	57	54
4:00 PM	58	74	51	63	60	59	58	55
5:00 PM	61	87	52	63	61	59	58	56
6:00 PM	59	77	51	64	61	59	58	55
7:00 PM	57	73	49	63	60	58	56	53
8:00 PM	56	72	48	61	58	56	55	52
9:00 PM	57	76	50	61	59	57	55	53
10:00 PM	60	91	48	61	58	56	54	50
11:00 PM	56	81	47	61	58	56	54	50
Daytime	Leq	Lmax	Lmin	L02	L08	L25	L50	L90
Average	58	76	50	63	60	58	57	54
High	63	90	52	64	61	59	58	56
Low	56	70	47	61	58	56	55	52
Nighttime	Leq	Lmax	Lmin	L02	L08	L25	L50	L90
Average	56	74	48	60	58	55	54	51
High	60	91	50	64	62	59	57	53
Low	53	62	47	57	56	54	52	49

Ldn: 64 % Daytime Energy: % Nighttime Energy: 71%

29%

Appendix C-4 Ambient Noise Monitoring Results - Site A ARCO AM/PM Car Wash at 8 Mile Road & Thorton Road - Stockton, CA Sunday, August 21, 2016

Hour	Leq	Lmax	Lmin	L02	L08	L25	L50	L90
12:00 AM	55	71	48	59	57	56	54	51
1:00 AM	55	73	48	59	57	55	54	50
2:00 AM	53	69	47	57	55	54	52	50
3:00 AM	54	65	48	58	57	55	54	50
4:00 AM	55	65	49	58	57	55	54	52
5:00 AM	53	63	49	57	55	54	53	51
6:00 AM	55	66	49	59	57	55	54	52
7:00 AM	57	84	49	60	57	56	55	52
8:00 AM	55	72	49	59	57	55	54	51
9:00 AM	55	71	49	59	57	55	54	51
10:00 AM	56	71	51	61	59	57	56	53
11:00 AM	57	71	52	61	59	58	57	54
12:00 PM	58	70	53	62	60	58	57	55
1:00 PM	58	71	51	63	60	59	57	54
2:00 PM	57	78	50	63	59	57	56	53
3:00 PM	56	74	49	62	58	56	55	52
4:00 PM	58	84	50	62	58	56	55	52
5:00 PM	56	75	50	61	59	57	55	52
6:00 PM	61	89	49	63	59	57	55	52
7:00 PM	59	84	45	65	60	58	55	51
8:00 PM	56	75	45	61	59	57	54	50
9:00 PM	55	72	46	61	58	56	53	49
10:00 PM	55	71	47	60	58	55	53	49
11:00 PM	56	77	44	60	58	56	54	50
Daytime	Leq	Lmax	Lmin	L02	L08	L25	L50	L90
Average	57	76	49	61	59	57	55	52
High	61	89	53	65	60	59	57	55
Low	55	70	44	59	57	55	53	49
Nighttime	Leq	Lmax	Lmin	L02	L08	L25	L50	L90
Average	54	69	48	59	57	55	54	50
High	56	77	49	60	58	56	54	52
Low	53	63	44	57	55	54	52	49
		_			-	-		

Ldn: 61

% Daytime Energy:76%% Nighttime Energy:24%

Appendix C-5 Ambient Noise Monitoring Results - Site B ARCO AM/PM Car Wash at 8 Mile Road & Thorton Road - Stockton, CA Thursday, August 18, 2016

Hour	Leq	Lmax	Lmin	L02	L08	L25	L50	L90
12:00 AM	51	60	43	57	55	52	49	46
1:00 AM	51	67	43	57	54	51	49	46
2:00 AM	50	63	43	57	54	51	48	46
3:00 AM	52	66	43	58	56	53	50	46
4:00 AM	54	64	44	59	57	55	52	48
5:00 AM	56	70	47	61	59	57	55	51
6:00 AM	59	79	50	63	61	59	57	54
7:00 AM	59	72	48	63	61	59	58	55
8:00 AM	56	70	45	61	59	57	55	51
9:00 AM	54	66	44	60	57	55	53	48
10:00 AM	55	80	41	59	56	54	52	47
11:00 AM	53	71	40	58	56	54	51	47
12:00 PM	53	67	42	58	56	54	51	46
1:00 PM	54	75	42	59	57	54	52	47
2:00 PM	55	66	44	60	58	56	54	50
3:00 PM	55	73	44	61	58	56	54	50
4:00 PM	56	67	46	61	59	58	56	52
5:00 PM	57	70	47	62	60	58	57	52
6:00 PM	58	74	49	62	60	59	57	53
7:00 PM	58	80	48	63	60	58	57	53
8:00 PM	60	85	51	62	60	58	57	54
9:00 PM	56	69	48	61	59	57	55	52
10:00 PM	56	77	48	60	58	56	54	51
11:00 PM	54	70	46	59	57	54	52	49
Daytime	Leq	Lmax	Lmin	L02	L08	L25	L50	L90
Average	56	72	45	61	58	57	55	50
High	60	85	51	63	61	59	58	55
Low	53	66	40	58	56	54	51	46
Nighttime	Leq	Lmax	Lmin	L02	L08	L25	L50	L90
Average	54	68	45	59	57	54	52	49
High	59	79	50	63	61	59	57	54
Low	50	60	43	57	54	51	48	46

Ldn: 61 % Daytime Energy: % Nighttime Energy: 72% 28%

Appendix C-6 Ambient Noise Monitoring Results - Site B ARCO AM/PM Car Wash at 8 Mile Road & Thorton Road - Stockton, CA Friday, August 19, 2016

Hour	Leq	Lmax	Lmin	L02	L08	L25	L50	L90
12:00 AM	52	66	45	58	56	53	51	48
1:00 AM	53	70	41	61	57	53	50	45
2:00 AM	51	67	41	59	55	51	48	45
3:00 AM	53	67	42	59	56	53	50	45
4:00 AM	54	64	47	60	58	55	53	50
5:00 AM	57	66	51	61	59	57	56	53
6:00 AM	58	69	49	63	61	59	57	54
7:00 AM	58	71	49	62	60	59	57	54
8:00 AM	57	70	46	62	60	58	56	52
9:00 AM	55	77	43	60	58	55	53	48
10:00 AM	54	69	42	59	57	54	53	47
11:00 AM	55	77	41	60	57	54	52	48
12:00 PM	53	66	42	58	57	54	52	47
1:00 PM	54	72	42	59	57	55	53	48
2:00 PM	58	82	45	63	59	57	55	52
3:00 PM	63	92	46	62	59	58	56	51
4:00 PM	57	70	46	62	60	58	57	52
5:00 PM	63	90	47	65	61	59	58	54
6:00 PM	58	75	48	63	61	59	57	54
7:00 PM	58	73	49	63	61	59	57	54
8:00 PM	58	77	50	62	60	59	57	54
9:00 PM	57	73	49	62	60	58	57	53
10:00 PM	56	79	46	61	59	57	55	51
11:00 PM	56	78	47	62	58	56	54	50
Daytime	Leq	Lmax	Lmin	L02	L08	L25	L50	L90
Average	57	76	46	61	59	57	55	51
High	63	92	51	65	61	59	58	54
Low	53	66	41	58	57	54	52	47
Nighttime	Leq	Lmax	Lmin	L02	L08	L25	L50	L90
Average	55	70	45	60	58	55	53	49
High	58	79	51	63	61	59	57	54
Low	51	64	41	58	55	51	48	45

Ldn: 62

% Daytime Energy: 77% % Nighttime Energy: 23%

Appendix C-7 Ambient Noise Monitoring Results - Site B ARCO AM/PM Car Wash at 8 Mile Road & Thorton Road - Stockton, CA Saturday, August 20, 2016

Hour	Leq	Lmax	Lmin	L02	L08	L25	L50	L90
12:00 AM	54	72	41	59	57	54	52	47
1:00 AM	51	64	38	57	55	53	49	44
2:00 AM	49	65	38	56	53	50	46	41
3:00 AM	49	61	36	56	54	50	46	41
4:00 AM	51	64	39	57	55	52	48	43
5:00 AM	53	67	43	58	57	55	52	47
6:00 AM	63	92	47	63	59	57	55	51
7:00 AM	57	76	50	61	59	58	56	54
8:00 AM	56	72	44	61	59	57	55	51
9:00 AM	56	72	43	61	58	56	55	50
10:00 AM	55	72	45	60	58	56	54	50
11:00 AM	55	70	44	60	58	56	54	50
12:00 PM	55	66	44	60	58	56	54	50
1:00 PM	55	70	44	61	58	56	54	50
2:00 PM	63	90	45	65	59	57	55	51
3:00 PM	56	72	47	61	59	57	56	52
4:00 PM	57	73	47	63	60	58	56	52
5:00 PM	62	87	46	63	60	58	56	52
6:00 PM	58	81	49	63	60	59	57	53
7:00 PM	58	71	48	63	60	59	57	53
8:00 PM	57	70	49	62	60	58	56	52
9:00 PM	57	74	51	62	60	58	57	53
10:00 PM	61	89	48	62	59	58	56	53
11:00 PM	57	75	44	63	59	57	55	50
Daytime	Leq	Lmax	Lmin	L02	L08	L25	L50	L90
Average	57	74	46	62	59	57	55	52
High	63	90	51	65	60	59	57	54
Low	55	66	36	60	58	56	54	50
Nighttime	Leq	Lmax	Lmin	L02	L08	L25	L50	L90
Average	54	72	42	59	56	54	51	46
High	63	92	48	63	59	58	56	53
Low	49	61	36	56	53	50	46	41

Ldn: 63 % Daytime Energy: % Nighttime Energy: 68% 32%

Appendix C-8 Ambient Noise Monitoring Results - Site B ARCO AM/PM Car Wash at 8 Mile Road & Thorton Road - Stockton, CA Sunday, August 21, 2016

Hour	Leq	Lmax	Lmin	L02	L08	L25	L50	L90
12:00 AM	53	68	40	60	57	54	52	46
1:00 AM	57	84	40	60	56	53	50	44
2:00 AM	50	61	38	56	54	51	47	42
3:00 AM	50	65	38	57	54	50	47	43
4:00 AM	51	67	38	58	55	51	48	43
5:00 AM	52	67	40	58	56	53	50	45
6:00 AM	54	67	44	60	57	55	52	48
7:00 AM	57	82	44	62	58	55	53	49
8:00 AM	55	72	43	61	58	56	54	48
9:00 AM	54	66	43	59	57	55	53	49
10:00 AM	54	66	43	60	57	55	53	48
11:00 AM	55	77	42	60	57	55	53	48
12:00 PM	53	65	42	58	57	54	52	47
1:00 PM	54	67	41	60	57	55	53	48
2:00 PM	55	71	42	61	58	55	53	49
3:00 PM	55	70	43	60	58	55	53	49
4:00 PM	57	80	46	61	59	57	56	51
5:00 PM	58	76	48	63	60	58	57	52
6:00 PM	64	94	46	64	61	59	57	53
7:00 PM	59	79	48	64	61	59	57	52
8:00 PM	58	72	50	62	60	58	57	54
9:00 PM	57	69	50	61	59	57	56	53
10:00 PM	54	67	43	60	58	55	53	48
11:00 PM	54	75	41	60	58	55	52	45
Daytime	Leq	Lmax	Lmin	L02	L08	L25	L50	L90
Average	56	74	45	61	58	56	54	50
High	64	94	50	64	61	59	57	54
Low	53	65	38	58	57	54	52	47
Nighttime	Leq	Lmax	Lmin	L02	L08	L25	L50	L90
Average	53	69	40	59	56	53	50	45
High	57	84	44	60	58	55	53	48
Low	50	61	38	56	54	50	47	42
		_						

Ldn: 61 9

% Daytime Energy:80%% Nighttime Energy:20%

















Appendix E AquaDri Dryers Reference Noise Level Data

AquaDri[®] Dryers



					Noise Lev	els in dBA					
		Feet	from Ex	tit End			Feet from Entrance End				
	<u>10</u>	<u>20</u>	<u>30</u>	<u>40</u>	<u>50</u>	<u>10</u>	<u>20</u>	<u>30</u>	<u>40</u>	<u>50</u>	
AquaDri Dryer Model											
FS-30 30hp Freestanding	91	86	83	80	75	88	85	80	79	77	
FS-40 40hp Freestanding	92	87	84	81	77	89	84	81	80	78	
E-20 20hp On-Board Static	84	82	78	74	72	83	80	75	73	71	
E-30 30hp On-Board Static	85	83	80	76	74	84	81	78	75	72	
C-15 15hp On-Board Contouring	92	88	84	80	77	90	86	82	80	77	

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Appendix F-1 **Barrier Insertion Loss Calculation**

Project Information:

Job Number: 2016-148 Project Name: ARCO AM/PM at West 8 Mile Road & Thornton Road Location(s): Eastern Property Line

Noise Level Data:

Source Description: Dryer Source Noise Level, dBA: 56 Source Frequency (Hz): 500 Source Height (ft): 8

Site Geometry:

Receiver Description: Eastern Property Line Source to Barrier Distance (C₁): 90 Barrier to Receiver Distance (C₂): 10

> Pad/Ground Elevation at Receiver: 0 Receiver Elevation¹: 5 Base of Barrier Elevation: 0 Starting Barrier Height 6

Barrier Effectiveness:

Top of Barrier B	arrier Heig	ht		Barrier Breaks Line of Site to
Elevation (ft)	(ft)	Insertion Loss, dB	Noise Level, dB	Source?
6	6	-5.2	50.8	Yes
7	7	-6.4	49.6	Yes
8	8	-7.7	48.3	Yes
9	9	-9.1	46.9	Yes
10	10	-10.3	45.7	Yes
11	11	-11.1	44.9	Yes
12	12	-12.3	43.7	Yes
13	13	-13.0	43.0	Yes
14	14	-13.8	42.2	Yes
15	15	-14.4	41.6	Yes
16	16	-14.6	41.4	Yes



Appendix F-2 **Barrier Insertion Loss Calculation**

Project Information:

Job Number: 2016-148 Project Name: ARCO AM/PM at West 8 Mile Road & Thornton Road Location(s): Southern Property Line

Noise Level Data:

Source Description: Dryer Source Noise Level, dBA: 55 Source Frequency (Hz): 500 Source Height (ft): 8

Site Geometry:

Receiver Description: Southern Property Line Source to Barrier Distance (C1): 20 Barrier to Receiver Distance (C₂): 10

> Pad/Ground Elevation at Receiver: 0 Receiver Elevation¹: 5 Base of Barrier Elevation: 0 Starting Barrier Height 6

Barrier Effectiveness:

Top of Barrier B	arrier Heigl	nt		Barrier Breaks Line of Site to
Elevation (ft)	(ft)	Insertion Loss, dB	Noise Level, dB	Source?
6	6	-5.0	50.0	No
7	7	-5.6	49.4	Yes
8	8	-7.1	47.9	Yes
9	9	-8.8	46.2	Yes
10	10	-10.3	44.7	Yes
11	11	-11.3	43.7	Yes
12	12	-12.5	42.5	Yes
13	13	-13.5	41.5	Yes
14	14	-14.3	40.7	Yes
15	15	-14.6	40.4	Yes
16	16	-15.3	39.7	Yes



Appendix F-3 **Barrier Insertion Loss Calculation**

Project Information:

Job Number: 2016-148 Project Name: ARCO AM/PM at West 8 Mile Road & Thornton Road Location(s): Western Property Line

Noise Level Data:

Source Description: Dryer Source Noise Level, dBA: 47 Source Frequency (Hz): 500 Source Height (ft): 8

Site Geometry:

Receiver Description: Western Property Line Source to Barrier Distance (C₁): 250 Barrier to Receiver Distance (C_2) : 10

> Pad/Ground Elevation at Receiver: 0 Receiver Elevation¹: 5 Base of Barrier Elevation: 0 Starting Barrier Height 6

Barrier Effectiveness:

Top of Barrier B	arrier Heigh	ht		Barrier Breaks Line of Site to
Elevation (ft)	(ft)	Insertion Loss, dB	Noise Level, dB	Source?
6	6	-5.3	41.7	Yes
7	7	-6.6	40.4	Yes
8	8	-7.8	39.2	Yes
9	9	-9.2	37.8	Yes
10	10	-10.3	36.7	Yes
11	11	-11.1	35.9	Yes
12	12	-12.1	34.9	Yes
13	13	-13.0	34.0	Yes
14	14	-13.7	33.3	Yes
15	15	-14.3	32.7	Yes
16	16	-14.6	32.4	Yes



Appendix F-4 **Barrier Insertion Loss Calculation**

Project Information:

Job Number: 2016-148 Project Name: ARCO AM/PM at West 8 Mile Road & Thornton Road Location(s): Southern Property Line

Noise Level Data:

Source Description: Vacuum Source Noise Level, dBA: 63.4 Source Frequency (Hz): 500 Source Height (ft): 3

Site Geometry:

Receiver Description: Southern Property Line Source to Barrier Distance (C_1) : 50 Barrier to Receiver Distance (C₂): 10

> Pad/Ground Elevation at Receiver: 0 Receiver Elevation¹: 5 Base of Barrier Elevation: 0 Starting Barrier Height 6

Barrier Effectiveness:

Top of Barrier Ba	arrier Heig	ht		Barrier Breaks Line of Site to		
Elevation (ft)	(ft)	Insertion Loss, dB	Noise Level, dB	Source?		
6	6	-5.9	57.5	Yes		
7	7	-7.4	56.0	Yes		
8	8	-8.9	54.5	Yes		
9	9	-10.2	53.2	Yes		
10	10	-11.1	52.3	Yes		
11	11	-12.3	51.1	Yes		
12	12	-13.2	50.2	Yes		
13	13	-13.9	49.5	Yes		
14	14	-14.6	48.8	Yes		
15	15	-14.6	48.8	Yes		
16	16	-15.3	48.1	Yes		



Appendix F-5 **Barrier Insertion Loss Calculation**

Project Information:

Job Number: 2016-148 Project Name: ARCO AM/PM at West 8 Mile Road & Thornton Road Location(s): Western Property Line

Noise Level Data:

Source Description: Vacuum Source Noise Level, dBA: 51.0 Source Frequency (Hz): 500 Source Height (ft): 3

Site Geometry:

Receiver Description: Western Property Line Source to Barrier Distance (C1): 240 Barrier to Receiver Distance (C_2) : 10

> Pad/Ground Elevation at Receiver: 0 Receiver Elevation¹: 5 Base of Barrier Elevation: 0 Starting Barrier Height 6

Barrier Effectiveness:

Top of Barrier B	arrier Heigl	nt		Barrier Breaks Line of Site to		
Elevation (ft)	(ft)	Insertion Loss, dB	Noise Level, dB	Source?		
6	6	-5.5	45.5	Yes		
7	7	-6.7	44.3	Yes		
8	8	-8.1	42.9	Yes		
9	9	-9.4	41.6	Yes		
10	10	-10.5	40.5	Yes		
11	11	-11.3	39.7	Yes		
12	12	-12.5	38.5	Yes		
13	13	-13.2	37.8	Yes		
14	14	-13.8	37.2	Yes		
15	15	-14.5	36.5	Yes		
16	16	-14.6	36.4	Yes		



Appendix G JE Adams Vacuum Reference Noise Level Data



9209

2 Motor Vac - Small Dome															
Wide Open With		Distance From Vac in Feet													
Attachment	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150
Sound Level (dB)	76.4	70.4	66.9	64.4	62.4	60.9	59.5	58.4	57.3	56.4	55.6	54.8	54.1	53.5	52.9
Sealed		Distance From Vac in Feet													
Attachment	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150
Sound Level (dB)	80.5	74.5	71.0	68.5	66.5	64.9	63.6	62.4	61.4	60.5	59.7	58.9	58.2	57.6	57.0
Attachment		Distance From Vac in Feet													
Removed	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150
Sound Level (dB)	74.5	68.5	65.0	62.5	60.6	59.0	57.6	56.5	55.4	54.5	53.7	52.9	52.3	51.6	51.0

APPENDIX F TRAFFIC IMPACT ANALYSIS

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TRAFFIC IMPACT STUDY

FOR

THE EIGHT MILE ROAD & THORNTON ROAD CONVENIENCE CENTER PROJECT

Stockton, CA

Prepared For:

PS Fuels, Inc.

Prepared By:

KD Anderson & Associates

3853 Taylor Road, Suite G Loomis, California 95650 (916) 660-1555

July 19, 2017

5525-001 Eight Mile Thornton Conv Ctr TIS 7-19-17.doc

KD Anderson & Associates, Inc.

TRAFFIC IMPACT STUDY FOR THE EIGHT MILE ROAD & THORNTON ROAD CONVENIENCE CENTER PROJECT

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INTRODUCTION

STUDY PURPOSE AND PROJECT LOCATION

This traffic impact study presents an analysis of the traffic-related effects of the proposed Eight Mile Road & Thornton Road Convenience Center project. The project site is located on the southeast corner of the intersection of Eight Mile Road and Thornton Road. **Figure 1** displays the regional location of the project site. **Figure 2** displays the project site relative to the surrounding transportation system.

PROPOSED LAND USES AND ACCESS

The Eight Mile Road & Thornton Road Convenience Center project includes:

- a 4,000 building square feet retail commercial structure,
- a 3,462 building square feet quick service restaurant,
- an am/pm convenience store with a 16-position vehicle fueling area and a car wash, and
- 234 multiple-family dwelling units.

Figure 3 presents the Eight Mile Road & Thornton Road Convenience Center project site plan. **Figure 4** presents a more detail view of the retail commercial portion of the site plan.

The multiple-family residential portion of the proposed project is consistent with the current City of Stockton General Plan and zoning designations for the project site. The multiple-family residential development is not proposed by the project applicant, and City approval for the multiple-family residential development is not requested. However, it remains that the site is designated and zoned for high-density residential development, and an application could be submitted at a later date by the applicant or others to whom the remainder might be sold. The residential development on the project site. Figure 3 is intended to visually communicate the potential future use of the residential area. For the purposes of this traffic impact study, it is assumed that a high-density residential complex containing 234 units in three-story structures would be constructed. (Mann pers comm.)

As shown on **Figure 4**, vehicle access to the retail commercial portion of the project site would be provided by a right-in/right-out driveway connecting to Eight Mile Road, and a right-in/right-out driveway connecting to Thornton Road. Left-turn movements would be prohibited at these two driveway connections. Vehicle access to the multiple-family residential portion of the project site would be provided by a driveway connecting to Breaker Way in the southeastern corner of the project site. Emergency-only vehicle access to the multiple-family residential portion of the project site would be provided by a gated connection to the retail commercial driveway on Eight Mile Road.



OVERALL ANALYSIS APPROACH

This traffic impact study presents an analysis of the traffic-related effects of the Eight Mile Road & Thornton Road Convenience Center project. This analysis is conducted using near-term background traffic conditions and long-term future background conditions.

Traffic operating conditions under the following five scenarios are presented in this traffic impact study:

- Existing Conditions,
- Existing Plus Approved Projects No Proposed Project,
- Existing Plus Approved Projects Plus Proposed Project,
- Cumulative No Proposed Project, and
- Cumulative Plus Proposed Project.

Existing Plus Approved Projects (EPAP) conditions are a near-term background condition which includes existing traffic levels, and traffic associated with approved land use development projects in the vicinity of the project site.

Cumulative conditions are a long-term background condition with future year traffic forecasts based on development of surrounding land uses and the roadway network. This set of scenarios assumes 2035 conditions with future development consistent with the City of Stockton General Plan.





REGIONAL LOCATION



ROADWAY NETWORK AND STUDY INTERSECTIONS



KD Anderson & Associates, Inc. Transportation Engineers SITE PLAN

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CONVENIENCE CENTER SITE PLAN

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Eight Mile Road & Thornton Road Convenience Center Traffic Impact Study
EXISTING SETTING

This section of this traffic impact study presents a description of existing conditions in the study area. Information presented in this section of the study is based on on-site field observations, traffic count data collected for this study, and other data available from local and state agencies. Portions of the information presented below are from the *City of Stockton General Plan Background Report* (City of Stockton 2004a). This section of the traffic impact study also describes analysis methods applied for this study, and thresholds used to determine the significance of project-related effects.

STUDY AREA ROADWAYS

This traffic impact study presents analyses of traffic operating conditions at intersections and on roadways in the study area that may be affected by the proposed project. The limits of the study area were identified through discussions with City of Stockton staff.

The following is a description of roadways that provide access to the project site. These roadways are shown in **Figure 2**.

Interstate 5 (I-5) is a major north-south freeway that traverses the western U.S., originating in southern California and continuing north towards Sacramento and beyond. It is aligned through the western portion of the City, generally providing four travel lanes in each direction through the central portion of Stockton (between Charter Way and Country Club Drive) and three lanes in each direction along the remaining segments. Twelve interchanges are provided along the 14-mile stretch of I-5 within and adjacent to the City limits. The portion of I-5 in the North Stockton area has been recently improved with large portions under construction. As a result, the number of travel lanes, speed limit, and traffic volume varied as the active construction portion changed over time. In the recent past, the average daily traffic (ADT) volumes on I-5 in the vicinity of the project site were between 76,000 and 94,000. Current ADT volumes are between 63,000 and 74,000. The speed limit on I-5 in the past has been 70 miles per hour (mph) north of Eight Mile Road, and 65 mph south of Eight Mile Road.

Eight Mile Road is an east-west roadway north of the project site. In the past, Eight Mile Road has been two lanes wide (one lane in each direction) in the vicinity of the project site. However, portions of Eight Mile Road have been widened with adjacent land use development. As a result, portions of Eight Mile Road are two or three lanes wide in each direction. In the vicinity of the project site, the posted speed limit along Eight Mile Road is 45 mph. Eight Mile Road has access to I-5 via an interchange west of the project site. Eight Mile Road also has access to State Route (SR) 99 via an interchange east of the project site.

Thornton Road is a roadway with a northern terminus at the Sacramento County line and, as Pacific Avenue, has a southern terminus in downtown Stockton. Thornton Road generally has a north-south alignment. However, a portion south of Eight Mile Road has a northwest-southeast alignment. North of Eight Mile Road, Thornton Road is two lanes wide. In the vicinity of the



project site, the majority of Thornton Road is four lanes wide, with a portion northwest of Davis Road being two lanes wide. The speed limit on Thornton Road is 55 mph north of Eight Mile Road, 45 mph between Eight Mile Road and Davis Road, and 40 mph south of Davis Road.

Davis Road is a north-south roadway with a northern terminus at the Mokelumne River, northwest of Lodi, and a southern terminus at Thornton Road. The majority of Davis Road is two lanes wide, with portions north of Thornton Road being three lanes wide and four lanes wide. In the vicinity of the project site, the speed limit is 45 mph.

Lower Sacramento Road is a roadway with a northern terminus at the Sacramento County line and a southern terminus at Rivara Road, south of Hammer Lane. Lower Sacramento Road generally has a north-south alignment. However, a portion immediately south of Eight Mile Road has a northeast-southwest alignment. North of Armor Drive, Lower Sacramento Road is two lanes wide. South of Armor Drive, it is four lanes wide. The speed limit on Lower Sacramento Road is 55 mph north of Armor Drive, 50 mph between Armor Drive and Katherine Way, and 40 mph south of Katherine Way.

Rivermont Drive is a northwest-southeast two-lane roadway with a northwest terminus at Eight Mile Road. Rivermont Drive provides access to Eight Mile Road for land use development south of Eight Mile Road east of Thornton Road and west of Davis Road. The speed limit on Rivermont Drive is 30 mph.

A.G. Spanos Boulevard is a two-lane roadway with some portions including a center-two-way left-turn lane (CTWLTL). West of Thornton Road, A.G. Spanos Boulevard has a semi-circle alignment and two intersections with Thornton Road. Short portions of A.G. Spanos Boulevard are also present east of both intersections with Thornton Road. The speed limit on A.G. Spanos Boulevard is 35 mph.

Whistler Way is a two-lane east-west roadway with a western terminus at a "T" intersection at A.G. Spanos Boulevard, and an eastern terminus at a "T" intersection with Lower Sacramento Road. The easternmost portion of this roadway is named Grider Way. Whistler Way provides surrounding land use with access to Thornton Road, Davis Road, and Lower Sacramento Road.

BICYCLE AND PEDESTRIAN SYSTEMS

The generally level terrain and mild weather make bicycling and walking viable forms of transportation in Stockton. The City of Stockton has an extensive network of bicycle facilities, including off-street trails and paths, as well as on-street bicycle lanes and routes. Many of these facilities also support pedestrian travel. According to Caltrans guidelines, bicycle facilities are generally divided into three categories:

Class I Bikeway (Bike Path). A completely separate facility designated for the exclusive use of bicycles and pedestrians with vehicle and pedestrian cross-flow minimized.



- Class II Bikeway (Bike Lane). A striped lane designated for the use of bicycles on Vehicle parking and vehicle/pedestrian cross-flow are a street or highway. permitted at designated locations.
- Class III Bikeway (Bike Route). A route designated by signs or pavement markings for bicyclists within the vehicular travel lane (i.e., shared use) of a roadway.

Sidewalks are present on the project site frontage along both Eight Mile Road and Thornton Road. The project site frontage sidewalks connect to sidewalks extending east along Eight Mile Road and south along Thornton Road.

Existing and future bicycle facilities in the Stockton area are shown on **Figure 5**. Along the project site frontage, future Class II facilities are shown on both Eight Mile Road and Thornton Road.

PUBLIC TRANSPORTATION

The San Joaquin Regional Transit District (SJRTD) is the primary provider of public transportation service in San Joaquin County, providing services to the Stockton metropolitan area, as well as inter-city, inter-regional, and rural transit service. SJRTD provides fixed-route, flexible fixed-route, and dial-a-ride services in Stockton (San Joaquin Regional Transit District 2016). Each service is described in more detail below.

- Stockton Metropolitan Area Fixed Route Service operates 40 fixed routes within the Stockton metropolitan area, and seven Saturday and Sunday routes.
- Intercity Fixed Route Service is provided by a route between Stockton and the Lodi Station in downtown Lodi connecting with Lodi Grapeline, Calaveras Transit, Delta Breeze, Sacramento South County Transit (SCT)/LINK buses.
- Interregional Commuter Service is a subscription commuter bus service. A total of eight routes connect San Joaquin County to Sacramento, the San Francisco Bay Area, and the Bay Area Rapid Transit (BART) system.
- SJRTD operates two Dial-a-Ride services. General Public Dial-A-Ride is a curbto-curb service in areas not currently being served by RTD or other local transportation providers. Passengers are required to use other public transportation options currently available in their area. Stockton Metro Area Dial-A-Ride (SMA-ADA) is a curb-to-curb service operating within the Stockton Metropolitan Area for passengers with an Americans with Disabilities Act (ADA) Certification.
- Hopper Service is a deviated fixed-route service connecting Stockton, Tracy, Lodi, Manteca, Ripon, and Lathrop. The Metro Hopper provides eight routes. The County Hopper provides four routes.





EXISTING AND FUTURE BIKEWAY PLAN Source: City of Stockton 2010

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The following is a description of existing SJRTD transit service in the vicinity of the project site (San Joaquin Regional Transit District 2016):

- Currently, route number 93 extends along Davis Road in a north-south direction from Stockton to Lodi.
- Currently, route number 66 operates along Thornton Road south of A.G. Spanos Boulevard, and along A.G. Spanos Boulevard west of Thornton Road. The route operates within approximately 500 feet of the Eight Mile Road & Thornton Road Convenience Center project site.

Figure 6 shows the future transit system presented in the City of Stockton General Plan (City of Stockton 2007). In the vicinity of the project site, **Figure 6** shows future bus rapid transit (BRT) Type 2 service along Thornton Road, and BRT Type 3 service along Eight Mile Road.

CARPOOLING AND VANPOOLING

Commute Connection is a Regional Rideshare Agency and a program of the San Joaquin Council of Governments (SJCOG). Commute Connection is an employer-based Travel Demand Management (TDM) program serving the three northern regions of the San Joaquin Valley; San Joaquin County since 1978, Stanislaus County since 1987 and Merced County since 2010. The program is designed to help commuters make the transition from driving alone to a convenient ridesharing option such as carpooling, vanpooling, bicycling/walking or riding transit. The program includes free services such as commuter ridematching, Guaranteed Ride Home and Employer Services. (Commute Connection 2016)





2035 STOCKTON GENERAL PLAN FUTURE TRANSIT NETWORK Source: City of Stockton 2007a

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Eight Mile Road & Thornton Road Convenience Center Traffic Impact Study

PARK AND RIDE FACILITIES

Park and Ride lots are free parking facilities for commuters to use as a convenient meeting place for carpools, transit, and vanpools. Park and Ride lots in the Stockton area are listed below (Commute Connection 2016).

- The Calvary First Church on Kelley Drive north of Hammer Lane lot provides a transit connection to the SJRTD Inter-Regional Bus. The lot provides 40 parking spaces and a bicycle locker.
- The Lifesong Church, 3034 Michigan Avenue lot provides a transit connection to the SJRTD Inter-Regional Bus. The lot provides 45 parking spaces.
- The I-5 at Benjamin Holt Drive; Marina Shopping Center lot provides a transit connection to the SJRTD Inter-Regional Bus. The lot provides 45 parking spaces.
- The Super Walmart Center, Hammer Lane and Sampson Street lot provides 50 parking spaces.
- The Morada Ranch Shopping Center lot is at SR 99 and Morada Lane. The lot provides 35 parking spaces.

STUDY AREA INTERSECTIONS

The traffic-related effects of the proposed project were assessed for this traffic impact study by analyzing traffic operations at intersections that would serve project-related travel. The following intersections were selected for analysis in consultation with City of Stockton staff.

- 1 Eight Mile Road & the I-5 Southbound Ramps
- 2 Eight Mile Road & the I-5 Northbound Ramps
- 3 Eight Mile Road & Thornton Road
- 4 Eight Mile Road & Rivermont Drive
- 5 Eight Mile Road & Davis Road
- 6 Thornton Road & A.G. Spanos Boulevard

The locations of the study intersections are presented in Figure 2. The numbers listed above correspond to the intersection numbers on Figure 2.

As noted earlier in the Proposed Land Uses and Access section of this traffic impact study, access to the project site would be provided by two driveways. Traffic operation of the access locations were analyzed as two study intersections under development conditions that included the proposed project:



- 7 Eight Mile Road & Project Site Driveway
- Thornton Road & Project Site Driveway 8

The locations of these two project site driveways are shown in **Figure 4**.

STUDY AREA ROADWAY SEGMENTS

In addition to analyzing intersections, the traffic-related effects of the proposed project on roadway segments were assessed for this traffic impact study. Major roadways adjacent to the project site, and roadways that would serve as access routes were analyzed. Roadway segments were selected for analysis in consultation with City of Stockton staff.

The following roadway segments were analyzed under all study scenarios:

- 1 Eight Mile Road – I-5 to Thornton Road
- 2 Eight Mile Road – Thornton Road to Davis Road
- Thornton Road Eight Mile Road to Bear Creek 3
- A.G. Spanos Boulevard Thornton Road to Ocean Mist Way 4
- 5 Ocean Mist Way / Breaker Way - A.G. Spanos Boulevard to Lands End Drive

METHODOLOGY

The following is a description of the methods used in the analysis presented in this traffic impact study.

Intersection Level of Service Analysis Procedures

Level of service (LOS) analysis provides a basis for describing existing traffic conditions and for evaluating the significance of project-related traffic impacts. Level of service measures the quality of traffic flow and is represented by letter designations from A to F, with a grade of A referring to the best conditions, and F representing the worst conditions. The characteristics associated with the various LOS for intersections are presented in Table 1.

Level of service at both signalized and unsignalized intersections was analyzed using methods presented in the Highway Capacity Manual. Methods described in the Highway Capacity Manual were used to provide a basis for describing traffic conditions and for evaluating the significance of project traffic impacts. As specified by City of Stockton staff, methods from the Highway Capacity Manual 2000 (Transportation Research Board 2000) were used to analyze local roadway intersections. As specified in the City of Stockton Transportation Impact Analysis Guidelines (City of Stockton 2003), the Traffix software analysis package was used to analyze local roadway intersections.



Caltrans District 10 recommends use of the Highway Capacity Manual 2010 (Transportation Research Board 2010) and the Synchro software package (Trafficware 2016). Therefore, as specified by City of Stockton staff, freeway ramp intersections were analyzed using *Highway* Capacity Manual 2010 methods and the Synchro software package.

The lengths of vehicle queues were also analyzed for this traffic impact study. Methods presented in the Highway Capacity Manual 2000 and Highway Capacity Manual 2010 were used to analyze queuing. 95th percentile queue length values are presented in this traffic impact study. The calculation of vehicles queues are shown in the LOS calculation worksheets presented in the technical appendix. The results are summarized at the end of each set of LOS calculation worksheets.

Worksheets and output reports for the calculation of LOS and vehicles queues are presented in the technical appendix.



Level of Service	Signalized Intersections	Unsignalized Intersections
А	Vehicle progression is exceptionally favorable or the cycle length is very short.	Little or no delay.
	$Delay \le 10.0$ seconds/vehicle	$Delay \le 10$ seconds/vehicle
В	Vehicle progression is highly favorable or the cycle length is short.	Short traffic delays.
	Delay > 10 seconds/vehicle and \leq 20 seconds/vehicle	Delay > 10 seconds/vehicle and \leq 15 seconds/vehicle
С	Vehicle progression is favorable or the cycle length is moderate. Individual cycle failures may begin to appear at this level.	Average traffic delays.
	Delay > 20 seconds/vehicle and \leq 35 seconds/vehicle	Delay > 15 seconds/vehicle and ≤ 25 seconds/vehicle
D	Vehicle progression is ineffective or the cycle length is long. Many vehicles stop and the individual cycle failures are noticeable.	Long traffic delays.
	Delay > 35 seconds/vehicle and \leq 55 seconds/vehicle	Delay > 25 seconds/vehicle and \leq 35 seconds/vehicle
Е	Vehicle progression is unfavorable and the cycle length is long. Individual cycle failures are frequent.	Very long traffic delays, failure, extreme congestion.
	Delay > 55 seconds/vehicle and ≤ 80 seconds/vehicle	Delay > 35 seconds/vehicle and \leq 50 seconds/vehicle
F	Vehicle progression is very poor and the cycle length is long. Most cycles fail to clear the vehicle queue.	Intersection blocked by external causes.
	Delay > 80 seconds/vehicle	Delay > 50 seconds/vehicle
Source: Tran	sportation Research Board 2000, and Transportation Re	esearch Board 2010.

Table 1. Level of Service Definitions - Intersections



Signal Warrants Procedures

Traffic signal warrants are a series of standards which provide guidelines for determining if a traffic signal is appropriate. Signal warrant analyses are typically conducted at intersections of uncontrolled major streets and stop sign-controlled minor streets. If one or more signal warrants are met, signalization of the intersection may be appropriate. However, a signal should not be installed if none of the warrants are met, since the installation of signals would increase delays on the previously-uncontrolled major street, resulting in an undesirable increase in overall vehicle delay at the intersection. Signalization may also increase the occurrence of particular types of accidents. Therefore, if signals are installed where signal warrants are not met, the detriment of increased accidents and overall delay may be greater than the benefit in traffic operating conditions on the single worst movement at the intersection. Signal warrants, then, provide an industry-standard basis for identifying when the adverse effect on the worst movement is substantial enough to warrant signalization.

For the traffic analysis conducted for this traffic impact study, available data are limited to a.m. and p.m. peak hour volumes. Thus, unsignalized intersections operating at poor LOS were evaluated using the Peak Hour Warrant (Warrant Number 3) from the California Department of Transportation document California Manual on Uniform Traffic Control Devices (California This warrant was applied where the minor street Department of Transportation 2014). experiences long delays in entering or crossing the major street for at least one hour of the day. The Peak Hour Warrant itself includes several components. Some of the components involve comparison of traffic volumes and vehicle delay to a series of standards. Another component involves comparison of traffic volumes to a nomograph.

Even if the Peak Hour Warrant is met, a more detailed signal warrant study is recommended before a signal is installed. The more detailed study should consider volumes during the eight highest hours of the day, volumes during the four highest hours of the day, pedestrian traffic, and accident histories.

Signal warrant analysis worksheets for all stop sign-controlled intersections are presented in the technical appendix.

Roadway Segment Level of Service Analysis Procedures

Roadway segment LOS was analyzed for this traffic impact study based on methods used in the City of Stockton General Plan analysis (Henry and Morgan pers. comm.). These methods set maximum daily traffic volume thresholds for each LOS designation. The thresholds are shown in Table 2.

As shown in **Table 2**, the roadway segment LOS analysis method sets separate thresholds for:

- different types of facilities (i.e., freeways, arterials, and collectors);
- different number of lanes; and
- different area types (i.e., new versus existing).



Facility Class	Lanes	Area Type	LOS A	LOS B	LOS C	LOS D	LOS E				
Fragman	4	A11 Aroos	27,600	45 200	62 600	77 400	86 400				
Fleeway	4	All Areas	27,000	43,200	05,000	116 100	80,400 120,600				
	0	All Areas	41,400	07,800	93,400	110,100	129,000				
	8	All Areas	55,200	90,400	127,200	154,800	1/2,800				
	10	All Areas	69,000	113,000	159,000	193,500	216,000				
1	2	D • /•	0.400	0.200	11.000	14,700	17 200				
Arterial	2	Existing	8,400	9,300	11,800	14,700	17,200				
	2	New	10,000	11,100	14,000	17,500	20,600				
	4	Existing	18,600	20,600	26,000	32,500	38,200				
	4	New	23,300	25,800	32,600	40,700	47,900				
	6	Existing	28,800	32,000	40,300	50,400	59,300				
	6	New	33,300	37,000	46,600	58,300	68,600				
	8	Existing	38,100	42,300	53,300	66,600	78,400				
	8	New	41,100	45,700	57,600	72,000	84,700				
Collector	2	Existing	6,400	7,100	9,000	11,300	13,200				
	2	New	6,400	7,100	9,000	11,300	13,200				
	4	Existing	17,600	19,600	24,700	30,900	36,300				
	4	New	21,100	23,500	29,600	37,000	43,500				
Source: Stoc Note: The	Source: Stockton General Plan Draft Environmental Impact Report (City of Stockton 2006). Note: The Stockton General Plan does not provide thresholds for local roads.										

Table 2. City of Stockton General Plan Roadway Segment Level of Service Thresholds

As described in Henry and Morgan pers. comm.,

"Thresholds for arterials and collectors were based on Highway Capacity Manual calculations and were developed in conjunction with City staff. The arterial thresholds distinguish between roads in the existing urbanized area and those in new development areas; because arterials in new development areas can be designed to higher standards, with medians, exclusive turn lanes, and controlled access from adjacent uses, the capacities are higher than those in previously-developed areas. Thresholds for freeways were based on Highway Capacity Manual procedures relating levels of service to vehicle density ranges."



As specified in Henry and Morgan pers. comm., the "Existing" area is generally located between I-5 and SR 99, south of Eight Mile Road. Eight Mile Road itself is considered a "New" arterial due to the lack of existing development in the area.

Travel Forecasting

As part of the General Plan Update process, the City of Stockton developed a series of travel demand forecasting simulation models (City of Stockton 2004b). Several different travel models were developed to simulate different background conditions. Travel models of the following two conditions were used to develop forecasts of future year traffic volumes for this traffic impact study:

- Existing Plus Approved Projects (EPAP), and
- 2035 Conditions with the Updated General Plan Preferred Alternative.

The travel model for the Updated General Plan Preferred Alternative was updated for analysis of the most recent Stockton Public Facility Fee (PFF) Projects program. This updated travel model is the version used in this traffic impact study.

The current version of the City's travel model produces forecasts of daily traffic volumes. The forecasts of daily volumes generated by the City's travel model are adequate for use in the analysis of roadway segment LOS, and are used for daily volume forecasts in this traffic impact study. However, the daily volumes generated by the traffic model are not, by themselves, adequate for use in the peak hour LOS analysis of study intersections.

Two methods were used to develop forecasts of future year peak hour intersection turning movement traffic volumes for this traffic impact study:

Method #1 was used at existing intersections that would not have legs added to the intersection in the future, and would not experience substantial unbalanced increases in traffic volumes (substantial increases in traffic volumes on some legs of the intersection, but not on other legs of the intersection). At these intersections, existing turning movement count data are available, and can be increased by application of model-generated growth factors.

Method #2 was used at new intersections, intersections that would have added legs in the future, or would experience substantial unbalanced increases in traffic volumes. At these intersections, existing turning movement count data are not available, or cannot be validly increased by application of model-generated growth factors.

Method #1. In Method #1, daily traffic volumes from the travel models were used to generate growth factors. These growth factors were applied to existing peak hour intersection turning movement traffic volumes. The development of future year intersection turning movement traffic





volumes requires that the turning movements at each intersection "balance". To achieve the balance, inbound traffic volumes must equal the outbound traffic volumes, and the volumes must be distributed among the various left-turn, through, and right-turn movements at each intersection. The "balancing" of future year intersection turning movement traffic volumes was conducted using methods described in the Transportation Research Board's (TRB's) National Cooperative Highway Research Program (NCHRP) Report 255, *Highway Traffic Data for Urbanized Area Project Planning and Design*. The NCHRP 255 method applies the desired peak hour directional volumes to the intersection turning movement volumes, using an iterative process to balance and adjust the resulting forecasts to match the desired peak hour directional volumes.

Method #2. Method #1 cannot be applied where existing turning movement traffic volumes for each leg of the intersection are not available. Also, at some intersections, the traffic model forecasts growth factors that are substantially different on each intersection leg. In these cases, the NCHRP 255 method by itself is not able to develop valid "balanced" turning movement forecast. In these cases, Method #2 was applied. Method #2 involves three steps:

- applying peak hour ratios to convert travel model-generated daily volumes into peak hour volumes;
- applying directional ratios to estimate, separately for each peak hour, how many vehicles travel in each direction, and
- applying the NCHRP 255 method to balance intersection turning movement volumes.

Traffic count data from 11 locations in the already-urbanized portion of the North Stockton area (e.g., along Hammer Lane) were used to determine the percent of daily traffic that travels during the a.m. peak hour, and during the p.m. peak hour. These measured percentages were applied to the City's model-estimated daily traffic volume to estimate, separately, a.m. peak hour volumes and p.m. peak hour volumes.

Measured traffic count data from 25 locations in the already urbanized portion of the North Stockton area were used to determine the direction of travel in each of the two peak hours. The count data were used to determine the "directional split", that is, the percent of traffic traveling in one direction as opposed to the other. Eastbound versus westbound directional splits, and northbound versus southbound directional splits, were determined separately for the a.m. peak hour and the p.m. peak hour.

The NCHRP 255 method was then applied to "balance" the directional peak hour traffic volumes at the intersection. In some cases, manual adjustment of the forecasted peak hour volumes was needed to develop reasonable intersection turning movement volumes.

In general, Method #1 was applied to develop peak hour forecasts for the EPAP background conditions, and Method #2 was applied to develop peak hour forecasts for Cumulative background conditions.



LEVEL OF SERVICE SIGNIFICANCE THRESHOLD

In this traffic impact study, the significance of the proposed project's impact on traffic operating conditions is based on a determination of whether resulting intersection or roadway segment LOS is considered acceptable by the City of Stockton. A project's impact on traffic conditions is considered significant if implementation of the project would result in LOS changing from levels considered acceptable to levels considered unacceptable, or if the project would substantially worsen already unacceptable LOS.

As noted in the City of Stockton Transportation Impact Analysis Guidelines (City of Stockton 2003),

"The City of Stockton's General Plan has a LOS 'D' standard for its roadway system. Intersections and roadway segments operating at LOS 'A', 'B', 'C', or 'D' conditions are considered acceptable, while those operating at LOS 'E' or 'F' conditions are considered unacceptable.

"For a City intersection, a transportation impact for a project is considered significant if the addition of project traffic would cause an intersection that would function at LOS 'D' or better without the Project to function at LOS 'E' or 'F'.

"For City intersections with a LOS 'E' or 'F' conditions without the project, a transportation impact for a project is considered significant if the addition of project traffic causes an increase of greater than 5 seconds in the average delay for the intersection."

Portions of the City's guidelines do not specifically address significance thresholds for roadway segments. For this traffic impact study, the City's significance thresholds described above are also applied to roadway segments. As shown in **Table 1** and **Table 2**, LOS at intersections is measured in seconds of delay, while LOS on roadway segments is measured in traffic volume. Therefore, for roadway segments already at LOS E or F, an increase of greater than five seconds of delay cannot be identified. Because roadway segment LOS is measured in traffic volumes, rather than seconds of delay, an increase in traffic volumes is used in this traffic impact study, in lieu of the threshold of five seconds of delay. For this traffic impact study, if a roadway segment operates at LOS E or F without the project, an impact is considered significant if the addition of project traffic causes an increase of greater than five percent in traffic volumes.

Interstate 5 is a facility under the jurisdiction of Caltrans. Caltrans has set an LOS D standard for I-5 (Dumas pers. comm.). At the direction of City staff, because I-5 is under the jurisdiction of Caltrans, LOS D is used as the LOS standard for the I-5 ramp intersections in this traffic impact study; LOS E and F are considered unacceptable.

This traffic impact study will be used in the preparation of a California Environmental Quality Act (CEQA) environmental document for the proposed project. In this traffic impact study, a project's impact will be considered significant if:



- the project would result in traffic operating conditions changing from an acceptable LOS to an unacceptable LOS, or
- when LOS without the project is already unacceptable, the project would result in a substantial degradation of traffic operating conditions (e.g., an increase of more than five seconds of delay at an intersection, or an increase of more than five percent in traffic volume on a roadway segment).

EXISTING INTERSECTION TRAFFIC VOLUMES AND LEVELS OF SERVICE

The following is a description of existing traffic operating conditions at the study intersections.

Intersection Traffic Volumes

Intersection turning movement count data at the study intersections were collected during the 7:00 a.m. to 9:00 a.m. period, and the 4:00 p.m. to 6:00 p.m. period. Data were collected on Wednesday May 6, 2015 at the following study intersections:

- 1 Eight Mile Road & the I-5 Southbound Ramps
- 2 Eight Mile Road & the I-5 Northbound Ramps
- 3 Eight Mile Road & Thornton Road
- 5 Eight Mile Road & Davis Road

Schools were in session at the time data were collected for the four intersections listed above. Data were collected at the following two intersections on Tuesday July 12, 2016 and Wednesday July 13, 2016, respectively:

- 4 Eight Mile Road & Rivermont Drive
- 6 Thornton Road & A.G. Spanos Boulevard

Schools were not in session at the time data were collected for the two intersections listed above. Therefore, traffic volumes at these two intersections were adjusted for use in this traffic impact study to match volumes collected for the intersection of Eight Mile Road & Thornton Road, where data were collected while schools were in session. Traffic count data collected for this traffic impact study are included in the technical appendix.

Figure 7 presents the existing lane configurations and existing a.m. peak hour and p.m. peak hour traffic volumes at the existing study intersections.





EXISTING CONDITIONS

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Intersection Traffic Volumes and Lane Configurations

Intersection Levels of Service

Table 3 presents a.m. peak hour and p.m. peak hour LOS at the six existing study intersections. The worksheets presenting the calculation of LOS are included in the technical appendix.

		Testeres	Signal	AM	Peak	PM Peak	
	Study Intersections	Control	Met?	LOS	Delay	LOS	Delay
1	Eight Mile Road & I-5 Southbound Ramps	Signal		В	12.5	В	15.4
2	Eight Mile Road & I-5 Northbound Ramps	Signal		C	26.7	В	18.9
3	Eight Mile Road & Thornton Road	Signal		С	32.1	С	31.2
4	Eight Mile Road & Rivermont Drive	Signal		В	10.2	В	10.6
5	Eight Mile Road & Davis Road	Signal		С	29.1	С	25.1
6	Thornton Road & A.G. Spanos Boulevard	Signal		С	25.8	С	20.7
7	Eight Mile Road & Project Site Driveway						
8	Thornton Road & Project Site Driveway						
No	 Notes: I-5 = Interstate 5. LOS = Level of Service. "Inters. Control" = Type of intersection control. "Signal" = Signalized light control. "Unsig" = Unsignalized stop-sign control. Dashes () indicate the intersection would not be present under this scenario. Delay is measured in seconds per vehicle. Per City of Stockton guidelines, intersection average delay is reported for all intersections, including unsignalized intersections. 						

Table 3. Intersection Level of Service - Existing Conditions

All six of the study intersections operate at acceptable LOS D or better during both the a.m. peak hour and the p.m. peak hour under Existing conditions. No improvements are needed at these intersections to achieve acceptable LOS.



EXISTING ROADWAY SEGMENT TRAFFIC VOLUMES AND LEVELS OF SERVICE

The following is a description of existing traffic operating conditions on study roadway segments.

Roadway Segment Traffic Volumes

Daily traffic volume count data at the five study roadway segments were collected for 24-hour periods on Wednesday July 6, 2016 and Thursday July 28, 2016.

Schools were not in session at the time data were collected for the study roadway segments. Therefore, daily traffic volume data for Eight Mile Road collected on July 6, 2016 were compared to daily traffic volume data at the same location collected on Tuesday May 5, 2015, when schools were in session. Daily traffic volume data for July 6, 2016 were found to be six percent greater than daily traffic volume data for May 5, 2015. Because the July 6, 2016 data were greater than the May 5, 2015 data, the July 6, 2016 data are used in the traffic impact study without adjustment.

Table 4 presents the existing daily traffic volumes for the five study roadway segments.

Roadway Segment Levels of Service

Table 4 presents a summary of existing LOS on the five existing study roadway segments. Four of the five study roadway segments operate at acceptable LOS D or better. No improvements are needed on these four roadway segments to achieve acceptable LOS. The following roadway segment operates at unacceptable LOS under Existing conditions.

Eight Mile Road - Thornton Road to Davis Road. This roadway segment operates at LOS E under Existing conditions. LOS E is considered unacceptable. The following improvement is recommended:

Widen Eight Mile Road - Thornton Road to Davis Road to four lanes.

It should be noted that approximately one-half of the length of Eight Mile Road between Thornton Road and Davis Road is already four lanes wide, and approximately three-quarters of westbound Eight Mile Road between Thornton Road and Davis Road is already two lanes wide. This recommended improvement would involve widening the entire length of Eight Mile Road between Thornton Road and Davis Road to four lanes wide.

With implementation of this recommended improvement, Eight Mile Road between Thornton Road and Davis Road would operate at LOS A with a 0.39 volume-to-capacity (v/c) ratio. This LOS is considered acceptable.



	Roadway Segment	Number of Lanes	Daily Capacity	Daily Volume	V/C Ratio	Level of Service
1	Eight Mile Road – Interstate 5 to Thornton Road	4	47,900	25,047	0.52	В
2	Eight Mile Road – Thornton Road to Davis Road	2	20,600	18,717	0.91	E
3	Thornton Road - Eight Mile Road to Bear Creek	4	38,200	12,882	0.34	А
4	A.G. Spanos Boulevard - Thornton Road to Ocean Mist Way	2	13,200	1,721	0.13	А
5	Ocean Mist Way / Breaker Way - A.G. Spanos Boulevard to Lands End	2	13,200	748	0.06	А
N	otes: "V/C Ratio" = volume-to-capacity ratio.					

Table 4. Roadway Segment Level of Service -**Existing Conditions**



EXISTING PLUS APPROVED PROJECTS NO PROJECT CONDITIONS

EPAP No Project conditions represent a near-term future background condition. Development of land uses and roadway improvements associated with previously-approved projects are assumed in this condition. This scenario does not include development of any of the proposed Eight Mile Road & Thornton Road Convenience Center project. The EPAP No Project condition, therefore, serves as the baseline condition used to assess the significance of near-term project-related traffic impacts.

TRAFFIC VOLUME FORECASTS

The City of Stockton Travel Demand Model (City of Stockton 2004b) was used to develop forecasts of background increases in traffic volumes under near-term EPAP conditions. The increases in traffic volumes reflect development of near-term previously-approved projects in Stockton.

A more detailed description of traffic volume forecasting methods is presented in the *Travel Forecasting* section of this traffic impact study. Application of these methods results in the daily traffic volumes presented in **Table 5** and the a.m. peak hour and p.m. peak hour traffic volumes presented in **Figure 8**.

ROADWAY IMPROVEMENTS

In consultation with City of Stockton staff, near-term roadway improvements were assumed for EPAP No Project conditions. City of Stockton staff provided specific lane geometrics for EPAP No Project conditions for the intersection of Eight Mile Road and Davis Road.

The resulting intersection lane geometrics assumed for EPAP No Project conditions are shown in **Figure 8**.

INTERSECTION LEVELS OF SERVICE

Table 6 presents the a.m. peak hour and p.m. peak hour LOS at each study intersection under EPAP No Project conditions. The worksheets presenting the calculation of LOS are included in the technical appendix.

Traffic volumes under EPAP No Project conditions would be generally higher than under Existing conditions and, as a result, vehicle delay at study intersections under EPAP No Project conditions would be higher than under Existing conditions.



	Roadway Segment	Number of Lanes	Daily Capacity	Daily Volume	V/C Ratio	Level of Service
1	Eight Mile Road – Interstate 5 to Thornton Road	4	47,900	25,396	0.53	В
2	Eight Mile Road – Thornton Road to Davis Road	2	20,600	18,878	0.92	E
3	Thornton Road - Eight Mile Road to Bear Creek	4	38,200	8,404	0.22	А
4	A.G. Spanos Boulevard - Thornton Road to Ocean Mist Way	2	13,200	1,864	0.14	А
5	Ocean Mist Way / Breaker Way - A.G. Spanos Boulevard to Lands End	2	13,200	810	0.06	А
No	otes: "V/C Ratio" = volume-to-capacity ratio.					

Table 5. Roadway Segment Level of Service -**EPAP No Project Conditions**



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EXISTING PLUS APPROVED PROJECTS NO PROPOSED PROJECT

KD Anderson & Associates, Inc. Transportation Engineers

Intersection Traffic Volumes and Lane Configurations

		Signal Inters. Warrant - Control Met?		AM	Peak	PM	Peak
	Study Intersections			LOS	Delay	LOS	Delay
1	Eight Mile Road & I-5 Southbound Ramps	Signal		D	40.0	В	19.9
2	Eight Mile Road & I-5 Northbound Ramps	Signal		С	29.5	С	30.2
3	Eight Mile Road & Thornton Road	Signal		С	34.1	С	32.1
4	Eight Mile Road & Rivermont Drive	Signal		В	14.0	В	19.9
5	Eight Mile Road & Davis Road	Signal		D	45.0	D	39.8
6	Thornton Road & A.G. Spanos Boulevard	Signal		С	25.8	С	20.7
7	Eight Mile Road & Project Site Driveway						
8	Thornton Road & Project Site Driveway						
 Notes: I-5 = Interstate 5. LOS = Level of Service. "Inters. Control" = Type of intersection control. "Signal" = Signalized light control. "Unsig" = Unsignalized stop-sign control. Dashes () indicate the intersection would not be present under this scenario. Delay is measured in seconds per vehicle. Per City of Stockton guidelines, intersection average delay is reported for all intersections, including unsignalized intersections. 							

Table 6. Intersection Level of Service - EPAP No Project Conditions

Under EPAP No Project conditions, LOS at all six study intersections would be at acceptable LOS D or better during both the a.m. peak hour and the p.m. peak hour. No improvements are needed at these six intersections to achieve acceptable LOS.



ROADWAY SEGMENT LEVELS OF SERVICE

Table 5 presents a summary of LOS on the five study roadway segments under EPAP No Project conditions. Four of the five roadway segments would operate at acceptable LOS D or better. No improvements are needed on these four roadway segments to achieve acceptable LOS. The following roadway segment would operate at unacceptable LOS.

Eight Mile Road – Thornton Road to Davis Road

Under EPAP No Project conditions, this roadway segment would operate at LOS E. LOS E is considered unacceptable. The following improvement is recommended:

Widen Eight Mile Road - Thornton Road to Davis Road to four lanes.

This improvement is also recommended under Existing conditions. With implementation of this recommended improvement, Eight Mile Road between Thornton Road and Davis Road would operate at LOS A with a 0.39 volume-to-capacity (v/c) ratio. This LOS is considered acceptable.



EXISTING PLUS APPROVED PROJECTS PLUS EIGHT MILE ROAD & THORNTON ROAD CONVENIENCE CENTER PROJECT IMPACTS

The development of the Eight Mile Road & Thornton Road Convenience Center project would result in vehicle traffic to and from the project site. The amount of additional traffic on a particular section of the street network is dependent upon three factors:

- <u>Trip Generation</u>, the number of new trips generated by the project,
- <u>Trip Distribution</u>, the direction of travel for the new traffic, and
- <u>Trip Assignment</u>, the specific routes used by the new traffic.

TRIP GENERATION

Development of the Eight Mile Road & Thornton Road Convenience Center project would generate new vehicle trips and potentially affect traffic operations at the study intersections. The number of vehicle trips that are expected to be generated by development of the proposed project has been estimated using typical trip generation rates that have been developed based on the nature and size of project land uses.

Data compiled by the Institute of Transportation Engineers (ITE) and presented in the publication *Trip Generation*, 9^{th} *Edition* (Institute of Transportation Engineers 2012) is the primary source of trip generation rates.

The trip generation rates used in this traffic impact study are presented in **Table 7**. The trip generation rates are applied to the amount of project-related land uses. The resulting trip generation estimates are presented in **Table 8**.

As shown in **Table 8**, the trip generation estimate has been adjusted to reflect:

- trips retained internally within the project site, made between the project's mixed land use components, and
- pass-by trips to the retail commercial portion of the project site on the southeast corner of the intersection of Eight Mile Road and Thornton Road, drawn from the flow of background (not project-related) traffic.

The mixed land use internal trip adjustment was made using methods specified in Chapter 7, *Mixed Use Development*, of the ITE document *Trip Generation Handbook*, 2^{nd} *Edition* (Institute of Transportation Engineers 2004). Worksheets presenting the assumptions and calculations used in estimating the mixed land use internal trip adjustment are presented in the technical appendix.



		Vehicle Trip Rates						
			AM	I Peak H	lour	PM	I Peak I	Iour
Land Use Category and ITE Land Use Code	Independent Variable	Daily	In	Out	Total	In	Out	Total
Retail (ITE 820 - Shopping Center)	1,000 Sq. Ft	42.70	0.60	0.36	0.96	1.78	1.93	3.71
Quick Service Restaurant (ITE 934 - Fast-Food Restaurant with Drive-Through Window)	1,000 Sq. Ft	496.12	23.16	22.26	45.42	16.98	15.67	32.65
am/pm Convenience Store (ITE 946 - Gasoline/Service Station with Convenience Market and Car Wash)	Vehicle Fueling Positions	152.84	6.04	5.80	11.84	7.07	6.79	13.86
High-Density Residential (ITE 223 - Mid-Rise Apartment [When Available], ITE 220 - Apartment [When Data for 223 Are Not Available])	Dwelling Unit	6.65	0.09	0.21	0.30	0.23	0.16	0.39
Notes: Totals may not equal the sum of the comp No daily rate available for ITE 223 - Mi Source: Institute of Transportation Engineers 20	oonents due to roundi d-Rise Apartment 12.	ng.						

Table 7. Trip Generation Rates for Eight Mile Road & Thornton Road Convenience Center Project



		Vehicle Trips						
	Amount		AM	I Peak F	Iour	PN	I Peak J	Hour
Land Use Category and ITE Land Use Code	of Land Use	Daily	In	Out	Total	In	Out	Total
Retail (ITE 820 - Shopping Center)	4.000 1,000 Sq. Ft	171	2	1	4	7	8	15
Quick Service Restaurant (ITE 934 - Fast-Food Restaurant with Drive-Through Window)	3.462 1,000 Sq. Ft	1,718	80	77	157	59	54	113
am/pm Convenience Store (ITE 946 - Gasoline/Service Station with Convenience Market and Car Wash)	16 Vehicle Fueling Positions	2,445	97	93	189	113	109	222
High-Density Residential (ITE 223 - Mid-Rise Apartment [When Available], ITE 220 - Apartment [When Data for 223 Are Not Available])	234 Dwelling Unit	1,556	21	49	70	54	37	91
Unadjusted Subtotal		5,890	200	220	420	233	208	441
Pass-By & Mixed Land Use Internal Tr	ip Reductions							
Retail (Pass-By) (ITE 820 - Shopping Center)		-26	0	0	-1	-2	-3	-5
Quick Service Restaurant (Pass-By) (ITE 934 - Fast-Food Restaurant with Drive-Through Window)		-842	-39	-38	-77	-30	-27	-57
am/pm Convenience Store (Pass-By) (ITE 946 - Gasoline/Service Station with Convenience Market and Car Wash)		-1,369	-60	-58	-117	-63	-61	-124
Mixed Land Use Internal Trip Reduction (For calculation, see the technical appendix)		-433	-8	-9	-17	-17	-16	-33
Adjusted Total		3,220	93	115	208	121	101	222
Notes: Totals may not equal the sum of the comp Mixed land use internal trip calculation b Pass-by percentages based on Institute of	onents due to roundin based on Institute of 7 f Transportation Eng	ng. Fransportatic ineers 2012,	on Engine and Caltr	ers 2012 rans 2002	2.			

Table 8. Trip Generation Estimates for Eight Mile Road & Thornton Road Convenience Center Project



The pass-by trip adjustment was made using methods specified in the ITE document Trip Generation Handbook, 2nd Edition (Institute of Transportation Engineers 2004), and the Caltrans document Guide for the Preparation of Traffic Impact Studies (California Department of Transportation 2002). The Trip Generation Handbook specifies the methods used in applying passby adjustments.

As shown in **Table 8**, the proposed project would generate an estimated 3,220 vehicle trips per day, with 208 trips during the a.m. peak hour and 222 trips during the p.m. peak hour.

TRIP DISTRIBUTION

Project-related trips were geographically distributed over the study area roadway network. The distribution of trips is based on the relative attractiveness or utility of possible destinations. Trip distribution percentages applied in this traffic impact study are presented in Table 9.

The City's travel demand model (City of Stockton 2004b) was used to estimate trip distribution percentages. The travel demand model is considered to be a valid source for the trip distribution percentages because it directly addresses:

- the location of destinations of project-related trips,
- the magnitude of land uses that would attract project-related trips, and
- the quality of access to the destinations via the roadway network.

This traffic impact study includes analysis of scenarios based on two different background development conditions:

- Existing Plus Approved Projects (EPAP), and
- 2035 General Plan Cumulative Conditions.

The City's travel demand model for each of these two scenarios was used to estimate trip distribution percentages. Background (non-project) land uses are assumed to be different in each of the two travel demand models. The different land uses result in different geographic distributions of travel. As a result, the trip distribution percentages are different for each of the two background development conditions. Table 9 presents the trip distribution percentages for each of the two background development scenarios.

A "select link" analysis was conducted using each of the two travel demand models to determine the geographic distribution of project-related travel. The select link analysis identifies vehicle trips associated with the project site, and identifies the direction of travel to and from the project site. Adjustment of the raw results from the travel demand models, where needed, was applied.

The trip distribution methodology described above was developed in consultation with City of Stockton staff. Raw, pre-adjustment, traffic model results used in the development of trip distribution percentages are presented in the technical appendix.



Direction of Travel	Existing Plus Approved Projects Background	Cumulative Background
North on Interstate 5	2	2
West on Eight Mile Road	13	15
South on Interstate 5	12	7
North of Eight Mile Rd between I-5 & Thornton Rd		2
South of Eight Mile Rd between I-5 & Thornton Rd	10	10
North on Thornton Road	1	18
South on Thornton Road	30	19
North of Eight Mile Rd between Thornton Rd & Davis Rd		3
South of Eight Mile Rd between Thornton Rd & Davis Rd	14	8
North on Davis Road	1	3
South on Davis Road	5	4
East on Eight Mile Road	12	9
TOTAL	4 100	100
Source: City of Stockton 2004b and KD Anderson & Associates. Note: All values rounded to the nearest whole percentage. Dashes ("-	-") indicate value is less that	n one percent.

Table 9. Trip Distribution Percentages



TRIP ASSIGNMENT

Traffic that would be generated by the proposed project was added to EPAP No Project volumes. Figure 9 displays the project-related-only traffic volumes for each study intersection in the a.m. peak hour and p.m. peak hour. Figure 10 displays the resulting EPAP Plus Eight Mile Road & Thornton Road Convenience Center project traffic volumes anticipated for each study intersection in the peak hours.

Table 10 displays daily traffic volumes for study roadway segments under EPAP Plus Eight Mile Road & Thornton Road Convenience Center conditions.

INTERSECTION LEVELS OF SERVICE

Table 11 presents the a.m. peak hour and p.m. peak hour LOS at each study intersection under EPAP Plus Eight Mile Road & Thornton Road Convenience Center project conditions. The worksheets presenting the calculation of LOS are included in the technical appendix.

Traffic volumes under EPAP Plus Project conditions would be generally higher than under EPAP No Project conditions and, as a result, vehicle delay at study intersections under EPAP Plus Project conditions would be higher than under EPAP No Project conditions.

Under EPAP Plus Project conditions, LOS at all eight study intersections would be at acceptable LOS D or better during both the a.m. peak hour and the p.m. peak hour. This impact is considered to be less than significant. No mitigation measures are required.

ROADWAY SEGMENT LEVELS OF SERVICE

Table 10 presents a summary of LOS on the five study roadway segments under EPAP Plus Project conditions. Four of the five roadway segments would operate at acceptable LOS D or better. The impact of the proposed project on these four roadway segments is considered to be less than significant. No mitigation measures are required.

Eight Mile Road – Thornton Road to Davis Road

Under EPAP Plus Project conditions, the roadway segment Eight Mile Road from Thornton Road to Davis Road would operate at LOS E. LOS E is considered unacceptable. However, the project would not result in an increase in traffic volume greater than five percent. Therefore, based on criteria presented in the Level of Service Significance Threshold section of this traffic impact study, this impact is considered to be less than significant. No mitigation measures are required.







PROJECT RELATED TRIPS KD Anderson & Associates, Inc. EXISTING PLUS APPROVED PROJECTS BACKGROUND

5525-001 7/18/2017

Eight Mile Road & Thornton Road Convenience Center Traffic Impact Study



EXISTING PLUS APPROVED PROJECTS PLUS PROPOSED PROJECT

KD Anderson & Associates, Inc. Transportation Engineers Intersection Traffic Volumes and Lane Configurations

	Roadway Segment	Number of Lanes	Daily Capacity	Daily Volume	V/C Ratio	Level of Service
1	Fight Mile Road –	4	47 900	26 265	0.55	C
1	Interstate 5 to Thornton Road	-	47,900	20,203	0.55	C
2	Eight Mile Road – Thornton Road to Davis Road	2	20,600	19,332	0.94	E
3	Thornton Road - Eight Mile Road to Bear Creek	4	38,200	9,570	0.25	А
4	AG Spanos Boulevard - Thornton Road to Ocean Mist Way	2	13,200	2,759	0.21	А
5	Ocean Mist Way / Breaker Way - A.G. Spanos Boulevard to Lands End	2	13,200	1,301	0.10	А
No	otes: "V/C Ratio" = volume-to-capacity ratio.					

Table 10. Roadway Segment Level of Service -**EPAP Plus Project Conditions**



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		Ter 4 a ser	Signal	AM	Peak	PM	Peak	
	Study Intersections	Control	Warrant Met?	LOS	Delay	LOS	Delay	
1	Eight Mile Road & I-5 Southbound Ramps	Signal		D	39.8	В	19.9	
2	Eight Mile Road & I-5 Northbound Ramps	Signal		С	29.7	С	30.3	
3	Eight Mile Road & Thornton Road	Signal		D	35.3	С	33.7	
4	Eight Mile Road & Rivermont Drive	Signal		В	14.4	С	20.8	
5	Eight Mile Road & Davis Road	Signal		D	46.3	D	41.0	
6	Thornton Road & A.G. Spanos Boulevard	Signal		С	26.7	С	21.6	
7	Eight Mile Road & Project Site Driveway	Unsig	No	А	0.6	А	0.6	
8	Thornton Road & Project Site Driveway	Unsig	No	А	0.9	А	0.8	
 No	Notes: I-5 = Interstate 5. LOS = Level of Service. "Inters. Control" = Type of intersection control.							

Table 11. Intersection Level of Service - EPAP Plus Project Conditions

"Signal" = Signalized light control. "Unsig" = Unsignalized stop-sign control. Dashes (- -) indicate the intersection would not be present under this scenario.

Delay is measured in seconds per vehicle.

Per City of Stockton guidelines, intersection average delay is reported for all intersections, including unsignalized intersections.



INCREASE IN DEMAND FOR TRANSIT

Implementation of the proposed Eight Mile Road & Thornton Road Convenience Center project would result in an increase in demand for public transit service. Currently, there is limited direct public transit service to the project site, with SJRTD route number 66 providing service approximately 500 feet south of the project site. While development of project-related urban uses would result in an increase in demand, the frequency and proximity of future transit service is not known at this time and, as a result, demand for transit cannot be quantified. However, it is expected that SJRTD can accommodate the additional passengers the project would generate. This is considered a less-than-significant impact. No mitigation measures are required.

INCREASE IN DEMAND FOR BICYCLE AND PEDESTRIAN FACILITIES

Implementation of the Eight Mile Road & Thornton Road Convenience Center project would result in an increase in demand for bicycle and pedestrian facilities. As noted in the *Existing Setting* section of this traffic impact study, sidewalks are present on the project site frontage along both Eight Mile Road and Thornton Road. The project site frontage sidewalks connect to sidewalks extending east along Eight Mile Road and south along Thornton Road. These sidewalks would provide safe facilities for bicycle and pedestrian travel along Eight Mile Road and Thornton Road. Therefore, the increase in demand for facilities is considered a less-than-significant impact. No mitigation measures would be required.
CUMULATIVE NO PROJECT CONDITIONS

Cumulative No Project conditions represent a long-term future background condition. Development of land uses and roadway improvements associated with the City of Stockton General Plan in the year 2035 are assumed in this condition. This scenario does not include development of the retail commercial portion of the Eight Mile Road & Thornton Road Convenience Center project. The Cumulative No Project condition, therefore, serves as the baseline condition used to assess the significance of long-term project-related traffic impacts.

The Cumulative No Project condition assumes implementation of the City of Stockton General Plan. The sources of information on the land use and roadway improvements assumed in the analysis of Cumulative No Project condition are:

- website • the City Stockton internet for the General Plan of (http://www.stocktongov.com/government/departments/communityDevelop/cdPla nGen.html);
- documentation of the City's travel demand model, in particular the General Plan Update Preferred Alternative 2035 model (City of Stockton 2004b); and
- consultation with City of Stockton staff, providing clarification, updates, and details on assumed roadway widths.

TRAFFIC VOLUME FORECASTS

As previously described in the *Travel Forecasting* section of this traffic impact study, the City of Stockton Travel Demand Model (City of Stockton 2004b) was used to develop forecasts of background increases in traffic volumes under Cumulative No Project conditions. The increases in traffic volumes reflect development of land uses consistent with the City of Stockton General Plan.

As previously described in the *Proposed Land Uses and Access* section of this traffic impact study, the multiple-family residential portion of the project is consistent with the current General Plan and zoning designations for the project site. As a result, vehicle travel associated with the multiplefamily residential portion of the project is included in the City of Stockton travel model and, therefore, included both in the Cumulative No Project traffic forecasts and in background traffic volume forecasts for the Cumulative Plus Project conditions.

Application of the methods described in the *Travel Forecasting* section results in the a.m. peak hour and p.m. peak hour traffic volumes presented in Figure 11, and the daily traffic volumes presented in Table 12.





CUMULATIVE NO PROJECT

KD Anderson & Associates, Inc. Transportation Engineers

7/18/2017

5525-001

Intersection Traffic Volumes and Lane Configurations

	Roadway Segment	Number of Lanes	Daily Capacity	Daily Volume	V/C Ratio	Level of Service			
1	Eight Mile Road – Interstate 5 to Thornton Road	8	84,700	54,569	0.64	С			
2	Eight Mile Road – Thornton Road to Davis Road	8	84,700	53,730	0.63	С			
3	Thornton Road - Eight Mile Road to Bear Creek	6	59,300	17,033	0.29	А			
4	A.G. Spanos Boulevard - Thornton Road to Ocean Mist Way	2	13,200	2,812	0.21	А			
5	Ocean Mist Way / Breaker Way - A.G. Spanos Boulevard to Lands End	2	13,200	1,222	0.09	А			
No	Notes: "V/C Ratio" = volume-to-capacity ratio.								

Table 12. Roadway Segment Level of Service -**Cumulative No Project Conditions**



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ROADWAY IMPROVEMENTS

The analysis of Cumulative No Project conditions assumes roadway improvements consistent with the City of Stockton General Plan. For example, the General Plan assumes urban land uses north of Eight Mile Road. Roadway network improvements needed to support the additional land use development is also assumed.

The roadway assumptions also assume implementation of the following:

- Eight Mile Road Specific Plan from Interstate Rte. 5 to State Rte. 99, and
- Thornton Road Preliminary Design from Bear Creek Bridge to Rivara Road.

In some cases, the roadway improvements described above include intersection improvements. For example, the Eight Mile Road Specific Plan from Interstate Rte. 5 to State Rte. 99 includes adding a north leg to the current "T" intersection of Eight Mile Road and Rivermont Drive.

At some locations, City of Stockton staff directed use of specific roadway improvement assumptions. In these cases, City staff direction was considered to be more up-to-date than the plans described above, and were applied in the traffic analysis.

The resulting intersection lane geometrics assumed for Cumulative No Project conditions are shown in Figure 11. The resulting number of travel lanes assumed for study roadway segments are shown in **Table 12**.

INTERSECTION LEVELS OF SERVICE

Table 13 presents the a.m. peak hour and p.m. peak hour LOS at each study intersection under Cumulative No Project conditions. The worksheets presenting the calculation of LOS are included in the technical appendix.

Traffic volumes under Cumulative No Project conditions would be generally higher than under Existing conditions and, as a result, vehicle delay at study intersections under Cumulative No Project conditions would be higher than under Existing conditions.

Under Cumulative No Project condition, LOS at five of the six study intersections would be at acceptable LOS D or better during both the a.m. peak hour and the p.m. peak hour. No improvements are needed at these intersections.



		Signal Inters Warrant	AM Peak		PM Peak			
	Study Intersections	Control	Warrant Met?	LOS	Delay	LOS	Delay	
1	Eight Mile Road & I-5 Southbound Ramps	Signal		В	17.7	D	47.9	
2	Eight Mile Road & I-5 Northbound Ramps	Signal		С	23.4	Е	62.7	
3	Eight Mile Road & Thornton Road	Signal		С	31.9	D	50.4	
4	Eight Mile Road & Rivermont Drive	Signal		А	9.4	А	9.8	
5	Eight Mile Road & Davis Road	Signal		С	31.7	D	39.9	
6	Thornton Road & A.G. Spanos Boulevard	Signal		С	25.6	С	30.2	
7	Eight Mile Road & Project Site Driveway							
8	Thornton Road & Project Site Driveway							
 Notes: I-5 = Interstate 5. LOS = Level of Service. "Inters. Control" = Type of intersection control. "Signal" = Signalized light control. "Unsig" = Unsignalized stop-sign control. Dashes () indicate the intersection would not be present under this scenario. Delay is measured in seconds per vehicle. Per City of Stockton guidelines, intersection average delay is reported for all intersections, including unsignalized intersections. 								

Table 13. Intersection Level of Service - Cumulative No Project Conditions



<u>#2 – Eight Mile Road & I-5 Northbound Ramps</u>

Under Cumulative No Project condition, this intersection would operate at LOS C with 23.4 seconds of delay during the a.m. peak hour, and LOS E with 62.7 seconds of delay during the p.m. peak hour. LOS E is considered unacceptable. The following improvement is recommended:

• Add a third northbound-to-westbound left-turn lane. This would result in two exclusive left-turn lanes, and a combined through/left-turn lane on the northbound approach.

With this recommended improvement, this intersection would operate at LOS D with 36.0 seconds of delay during the p.m. peak hour. LOS D is considered acceptable.

The worksheets presenting the calculation of LOS with recommended improvements are included in the technical appendix.

ROADWAY SEGMENT LEVELS OF SERVICE

Table 12 presents a summary of LOS on the five study roadway segments under Cumulative No Project conditions. All five roadway segments would operate at acceptable LOS D or better. No improvements are needed on these five roadway segments to achieve acceptable LOS.



<u>CUMULATIVE PLUS EIGHT MILE ROAD & THORNTON ROAD</u> <u>CONVENIENCE CENTER PROJECT IMPACTS</u>

The analysis of the Cumulative Plus Eight Mile Road & Thornton Road Convenience Center project development condition describes long-term traffic operations assuming implementation of both the City of Stockton General Plan and the proposed project. Comparing traffic operations under this condition to traffic operations under Cumulative No Project conditions allows an identification of the long-term project-related effects of the proposed project.

The development of the Eight Mile Road & Thornton Road Convenience Center project would result in vehicle traffic to and from the project site. Methods used to estimate project-related travel have been previously described in the *Existing Plus Approved Projects Plus Eight Mile Road & Thornton Road Convenience Center Project Impacts* section of this traffic impact study. **Figure 12** displays the project-related-only traffic volumes for each study intersection in the a.m. peak hour and p.m. peak hour under long-term Cumulative background conditions. **Figure 13** displays the resulting Cumulative Plus Project traffic volumes anticipated for each study intersection in the peak hours. **Table 14** displays the resulting Cumulative Plus Project roadway segment daily traffic volumes.

It should be noted that traffic volumes for the Cumulative No Project condition, shown in **Figure 11**, include traffic associated with land uses assumed in the City of Stockton travel model for the project site. As previously described in the *Proposed Land Uses and Access* section of this traffic impact study, the multiple-family residential portion of the project is consistent with the current General Plan and zoning designations for the project site. As a result, vehicle travel associated with the multiple-family residential portion of the project is included in the City of Stockton travel model and, therefore, included both in the Cumulative No Project traffic forecasts and in background traffic volume forecasts for the Cumulative Plus Project conditions.

To develop the traffic volumes shown in **Figure 13**, project-related vehicle trips shown in **Figure 12** were added to Cumulative background traffic volumes that did not include development of the retail commercial portion of the project site. Background volumes used to develop the values shown in **Figure 13** were developed by removing land uses from the retail commercial portion of the project site in the Cumulative travel model. This approach to developing the traffic volumes shown in **Figure 13** avoids double-counting project-related trips. However, as a result of the approach used, adding project-related travel shown in **Figure 12** to Cumulative No Project traffic volumes shown in **Figure 11** will not result in the Cumulative Plus Project traffic volumes shown in **Figure 13**.

Development of forecasts of future year background traffic volumes has been previously described in the *Cumulative No Project Conditions* section of this traffic impact study.





KD Anderson & Associates, Inc. Transportation Engineers

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PROJECT RELATED TRIPS CUMULATIVE BACKGROUND



CUMULATIVE PLUS PROJECT ersection Traffic Volumes and Lane Configuration

KD Anderson & Associates, Inc. Transportation Engineers Intersection Traffic Volumes and Lane Configurations

	Roadway Segment	Number of Lanes	Daily Capacity	Daily Volume	V/C Ratio	Level of Service
1	Eight Mile Road – Interstate 5 to Thornton Road	8	84,700	55,018	0.65	С
2	Eight Mile Road – Thornton Road to Davis Road	8	84,700	53,965	0.64	С
3	Thornton Road - Eight Mile Road to Bear Creek	6	59,300	17,541	0.30	А
4	AG Spanos Boulevard - Thornton Road to Ocean Mist Way	2	13,200	2,892	0.22	А
5	Ocean Mist Way / Breaker Way - A.G. Spanos Boulevard to Lands End	2	13,200	1,304	0.10	А
Not	tes: "V/C Ratio" = volume-to-capacity ratio.	I				

Table 14. Roadway Segment Level of Service -**Cumulative Plus Project Conditions**

Project-related roadway improvements and future year background roadway improvements assumed in this analysis have been previously described in the Existing Plus Approved Projects Plus Eight Mile Road & Thornton Road Convenience Center Project Impacts and the Cumulative No Project Conditions sections of this traffic impact study, respectively.



1

INTERSECTION LEVELS OF SERVICE

Table 15 presents the a.m. peak hour and p.m. peak hour LOS at each study intersection under Cumulative Plus Eight Mile Road & Thornton Road Convenience Center project conditions. The worksheets presenting the calculation of LOS are included in the technical appendix.

Traffic volumes under Cumulative Plus Eight Mile Road & Thornton Road Convenience Center project conditions would be generally higher than under Cumulative No Project conditions and, as a result, vehicle delay at study intersections under Cumulative Plus Project conditions would be higher than under Cumulative No Project conditions.

Under Cumulative Plus Project conditions, LOS at seven of the eight study intersections would be at acceptable LOS D or better during both the a.m. peak hour and the p.m. peak hour. No improvements are needed at these seven intersections to achieve acceptable LOS.

<u>#2 – Eight Mile Road & I-5 Northbound Ramps</u>

Under Cumulative Plus Project conditions, this intersection would operate at LOS C with 23.4 seconds of delay during the a.m. peak hour, and LOS E with 63.4 seconds of delay during the p.m. peak hour. LOS E is considered unacceptable. However, the increase in delay from Cumulative No Project conditions is not greater than five seconds. Therefore, based on criteria presented in the Level of Service Significance Threshold section of this traffic impact study, this impact is considered less than significant and no mitigation measures are required.

ROADWAY SEGMENT LEVELS OF SERVICE

Table 14 presents a summary of LOS on the five study roadway segments under Cumulative Plus Project conditions. All five study roadway segments would operate at acceptable LOS D or better. Therefore, the impact on these roadway segments is considered to be less than significant. No mitigation measures are needed at these roadway segments.



		Sig Intona Way	Signal	AM Peak		PM Peak		
	Study Intersections	Control	Met?	LOS	Delay	LOS	Delay	
1	Eight Mile Road & I-5 Southbound Ramps	Signal		В	17.9	D	48.4	
2	Eight Mile Road & I-5 Northbound Ramps	Signal		С	23.5	Е	63.6	
3	Eight Mile Road & Thornton Road	Signal		С	32.8	D	52.9	
4	Eight Mile Road & Rivermont Drive	Signal		A	9.7	В	10.2	
-		~-8						
5	Eight Mile Road & Davis Road	Signal		С	31.7	D	39.9	
6	Thornton Road & A.G. Spanos Boulevard	Signal		С	25.5	С	30.3	
7	Eight Mile Road & Project Site Driveway	Unsig	No	А	0.3	А	0.3	
8	Thornton Road & Project Site Driveway	Unsig	Yes	А	0.6	А	0.7	
 No	Notes: I-5 = Interstate 5. LOS = Level of Service. "Inters. Control" = Type of intersection control.							

Table 15. Intersection Level of Service - Cumulative Plus Project Conditions

"Signal" = Signalized light control. "Unsig" = Unsignalized stop-sign control.

Dashes (- -) indicate the intersection would not be present under this scenario.

Delay is measured in seconds per vehicle.

Per City of Stockton guidelines, intersection average delay is reported for all intersections, including unsignalized intersections.



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APPENDICES

(see Electronic Files)

