APPENDIX 3.3-1

Air Quality Modeling

Delano DMV

San Joaquin Valley Unified APCD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Government Office Building	11.00	1000sqft	0.25	11,000.00	0
Other Asphalt Surfaces	57.78	1000sqft	1.33	57,784.00	0
Parking Lot	84.00	Space	0.76	33,600.00	0
City Park	0.66	Acre	0.66	28,749.60	0

1.2 Other Project Characteristics

Urbanization	Rural	**Wind Speed (m/s)**	2.7	**Precipitation Freq (Days)**	45
Climate Zone	3			**Operational Year**	2022
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	592.74	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Includes 33% RPS target by 2020.

Land Use - Based on project site plan and project description.

Construction Phase - Based on applicant provided data.

Off-road Equipment - Based on applicant provided information.

Off-road Equipment - Based on applicant provided information.

Off-road Equipment - Based on applicant provided information.

Off-road Equipment - Based on applicant provided information.

Off-road Equipment - Based on applicant provided information.

Off-road Equipment - Based on applicant provided information.

Trips and VMT - Based on applicant provided data.

On-road Fugitive Dust - CalEEMod defaults.

Grading - Based on applicant provided information.

Architectural Coating - CalEEMod defaults.

Vehicle Trips - Based on 824 daily trips from transportation impact analysis.

Consumer Products - CalEEMod defaults.

Area Coating - CalEEMod defaults.

Landscape Equipment - CalEEMod defaults.

Energy Use - CalEEMod defaults.

Water And Wastewater - CalEEMod defaults.

Solid Waste - CalEEMod defaults.

Construction Off-road Equipment Mitigation - watering twice daily

Energy Mitigation - Project includes a 100 kW solar PV system. 5% improvement over Title 24 per LEED scorecard.

Water Mitigation - No landscaping irrigation proposed. 35% indoor water use reduction per LEED scorecard.

Waste Mitigation - In accordance with AB 341.

Operational Off-Road Equipment -

Mobile Land Use Mitigation -

Mobile Commute Mitigation -

Delano DMV - San Joaquin Valley Unified APCD Air District, Annual

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	3.00	60.00
tblConstructionPhase	NumDays	220.00	300.00
tblConstructionPhase	NumDays	10.00	40.00
tblConstructionPhase	NumDays	10.00	40.00
tblGrading	MaterialImported	0.00	3,507.00
tblLandUse	LandUseSquareFeet	57,780.00	57,784.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	PhaseName		Earthwork and Site Preparation
tblOffRoadEquipment	UsageHours	8.00	5.00
tblProjectCharacteristics	CO2IntensityFactor	702.44	592.74
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblTripsAndVMT	HaulingTripLength	20.00	41.58
tblTripsAndVMT	HaulingTripLength	20.00	41.58
tblTripsAndVMT	HaulingTripLength	20.00	41.58
tblTripsAndVMT	HaulingTripNumber	438.00	208.00
tblTripsAndVMT	HaulingTripNumber	0.00	216.00
tblTripsAndVMT	HaulingTripNumber	0.00	186.00
tblTripsAndVMT	VendorTripNumber	21.00	22.00
tblTripsAndVMT	WorkerTripNumber	11.00	12.00
tblVehicleTrips	ST_TR	22.75	0.00
tblVehicleTrips	ST_TR	0.00	74.91
tblVehicleTrips	SU_TR	16.74	0.00
tblVehicleTrips	WD_TR	1.89	0.00
tblVehicleTrips	WD_TR	68.93	74.91

2.0 Emissions Summary

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	tons/yr										MT/yr					
2021	0.4026	3.8057	3.0480	7.0100e-003	0.2373	0.1710	0.4083	0.0956	0.1598	0.2554	0.0000	621.0654	621.0654	0.1232	0.0000	624.1440
2022	0.1761	0.6711	0.7687	1.4800e-003	0.0280	0.0319	0.0599	7.5300e-003	0.0300	0.0375	0.0000	129.7750	129.7750	0.0261	0.0000	130.4265
Maximum	**0.4026**	**3.8057**	**3.0480**	**7.0100e-003**	**0.2373**	**0.1710**	**0.4083**	**0.0956**	**0.1598**	**0.2554**	**0.0000**	**621.0654**	**621.0654**	**0.1232**	**0.0000**	**624.1440**

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	tons/yr										MT/yr					
2021	0.4026	3.8057	3.0480	7.0100e-003	0.1751	0.1710	0.3461	0.0614	0.1598	0.2212	0.0000	621.0648	621.0648	0.1232	0.0000	624.1435
2022	0.1761	0.6711	0.7687	1.4800e-003	0.0280	0.0319	0.0599	7.5300e-003	0.0300	0.0375	0.0000	129.7749	129.7749	0.0261	0.0000	130.4264
Maximum	**0.4026**	**3.8057**	**3.0480**	**7.0100e-003**	**0.1751**	**0.1710**	**0.3461**	**0.0614**	**0.1598**	**0.2212**	**0.0000**	**621.0648**	**621.0648**	**0.1232**	**0.0000**	**624.1435**

	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	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**23.45**	**0.00**	**13.29**	**33.13**	**0.00**	**11.67**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	**1-4-2021**	**4-3-2021**	1.3996	1.3996
2	**4-4-2021**	**7-3-2021**	1.0199	1.0199
3	**7-4-2021**	**10-3-2021**	1.0312	1.0312
4	**10-4-2021**	**1-3-2022**	0.7458	0.7458
5	**1-4-2022**	**4-3-2022**	0.8147	0.8147
		Highest	1.3996	1.3996

2.2 Overall Operational

Unmitigated Operational

	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	tons/yr										MT/yr					
Area	0.0588	1.0000e-005	1.4100e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	2.7400e-003	2.7400e-003	1.0000e-005	0.0000	2.9200e-003
Energy	7.7000e-004	7.0400e-003	5.9100e-003	4.0000e-005		5.3000e-004	5.3000e-004		5.3000e-004	5.3000e-004	0.0000	37.7945	37.7945	1.6200e-003	4.5000e-004	37.9678
Mobile	0.2142	2.3197	1.9213	9.3200e-003	0.5333	7.8100e-003	0.5412	0.1434	7.3700e-003	0.1508	0.0000	866.6360	866.6360	0.0694	0.0000	868.3706
Waste						0.0000	0.0000		0.0000	0.0000	2.0888	0.0000	2.0888	0.1234	0.0000	5.1749
Water						0.0000	0.0000		0.0000	0.0000	0.6933	5.1795	5.8728	0.0715	1.7300e-003	8.1759
Total	**0.2738**	**2.3268**	**1.9286**	**9.3600e-003**	**0.5333**	**8.3500e-003**	**0.5417**	**0.1434**	**7.9100e-003**	**0.1514**	**2.7821**	**909.6127**	**912.3947**	**0.2659**	**2.1800e-003**	**919.6921**

2.2 Overall Operational

Mitigated Operational

	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	tons/yr										MT/yr					
Area	0.0588	1.0000e-005	1.4100e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	2.7400e-003	2.7400e-003	1.0000e-005	0.0000	2.9200e-003
Energy	7.4000e-004	6.6900e-003	5.6200e-003	4.0000e-005		5.1000e-004	5.1000e-004		5.1000e-004	5.1000e-004	0.0000	-6.5434	-6.5434	-0.0005	0.0000	-6.5587
Mobile	0.2107	2.2792	1.8555	8.9500e-003	0.5067	7.4900e-003	0.5142	0.1363	7.0700e-003	0.1433	0.0000	832.5363	832.5363	0.0686	0.0000	834.2510
Waste						0.0000	0.0000		0.0000	0.0000	0.5222	0.0000	0.5222	0.0309	0.0000	1.2937
Water						0.0000	0.0000		0.0000	0.0000	0.4506	2.0664	2.5171	0.0464	1.1100e-003	4.0086
Total	**0.2703**	**2.2859**	**1.8626**	**8.9900e-003**	**0.5067**	**8.0100e-003**	**0.5147**	**0.1363**	**7.5900e-003**	**0.1439**	**0.9728**	**828.0622**	**829.0350**	**0.1453**	**1.1000e-003**	**832.9976**

	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	N20	CO2e
Percent Reduction	**1.27**	**1.76**	**3.42**	**3.95**	**5.00**	**4.07**	**4.99**	**5.00**	**4.05**	**4.96**	**65.03**	**8.97**	**9.14**	**45.36**	**49.54**	**9.43**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Earthwork and Site Preparation	Site Preparation	1/4/2021	3/26/2021	5	60	
2	Trenching (off-site utilities)	Trenching	1/4/2021	3/26/2021	5	60	
3	Building Construction	Building Construction	1/18/2021	3/11/2022	5	300	
4	Trenching (on-site utilities)	Trenching	3/27/2021	10/8/2021	5	140	
5	Paving	Paving	1/17/2022	3/11/2022	5	40	
6	Architectural Coating	Architectural Coating	1/17/2022	3/11/2022	5	40	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 2.09

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 16,500; Non-Residential Outdoor: 5,500; Striped Parking Area: 5,483 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Earthwork and Site Preparation		1	7.40	80	0.38
Earthwork and Site Preparation	Rubber Tired Dozers	1	5.00	247	0.40
Earthwork and Site Preparation	Rubber Tired Loaders	1	7.40	203	0.36
Earthwork and Site Preparation	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Trenching (on-site utilities)	Excavators	1	3.40	158	0.38
Trenching (on-site utilities)	Rubber Tired Dozers	1	3.40	247	0.40
Trenching (on-site utilities)	Rubber Tired Loaders	1	4.40	203	0.36
Trenching (off-site utilities)	Excavators	1	7.80	158	0.38
Trenching (off-site utilities)	Rubber Tired Loaders	1	10.20	203	0.36
Trenching (off-site utilities)	Rubber Tired Loaders	1	7.80	203	0.36

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
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Cement and Mortar Mixers	2	6.00	9	0.56
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	2	6.00	132	0.36
Paving	Rollers	2	6.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48
	Earthwork and Site Preparation				5.00
	Trenching (off-site utilities)				5.00
	Building Construction				5.00
	Trenching (on-site utilities)				5.00
	Paving				5.00
	Architectural Coating				5.00

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
Earthwork and Site Preparation	3	8.00	0.00	208.00	16.80	6.60	41.58	LD_Mix	HDT_Mix	HHDT
Trenching (on-site utilities)	3	8.00	0.00	216.00	16.80	6.60	41.58	LD_Mix	HDT_Mix	HHDT
Trenching (off-site utilities)	3	8.00	0.00	186.00	16.80	6.60	41.58	LD_Mix	HDT_Mix	HHDT
Building Construction	9	54.00	22.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Paving	8	20.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	12.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Earthwork and Site Preparation - 2021

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	tons/yr										MT/yr					
Fugitive Dust					0.1132	0.0000	0.1132	0.0621	0.0000	0.0621	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0291	0.3129	0.1201	3.3000e-004		0.0136	0.0136		0.0125	0.0125	0.0000	29.3092	29.3092	9.4800e-003	0.0000	29.5462
Total	**0.0291**	**0.3129**	**0.1201**	**3.3000e-004**	**0.1132**	**0.0136**	**0.1267**	**0.0621**	**0.0125**	**0.0746**	**0.0000**	**29.3092**	**29.3092**	**9.4800e-003**	**0.0000**	**29.5462**

3.2 Earthwork and Site Preparation - 2021

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	tons/yr										MT/yr					
Hauling	1.4000e-003	0.0442	7.3100e-003	1.6000e-004	3.7000e-003	1.7000e-004	3.8700e-003	1.0200e-003	1.7000e-004	1.1800e-003	0.0000	14.8652	14.8652	4.8000e-004	0.0000	14.8772
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	1.3000e-003	9.1000e-004	9.2100e-003	3.0000e-005	2.9800e-003	2.0000e-005	3.0000e-003	7.9000e-004	2.0000e-005	8.1000e-004	0.0000	2.5604	2.5604	7.0000e-005	0.0000	2.5621
Total	**2.7000e-003**	**0.0451**	**0.0165**	**1.9000e-004**	**6.6800e-003**	**1.9000e-004**	**6.8700e-003**	**1.8100e-003**	**1.9000e-004**	**1.9900e-003**	**0.0000**	**17.4256**	**17.4256**	**5.5000e-004**	**0.0000**	**17.4393**

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	tons/yr										MT/yr					
Fugitive Dust					0.0509	0.0000	0.0509	0.0280	0.0000	0.0280	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0291	0.3129	0.1201	3.3000e-004		0.0136	0.0136		0.0125	0.0125	0.0000	29.3092	29.3092	9.4800e-003	0.0000	29.5462
Total	**0.0291**	**0.3129**	**0.1201**	**3.3000e-004**	**0.0509**	**0.0136**	**0.0645**	**0.0280**	**0.0125**	**0.0404**	**0.0000**	**29.3092**	**29.3092**	**9.4800e-003**	**0.0000**	**29.5462**

3.2 Earthwork and Site Preparation - 2021

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	tons/yr										MT/yr					
Hauling	1.4000e-003	0.0442	7.3100e-003	1.6000e-004	3.7000e-003	1.7000e-004	3.8700e-003	1.0200e-003	1.7000e-004	1.1800e-003	0.0000	14.8652	14.8652	4.8000e-004	0.0000	14.8772
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	1.3000e-003	9.1000e-004	9.2100e-003	3.0000e-005	2.9800e-003	2.0000e-005	3.0000e-003	7.9000e-004	2.0000e-005	8.1000e-004	0.0000	2.5604	2.5604	7.0000e-005	0.0000	2.5621
Total	**2.7000e-003**	**0.0451**	**0.0165**	**1.9000e-004**	**6.6800e-003**	**1.9000e-004**	**6.8700e-003**	**1.8100e-003**	**1.9000e-004**	**1.9900e-003**	**0.0000**	**17.4256**	**17.4256**	**5.5000e-004**	**0.0000**	**17.4393**

3.3 Trenching (off-site utilities) - 2021

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	tons/yr										MT/yr					
Off-Road	0.0299	0.3238	0.2036	5.7000e-004		0.0118	0.0118		0.0108	0.0108	0.0000	50.3337	50.3337	0.0163	0.0000	50.7407
Total	**0.0299**	**0.3238**	**0.2036**	**5.7000e-004**		**0.0118**	**0.0118**		**0.0108**	**0.0108**	**0.0000**	**50.3337**	**50.3337**	**0.0163**	**0.0000**	**50.7407**

3.3 Trenching (off-site utilities) - 2021

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	tons/yr										MT/yr					
Hauling	1.2500e-003	0.0395	6.5400e-003	1.4000e-004	3.3100e-003	1.6000e-004	3.4600e-003	9.1000e-004	1.5000e-004	1.0600e-003	0.0000	13.2929	13.2929	4.3000e-004	0.0000	13.3037
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	1.3000e-003	9.1000e-004	9.2100e-003	3.0000e-005	2.9800e-003	2.0000e-005	3.0000e-003	7.9000e-004	2.0000e-005	8.1000e-004	0.0000	2.5604	2.5604	7.0000e-005	0.0000	2.5621
Total	**2.5500e-003**	**0.0404**	**0.0158**	**1.7000e-004**	**6.2900e-003**	**1.8000e-004**	**6.4600e-003**	**1.7000e-003**	**1.7000e-004**	**1.8700e-003**	**0.0000**	**15.8533**	**15.8533**	**5.0000e-004**	**0.0000**	**15.8657**

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	tons/yr										MT/yr					
Off-Road	0.0299	0.3238	0.2036	5.7000e-004		0.0118	0.0118		0.0108	0.0108	0.0000	50.3336	50.3336	0.0163	0.0000	50.7406
Total	**0.0299**	**0.3238**	**0.2036**	**5.7000e-004**		**0.0118**	**0.0118**		**0.0108**	**0.0108**	**0.0000**	**50.3336**	**50.3336**	**0.0163**	**0.0000**	**50.7406**

3.3 Trenching (off-site utilities) - 2021

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	tons/yr										MT/yr					
Hauling	1.2500e-003	0.0395	6.5400e-003	1.4000e-004	3.3100e-003	1.6000e-004	3.4600e-003	9.1000e-004	1.5000e-004	1.0600e-003	0.0000	13.2929	13.2929	4.3000e-004	0.0000	13.3037
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	1.3000e-003	9.1000e-004	9.2100e-003	3.0000e-005	2.9800e-003	2.0000e-005	3.0000e-003	7.9000e-004	2.0000e-005	8.1000e-004	0.0000	2.5604	2.5604	7.0000e-005	0.0000	2.5621
Total	**2.5500e-003**	**0.0404**	**0.0158**	**1.7000e-004**	**6.2900e-003**	**1.8000e-004**	**6.4600e-003**	**1.7000e-003**	**1.7000e-004**	**1.8700e-003**	**0.0000**	**15.8533**	**15.8533**	**5.0000e-004**	**0.0000**	**15.8657**

3.4 Building Construction - 2021

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	tons/yr										MT/yr					
Off-Road	0.2376	2.1790	2.0719	3.3600e-003		0.1198	0.1198		0.1127	0.1127	0.0000	289.5466	289.5466	0.0699	0.0000	291.2930
Total	**0.2376**	**2.1790**	**2.0719**	**3.3600e-003**		**0.1198**	**0.1198**		**0.1127**	**0.1127**	**0.0000**	**289.5466**	**289.5466**	**0.0699**	**0.0000**	**291.2930**

3.4 Building Construction - 2021

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	tons/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	8.3900e-003	0.2917	0.0529	7.2000e-004	0.0165	7.8000e-004	0.0173	4.7600e-003	7.5000e-004	5.5100e-003	0.0000	68.2062	68.2062	5.5800e-003	0.0000	68.3457
Worker	0.0367	0.0256	0.2591	8.0000e-004	0.0839	5.5000e-004	0.0845	0.0223	5.1000e-004	0.0228	0.0000	72.0122	72.0122	1.8400e-003	0.0000	72.0581
Total	**0.0451**	**0.3172**	**0.3121**	**1.5200e-003**	**0.1004**	**1.3300e-003**	**0.1017**	**0.0271**	**1.2600e-003**	**0.0283**	**0.0000**	**140.2184**	**140.2184**	**7.4200e-003**	**0.0000**	**140.4038**

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	tons/yr										MT/yr					
Off-Road	0.2376	2.1790	2.0719	3.3600e-003		0.1198	0.1198		0.1127	0.1127	0.0000	289.5463	289.5463	0.0699	0.0000	291.2926
Total	**0.2376**	**2.1790**	**2.0719**	**3.3600e-003**		**0.1198**	**0.1198**		**0.1127**	**0.1127**	**0.0000**	**289.5463**	**289.5463**	**0.0699**	**0.0000**	**291.2926**

3.4 Building Construction - 2021

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	tons/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	8.3900e-003	0.2917	0.0529	7.2000e-004	0.0165	7.8000e-004	0.0173	4.7600e-003	7.5000e-004	5.5100e-003	0.0000	68.2062	68.2062	5.5800e-003	0.0000	68.3457
Worker	0.0367	0.0256	0.2591	8.0000e-004	0.0839	5.5000e-004	0.0845	0.0223	5.1000e-004	0.0228	0.0000	72.0122	72.0122	1.8400e-003	0.0000	72.0581
Total	**0.0451**	**0.3172**	**0.3121**	**1.5200e-003**	**0.1004**	**1.3300e-003**	**0.1017**	**0.0271**	**1.2600e-003**	**0.0283**	**0.0000**	**140.2184**	**140.2184**	**7.4200e-003**	**0.0000**	**140.4038**

3.4 Building Construction - 2022

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	tons/yr										MT/yr					
Off-Road	0.0427	0.3904	0.4091	6.7000e-004		0.0202	0.0202		0.0190	0.0190	0.0000	57.9313	57.9313	0.0139	0.0000	58.2783
Total	**0.0427**	**0.3904**	**0.4091**	**6.7000e-004**		**0.0202**	**0.0202**		**0.0190**	**0.0190**	**0.0000**	**57.9313**	**57.9313**	**0.0139**	**0.0000**	**58.2783**

3.4 Building Construction - 2022

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	tons/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	1.5600e-003	0.0554	9.7600e-003	1.4000e-004	3.3000e-003	1.4000e-004	3.4300e-003	9.5000e-004	1.3000e-004	1.0800e-003	0.0000	13.5145	13.5145	1.0800e-003	0.0000	13.5415
Worker	6.8000e-003	4.5700e-003	0.0473	1.5000e-004	0.0168	1.1000e-004	0.0169	4.4600e-003	1.0000e-004	4.5600e-003	0.0000	13.8873	13.8873	3.3000e-004	0.0000	13.8955
Total	**8.3600e-003**	**0.0599**	**0.0570**	**2.9000e-004**	**0.0201**	**2.5000e-004**	**0.0203**	**5.4100e-003**	**2.3000e-004**	**5.6400e-003**	**0.0000**	**27.4018**	**27.4018**	**1.4100e-003**	**0.0000**	**27.4370**

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	tons/yr										MT/yr					
Off-Road	0.0427	0.3904	0.4091	6.7000e-004		0.0202	0.0202		0.0190	0.0190	0.0000	57.9312	57.9312	0.0139	0.0000	58.2782
Total	**0.0427**	**0.3904**	**0.4091**	**6.7000e-004**		**0.0202**	**0.0202**		**0.0190**	**0.0190**	**0.0000**	**57.9312**	**57.9312**	**0.0139**	**0.0000**	**58.2782**

3.4 Building Construction - 2022

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	tons/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	1.5600e-003	0.0554	9.7600e-003	1.4000e-004	3.3000e-003	1.4000e-004	3.4300e-003	9.5000e-004	1.3000e-004	1.0800e-003	0.0000	13.5145	13.5145	1.0800e-003	0.0000	13.5415
Worker	6.8000e-003	4.5700e-003	0.0473	1.5000e-004	0.0168	1.1000e-004	0.0169	4.4600e-003	1.0000e-004	4.5600e-003	0.0000	13.8873	13.8873	3.3000e-004	0.0000	13.8955
Total	**8.3600e-003**	**0.0599**	**0.0570**	**2.9000e-004**	**0.0201**	**2.5000e-004**	**0.0203**	**5.4100e-003**	**2.3000e-004**	**5.6400e-003**	**0.0000**	**27.4018**	**27.4018**	**1.4100e-003**	**0.0000**	**27.4370**

3.5 Trenching (on-site utilities) - 2021

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	tons/yr										MT/yr					
Off-Road	0.0512	0.5392	0.2790	6.5000e-004		0.0239	0.0239		0.0220	0.0220	0.0000	56.9673	56.9673	0.0184	0.0000	57.4279
Total	**0.0512**	**0.5392**	**0.2790**	**6.5000e-004**		**0.0239**	**0.0239**		**0.0220**	**0.0220**	**0.0000**	**56.9673**	**56.9673**	**0.0184**	**0.0000**	**57.4279**

3.5 Trenching (on-site utilities) - 2021

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	tons/yr										MT/yr					
Hauling	1.4600e-003	0.0459	7.5900e-003	1.6000e-004	3.8400e-003	1.8000e-004	4.0200e-003	1.0600e-003	1.7000e-004	1.2300e-003	0.0000	15.4369	15.4369	5.0000e-004	0.0000	15.4494
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	3.0400e-003	2.1200e-003	0.0215	7.0000e-005	6.9600e-003	5.0000e-005	7.0100e-003	1.8500e-003	4.0000e-005	1.8900e-003	0.0000	5.9743	5.9743	1.5000e-004	0.0000	5.9782
Total	**4.5000e-003**	**0.0480**	**0.0291**	**2.3000e-004**	**0.0108**	**2.3000e-004**	**0.0110**	**2.9100e-003**	**2.1000e-004**	**3.1200e-003**	**0.0000**	**21.4113**	**21.4113**	**6.5000e-004**	**0.0000**	**21.4276**

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	tons/yr										MT/yr					
Off-Road	0.0512	0.5392	0.2790	6.5000e-004		0.0239	0.0239		0.0220	0.0220	0.0000	56.9672	56.9672	0.0184	0.0000	57.4278
Total	**0.0512**	**0.5392**	**0.2790**	**6.5000e-004**		**0.0239**	**0.0239**		**0.0220**	**0.0220**	**0.0000**	**56.9672**	**56.9672**	**0.0184**	**0.0000**	**57.4278**

3.5 Trenching (on-site utilities) - 2021

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	tons/yr										MT/yr					
Hauling	1.4600e-003	0.0459	7.5900e-003	1.6000e-004	3.8400e-003	1.8000e-004	4.0200e-003	1.0600e-003	1.7000e-004	1.2300e-003	0.0000	15.4369	15.4369	5.0000e-004	0.0000	15.4494
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	3.0400e-003	2.1200e-003	0.0215	7.0000e-005	6.9600e-003	5.0000e-005	7.0100e-003	1.8500e-003	4.0000e-005	1.8900e-003	0.0000	5.9743	5.9743	1.5000e-004	0.0000	5.9782
Total	**4.5000e-003**	**0.0480**	**0.0291**	**2.3000e-004**	**0.0108**	**2.3000e-004**	**0.0110**	**2.9100e-003**	**2.1000e-004**	**3.1200e-003**	**0.0000**	**21.4113**	**21.4113**	**6.5000e-004**	**0.0000**	**21.4276**

3.6 Paving - 2022

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	tons/yr										MT/yr					
Off-Road	0.0195	0.1904	0.2439	3.8000e-004		9.7500e-003	9.7500e-003		9.0100e-003	9.0100e-003	0.0000	32.7517	32.7517	0.0103	0.0000	33.0090
Paving	2.7400e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0223**	**0.1904**	**0.2439**	**3.8000e-004**		**9.7500e-003**	**9.7500e-003**		**9.0100e-003**	**9.0100e-003**	**0.0000**	**32.7517**	**32.7517**	**0.0103**	**0.0000**	**33.0090**

3.6 Paving - 2022

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	tons/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	2.0200e-003	1.3500e-003	0.0140	5.0000e-005	4.9700e-003	3.0000e-005	5.0000e-003	1.3200e-003	3.0000e-005	1.3500e-003	0.0000	4.1148	4.1148	1.0000e-004	0.0000	4.1172
Total	**2.0200e-003**	**1.3500e-003**	**0.0140**	**5.0000e-005**	**4.9700e-003**	**3.0000e-005**	**5.0000e-003**	**1.3200e-003**	**3.0000e-005**	**1.3500e-003**	**0.0000**	**4.1148**	**4.1148**	**1.0000e-004**	**0.0000**	**4.1172**

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	tons/yr										MT/yr					
Off-Road	0.0195	0.1904	0.2439	3.8000e-004		9.7500e-003	9.7500e-003		9.0100e-003	9.0100e-003	0.0000	32.7517	32.7517	0.0103	0.0000	33.0090
Paving	2.7400e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0223**	**0.1904**	**0.2439**	**3.8000e-004**		**9.7500e-003**	**9.7500e-003**		**9.0100e-003**	**9.0100e-003**	**0.0000**	**32.7517**	**32.7517**	**0.0103**	**0.0000**	**33.0090**

3.6 Paving - 2022

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	tons/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	2.0200e-003	1.3500e-003	0.0140	5.0000e-005	4.9700e-003	3.0000e-005	5.0000e-003	1.3200e-003	3.0000e-005	1.3500e-003	0.0000	4.1148	4.1148	1.0000e-004	0.0000	4.1172
Total	**2.0200e-003**	**1.3500e-003**	**0.0140**	**5.0000e-005**	**4.9700e-003**	**3.0000e-005**	**5.0000e-003**	**1.3200e-003**	**3.0000e-005**	**1.3500e-003**	**0.0000**	**4.1148**	**4.1148**	**1.0000e-004**	**0.0000**	**4.1172**

3.7 Architectural Coating - 2022

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	tons/yr										MT/yr					
Archit. Coating	0.0955					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.0900e-003	0.0282	0.0363	6.0000e-005		1.6300e-003	1.6300e-003		1.6300e-003	1.6300e-003	0.0000	5.1065	5.1065	3.3000e-004	0.0000	5.1148
Total	**0.0996**	**0.0282**	**0.0363**	**6.0000e-005**		**1.6300e-003**	**1.6300e-003**		**1.6300e-003**	**1.6300e-003**	**0.0000**	**5.1065**	**5.1065**	**3.3000e-004**	**0.0000**	**5.1148**

3.7 Architectural Coating - 2022

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	tons/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	1.2100e-003	8.1000e-004	8.4100e-003	3.0000e-005	2.9800e-003	2.0000e-005	3.0000e-003	7.9000e-004	2.0000e-005	8.1000e-004	0.0000	2.4689	2.4689	6.0000e-005	0.0000	2.4703
Total	**1.2100e-003**	**8.1000e-004**	**8.4100e-003**	**3.0000e-005**	**2.9800e-003**	**2.0000e-005**	**3.0000e-003**	**7.9000e-004**	**2.0000e-005**	**8.1000e-004**	**0.0000**	**2.4689**	**2.4689**	**6.0000e-005**	**0.0000**	**2.4703**

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	tons/yr										MT/yr					
Archit. Coating	0.0955					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.0900e-003	0.0282	0.0363	6.0000e-005		1.6300e-003	1.6300e-003		1.6300e-003	1.6300e-003	0.0000	5.1065	5.1065	3.3000e-004	0.0000	5.1148
Total	**0.0996**	**0.0282**	**0.0363**	**6.0000e-005**		**1.6300e-003**	**1.6300e-003**		**1.6300e-003**	**1.6300e-003**	**0.0000**	**5.1065**	**5.1065**	**3.3000e-004**	**0.0000**	**5.1148**

3.7 Architectural Coating - 2022

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	tons/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	1.2100e-003	8.1000e-004	8.4100e-003	3.0000e-005	2.9800e-003	2.0000e-005	3.0000e-003	7.9000e-004	2.0000e-005	8.1000e-004	0.0000	2.4689	2.4689	6.0000e-005	0.0000	2.4703
Total	**1.2100e-003**	**8.1000e-004**	**8.4100e-003**	**3.0000e-005**	**2.9800e-003**	**2.0000e-005**	**3.0000e-003**	**7.9000e-004**	**2.0000e-005**	**8.1000e-004**	**0.0000**	**2.4689**	**2.4689**	**6.0000e-005**	**0.0000**	**2.4703**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Increase Density

Improve Destination Accessibility

	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	tons/yr										MT/yr					
Mitigated	0.2107	2.2792	1.8555	8.9500e-003	0.5067	7.4900e-003	0.5142	0.1363	7.0700e-003	0.1433	0.0000	832.5363	832.5363	0.0686	0.0000	834.2510
Unmitigated	0.2142	2.3197	1.9213	9.3200e-003	0.5333	7.8100e-003	0.5412	0.1434	7.3700e-003	0.1508	0.0000	866.6360	866.6360	0.0694	0.0000	868.3706

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.00	0.00	0.00		
Government Office Building	824.00	824.00	0.00	1,398,740	1,328,803
Other Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Total	824.00	824.00	0.00	1,398,740	1,328,803

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
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
City Park	14.70	6.60	6.60	33.00	48.00	19.00	66	28	6
Government Office Building	14.70	6.60	6.60	33.00	62.00	5.00	50	34	16
Other Asphalt Surfaces	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
Parking Lot	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.511925	0.031902	0.170344	0.119204	0.018408	0.005097	0.021580	0.111258	0.001794	0.001564	0.005229	0.000954	0.000741
Government Office Building	0.511925	0.031902	0.170344	0.119204	0.018408	0.005097	0.021580	0.111258	0.001794	0.001564	0.005229	0.000954	0.000741
Other Asphalt Surfaces	0.511925	0.031902	0.170344	0.119204	0.018408	0.005097	0.021580	0.111258	0.001794	0.001564	0.005229	0.000954	0.000741
Parking Lot	0.511925	0.031902	0.170344	0.119204	0.018408	0.005097	0.021580	0.111258	0.001794	0.001564	0.005229	0.000954	0.000741

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

Kilowatt Hours of Renewable Electricity Generated

	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	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	-13.8289	-13.8289	-0.0007	-0.0001	-13.8876
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	30.1341	30.1341	1.4700e-003	3.1000e-004	30.2619
NaturalGas Mitigated	7.4000e-004	6.6900e-003	5.6200e-003	4.0000e-005		5.1000e-004	5.1000e-004		5.1000e-004	5.1000e-004	0.0000	7.2856	7.2856	1.4000e-004	1.3000e-004	7.3289
NaturalGas Unmitigated	7.7000e-004	7.0400e-003	5.9100e-003	4.0000e-005		5.3000e-004	5.3000e-004		5.3000e-004	5.3000e-004	0.0000	7.6604	7.6604	1.5000e-004	1.4000e-004	7.7059

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas 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	tons/yr										MT/yr					
City Park	0	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
Government Office Building	143550	7.7000e-004	7.0400e-003	5.9100e-003	4.0000e-005		5.3000e-004	5.3000e-004		5.3000e-004	5.3000e-004	0.0000	7.6604	7.6604	1.5000e-004	1.4000e-004	7.7059
Other Asphalt Surfaces	0	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
Parking Lot	0	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
Total		**7.7000e-004**	**7.0400e-003**	**5.9100e-003**	**4.0000e-005**		**5.3000e-004**	**5.3000e-004**		**5.3000e-004**	**5.3000e-004**	**0.0000**	**7.6604**	**7.6604**	**1.5000e-004**	**1.4000e-004**	**7.7059**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas 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	tons/yr										MT/yr					
City Park	0	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
Government Office Building	136526	7.4000e-004	6.6900e-003	5.6200e-003	4.0000e-005		5.1000e-004	5.1000e-004		5.1000e-004	5.1000e-004	0.0000	7.2856	7.2856	1.4000e-004	1.3000e-004	7.3289
Other Asphalt Surfaces	0	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
Parking Lot	0	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
Total		**7.4000e-004**	**6.6900e-003**	**5.6200e-003**	**4.0000e-005**		**5.1000e-004**	**5.1000e-004**		**5.1000e-004**	**5.1000e-004**	**0.0000**	**7.2856**	**7.2856**	**1.4000e-004**	**1.3000e-004**	**7.3289**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000
Government Office Building	100320	26.9723	1.3200e-003	2.7000e-004	27.0866
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	11760	3.1618	1.5000e-004	3.0000e-005	3.1752
Total		**30.1341**	**1.4700e-003**	**3.0000e-004**	**30.2619**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
City Park	-40518.5	-10.8939	-0.0005	-0.0001	-10.9401
Government Office Building	58360.5	15.6909	7.7000e-004	1.6000e-004	15.7575
Other Asphalt Surfaces	-40518.5	-10.8939	-0.0005	-0.0001	-10.9401
Parking Lot	-28758.5	-7.7321	-0.0004	-0.0001	-7.7649
Total		**-13.8289**	**-0.0007**	**-0.0001**	**-13.8876**

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	tons/yr										MT/yr					
Mitigated	0.0588	1.0000e-005	1.4100e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	2.7400e-003	2.7400e-003	1.0000e-005	0.0000	2.9200e-003
Unmitigated	0.0588	1.0000e-005	1.4100e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	2.7400e-003	2.7400e-003	1.0000e-005	0.0000	2.9200e-003

6.2 Area by SubCategory

Unmitigated

	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	9.5500e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0491					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.3000e-004	1.0000e-005	1.4100e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	2.7400e-003	2.7400e-003	1.0000e-005	0.0000	2.9200e-003
Total	**0.0588**	**1.0000e-005**	**1.4100e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**	**0.0000**	**2.7400e-003**	**2.7400e-003**	**1.0000e-005**	**0.0000**	**2.9200e-003**

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	9.5500e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0491					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.3000e-004	1.0000e-005	1.4100e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	2.7400e-003	2.7400e-003	1.0000e-005	0.0000	2.9200e-003
Total	**0.0588**	**1.0000e-005**	**1.4100e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**	**0.0000**	**2.7400e-003**	**2.7400e-003**	**1.0000e-005**	**0.0000**	**2.9200e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

Apply Water Conservation Strategy

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	2.5171	0.0464	1.1100e-003	4.0086
Unmitigated	5.8728	0.0715	1.7300e-003	8.1759

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 0.786378	0.7400	4.0000e-005	1.0000e-005	0.7431
Government Office Building	2.18526 / 1.33935	5.1328	0.0714	1.7300e-003	7.4328
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**5.8728**	**0.0715**	**1.7400e-003**	**8.1759**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 0	0.0000	0.0000	0.0000	0.0000
Government Office Building	1.42042 / 0	2.5171	0.0464	1.1100e-003	4.0086
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**2.5171**	**0.0464**	**1.1100e-003**	**4.0086**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.5222	0.0309	0.0000	1.2937
Unmitigated	2.0888	0.1234	0.0000	5.1749

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	0.06	0.0122	7.2000e-004	0.0000	0.0302
Government Office Building	10.23	2.0766	0.1227	0.0000	5.1447
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**2.0888**	**0.1234**	**0.0000**	**5.1749**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	0.015	3.0400e-003	1.8000e-004	0.0000	7.5400e-003
Government Office Building	2.5575	0.5192	0.0307	0.0000	1.2862
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**0.5222**	**0.0309**	**0.0000**	**1.2937**

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

Delano DMV

San Joaquin Valley Unified APCD Air District, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Government Office Building	11.00	1000sqft	0.25	11,000.00	0
Other Asphalt Surfaces	57.78	1000sqft	1.33	57,784.00	0
Parking Lot	84.00	Space	0.76	33,600.00	0
City Park	0.66	Acre	0.66	28,749.60	0

1.2 Other Project Characteristics

Urbanization	Rural	**Wind Speed (m/s)**	2.7	**Precipitation Freq (Days)**	45
Climate Zone	3			**Operational Year**	2022
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	592.74	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Includes 33% RPS target by 2020.

Land Use - Based on project site plan and project description.

Construction Phase - Based on applicant provided data.

Off-road Equipment - Based on applicant provided information.

Off-road Equipment - Based on applicant provided information.

Off-road Equipment - Based on applicant provided information.

Off-road Equipment - Based on applicant provided information.

Off-road Equipment - Based on applicant provided information.

Off-road Equipment - Based on applicant provided information.

Trips and VMT - Based on applicant provided data.

On-road Fugitive Dust - CalEEMod defaults.

Grading - Based on applicant provided information.

Architectural Coating - CalEEMod defaults.

Vehicle Trips - Based on 824 daily trips from transportation impact analysis.

Consumer Products - CalEEMod defaults.

Area Coating - CalEEMod defaults.

Landscape Equipment - CalEEMod defaults.

Energy Use - CalEEMod defaults.

Water And Wastewater - CalEEMod defaults.

Solid Waste - CalEEMod defaults.

Construction Off-road Equipment Mitigation - watering twice daily

Energy Mitigation - Project includes a 100 kW solar PV system. 5% improvement over Title 24 per LEED scorecard.

Water Mitigation - No landscaping irrigation proposed. 35% indoor water use reduction per LEED scorecard.

Waste Mitigation - In accordance with AB 341.

Operational Off-Road Equipment -

Mobile Land Use Mitigation -

Mobile Commute Mitigation -

Delano DMV - San Joaquin Valley Unified APCD Air District, Summer

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	3.00	60.00
tblConstructionPhase	NumDays	220.00	300.00
tblConstructionPhase	NumDays	10.00	40.00
tblConstructionPhase	NumDays	10.00	40.00
tblGrading	MaterialImported	0.00	3,507.00
tblLandUse	LandUseSquareFeet	57,780.00	57,784.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	PhaseName		Earthwork and Site Preparation
tblOffRoadEquipment	UsageHours	8.00	5.00
tblProjectCharacteristics	CO2IntensityFactor	702.44	592.74
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblTripsAndVMT	HaulingTripLength	20.00	41.58
tblTripsAndVMT	HaulingTripLength	20.00	41.58
tblTripsAndVMT	HaulingTripLength	20.00	41.58
tblTripsAndVMT	HaulingTripNumber	438.00	208.00
tblTripsAndVMT	HaulingTripNumber	0.00	216.00
tblTripsAndVMT	HaulingTripNumber	0.00	186.00
tblTripsAndVMT	VendorTripNumber	21.00	22.00
tblTripsAndVMT	WorkerTripNumber	11.00	12.00
tblVehicleTrips	ST_TR	22.75	0.00
tblVehicleTrips	ST_TR	0.00	74.91
tblVehicleTrips	SU_TR	16.74	0.00
tblVehicleTrips	WD_TR	1.89	0.00
tblVehicleTrips	WD_TR	68.93	74.91

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

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	lb/day										lb/day					
2021	4.4375	43.9061	31.3806	0.0819	5.0404	1.8251	6.8656	2.4117	1.6991	4.1108	0.0000	8,032.6275	8,032.6275	1.6646	0.0000	8,074.2435
2022	8.3362	29.0083	34.2971	0.0653	1.2334	1.3905	2.6239	0.3302	1.3046	1.6348	0.0000	6,315.1917	6,315.1917	1.2682	0.0000	6,346.8975
Maximum	**8.3362**	**43.9061**	**34.2971**	**0.0819**	**5.0404**	**1.8251**	**6.8656**	**2.4117**	**1.6991**	**4.1108**	**0.0000**	**8,032.6275**	**8,032.6275**	**1.6646**	**0.0000**	**8,074.2435**

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	lb/day										lb/day					
2021	4.4375	43.9061	31.3806	0.0819	2.9656	1.8251	4.7907	1.2731	1.6991	2.9722	0.0000	8,032.6275	8,032.6275	1.6646	0.0000	8,074.2435
2022	8.3362	29.0083	34.2971	0.0653	1.2334	1.3905	2.6239	0.3302	1.3046	1.6348	0.0000	6,315.1917	6,315.1917	1.2682	0.0000	6,346.8975
Maximum	**8.3362**	**43.9061**	**34.2971**	**0.0819**	**2.9656**	**1.8251**	**4.7907**	**1.2731**	**1.6991**	**2.9722**	**0.0000**	**8,032.6275**	**8,032.6275**	**1.6646**	**0.0000**	**8,074.2435**

Delano DMV - San Joaquin Valley Unified APCD Air District, Summer

	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	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**33.07**	**0.00**	**21.86**	**41.53**	**0.00**	**19.82**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	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	lb/day										lb/day					
Area	0.3231	1.4000e-004	0.0157	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0336	0.0336	9.0000e-005		0.0358
Energy	4.2400e-003	0.0386	0.0324	2.3000e-004		2.9300e-003	2.9300e-003		2.9300e-003	2.9300e-003		46.2691	46.2691	8.9000e-004	8.5000e-004	46.5441
Mobile	1.6515	14.7430	13.1503	0.0631	3.5102	0.0495	3.5597	0.9419	0.0467	0.9885		6,459.1477	6,459.1477	0.4749		6,471.0199
Total	**1.9788**	**14.7817**	**13.1984**	**0.0633**	**3.5102**	**0.0525**	**3.5626**	**0.9419**	**0.0497**	**0.9915**		**6,505.4505**	**6,505.4505**	**0.4759**	**8.5000e-004**	**6,517.5998**

Mitigated Operational

	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	lb/day										lb/day					
Area	0.3231	1.4000e-004	0.0157	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0336	0.0336	9.0000e-005		0.0358
Energy	4.0300e-003	0.0367	0.0308	2.2000e-004		2.7900e-003	2.7900e-003		2.7900e-003	2.7900e-003		44.0053	44.0053	8.4000e-004	8.1000e-004	44.2668
Mobile	1.6287	14.4969	12.6535	0.0606	3.3347	0.0474	3.3821	0.8948	0.0447	0.9395		6,205.0484	6,205.0484	0.4689		6,216.7701
Total	**1.9558**	**14.5337**	**12.7000**	**0.0608**	**3.3347**	**0.0502**	**3.3849**	**0.8948**	**0.0476**	**0.9423**		**6,249.0873**	**6,249.0873**	**0.4698**	**8.1000e-004**	**6,261.0727**

	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	N20	CO2e
Percent Reduction	**1.16**	**1.68**	**3.78**	**3.95**	**5.00**	**4.25**	**4.99**	**5.00**	**4.25**	**4.96**	**0.00**	**3.94**	**3.94**	**1.28**	**4.71**	**3.94**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Earthwork and Site Preparation	Site Preparation	1/4/2021	3/26/2021	5	60	
2	Trenching (off-site utilities)	Trenching	1/4/2021	3/26/2021	5	60	
3	Building Construction	Building Construction	1/18/2021	3/11/2022	5	300	
4	Trenching (on-site utilities)	Trenching	3/27/2021	10/8/2021	5	140	
5	Paving	Paving	1/17/2022	3/11/2022	5	40	
6	Architectural Coating	Architectural Coating	1/17/2022	3/11/2022	5	40	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 2.09

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 16,500; Non-Residential Outdoor: 5,500; Striped Parking Area: 5,483 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Earthwork and Site Preparation		1	7.40	80	0.38
Earthwork and Site Preparation	Rubber Tired Dozers	1	5.00	247	0.40
Earthwork and Site Preparation	Rubber Tired Loaders	1	7.40	203	0.36
Earthwork and Site Preparation	Tractors/Loaders/Backhoes	0	8.00	97	0.37

Trenching (on-site utilities)	Excavators	1	3.40	158	0.38
Trenching (on-site utilities)	Rubber Tired Dozers	1	3.40	247	0.40
Trenching (on-site utilities)	Rubber Tired Loaders	1	4.40	203	0.36
Trenching (off-site utilities)	Excavators	1	7.80	158	0.38
Trenching (off-site utilities)	Rubber Tired Loaders	1	10.20	203	0.36
Trenching (off-site utilities)	Rubber Tired Loaders	1	7.80	203	0.36
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
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Cement and Mortar Mixers	2	6.00	9	0.56
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	2	6.00	132	0.36
Paving	Rollers	2	6.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48
	Earthwork and Site Preparation				5.00
	Trenching (off-site utilities)				5.00
	Building Construction				5.00
	Trenching (on-site utilities)				5.00
	Paving				5.00
	Architectural Coating				5.00

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
Earthwork and Site Preparation	3	8.00	0.00	208.00	16.80	6.60	41.58	LD_Mix	HDT_Mix	HHDT
Trenching (on-site utilities)	3	8.00	0.00	216.00	16.80	6.60	41.58	LD_Mix	HDT_Mix	HHDT
Trenching (off-site utilities)	3	8.00	0.00	186.00	16.80	6.60	41.58	LD_Mix	HDT_Mix	HHDT
Building Construction	9	54.00	22.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Paving	8	20.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	12.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Earthwork and Site Preparation - 2021

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	lb/day										lb/day					
Fugitive Dust					3.7724	0.0000	3.7724	2.0702	0.0000	2.0702			0.0000			0.0000
Off-Road	0.9713	10.4310	4.0024	0.0111		0.4520	0.4520		0.4158	0.4158		1,076.9294	1,076.9294	0.3483		1,085.6369
Total	**0.9713**	**10.4310**	**4.0024**	**0.0111**	**3.7724**	**0.4520**	**4.2244**	**2.0702**	**0.4158**	**2.4860**		**1,076.9294**	**1,076.9294**	**0.3483**		**1,085.6369**

3.2 Earthwork and Site Preparation - 2021

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	lb/day										lb/day					
Hauling	0.0464	1.4236	0.2374	5.2300e-003	0.1262	5.7800e-003	0.1320	0.0346	5.5300e-003	0.0401		548.8700	548.8700	0.0169		549.2921
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
Worker	0.0476	0.0280	0.3630	1.0400e-003	0.1022	6.6000e-004	0.1028	0.0271	6.0000e-004	0.0277		103.1991	103.1991	2.6900e-003		103.2665
Total	**0.0940**	**1.4516**	**0.6004**	**6.2700e-003**	**0.2284**	**6.4400e-003**	**0.2348**	**0.0617**	**6.1300e-003**	**0.0678**		**652.0692**	**652.0692**	**0.0196**		**652.5586**

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	lb/day										lb/day					
Fugitive Dust					1.6976	0.0000	1.6976	0.9316	0.0000	0.9316			0.0000			0.0000
Off-Road	0.9713	10.4310	4.0024	0.0111		0.4520	0.4520		0.4158	0.4158	0.0000	1,076.9294	1,076.9294	0.3483		1,085.6369
Total	**0.9713**	**10.4310**	**4.0024**	**0.0111**	**1.6976**	**0.4520**	**2.1496**	**0.9316**	**0.4158**	**1.3474**	**0.0000**	**1,076.9294**	**1,076.9294**	**0.3483**		**1,085.6369**

3.2 Earthwork and Site Preparation - 2021

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	lb/day										lb/day					
Hauling	0.0464	1.4236	0.2374	5.2300e-003	0.1262	5.7800e-003	0.1320	0.0346	5.5300e-003	0.0401		548.8700	548.8700	0.0169		549.2921
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
Worker	0.0476	0.0280	0.3630	1.0400e-003	0.1022	6.6000e-004	0.1028	0.0271	6.0000e-004	0.0277		103.1991	103.1991	2.6900e-003		103.2665
Total	**0.0940**	**1.4516**	**0.6004**	**6.2700e-003**	**0.2284**	**6.4400e-003**	**0.2348**	**0.0617**	**6.1300e-003**	**0.0678**		**652.0692**	**652.0692**	**0.0196**		**652.5586**

3.3 Trenching (off-site utilities) - 2021

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	lb/day										lb/day					
Off-Road	0.9952	10.7930	6.7871	0.0191		0.3917	0.3917		0.3604	0.3604		1,849.4462	1,849.4462	0.5982		1,864.3999
Total	**0.9952**	**10.7930**	**6.7871**	**0.0191**		**0.3917**	**0.3917**		**0.3604**	**0.3604**		**1,849.4462**	**1,849.4462**	**0.5982**		**1,864.3999**

3.3 Trenching (off-site utilities) - 2021

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	lb/day										lb/day					
Hauling	0.0415	1.2730	0.2123	4.6800e-003	0.1128	5.1700e-003	0.1180	0.0309	4.9400e-003	0.0359		490.8165	490.8165	0.0151		491.1939
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
Worker	0.0476	0.0280	0.3630	1.0400e-003	0.1022	6.6000e-004	0.1028	0.0271	6.0000e-004	0.0277		103.1991	103.1991	2.6900e-003		103.2665
Total	**0.0891**	**1.3010**	**0.5753**	**5.7200e-003**	**0.2150**	**5.8300e-003**	**0.2208**	**0.0580**	**5.5400e-003**	**0.0636**		**594.0156**	**594.0156**	**0.0178**		**594.4604**

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	lb/day										lb/day					
Off-Road	0.9952	10.7930	6.7871	0.0191		0.3917	0.3917		0.3604	0.3604	0.0000	1,849.4462	1,849.4462	0.5982		1,864.3999
Total	**0.9952**	**10.7930**	**6.7871**	**0.0191**		**0.3917**	**0.3917**		**0.3604**	**0.3604**	**0.0000**	**1,849.4462**	**1,849.4462**	**0.5982**		**1,864.3999**

3.3 Trenching (off-site utilities) - 2021

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	lb/day										lb/day					
Hauling	0.0415	1.2730	0.2123	4.6800e-003	0.1128	5.1700e-003	0.1180	0.0309	4.9400e-003	0.0359		490.8165	490.8165	0.0151		491.1939
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
Worker	0.0476	0.0280	0.3630	1.0400e-003	0.1022	6.6000e-004	0.1028	0.0271	6.0000e-004	0.0277		103.1991	103.1991	2.6900e-003		103.2665
Total	**0.0891**	**1.3010**	**0.5753**	**5.7200e-003**	**0.2150**	**5.8300e-003**	**0.2208**	**0.0580**	**5.5400e-003**	**0.0636**		**594.0156**	**594.0156**	**0.0178**		**594.4604**

3.4 Building Construction - 2021

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	lb/day										lb/day					
Off-Road	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013		2,553.3639	2,553.3639	0.6160		2,568.7643
Total	**1.9009**	**17.4321**	**16.5752**	**0.0269**		**0.9586**	**0.9586**		**0.9013**	**0.9013**		**2,553.3639**	**2,553.3639**	**0.6160**		**2,568.7643**

3.4 Building Construction - 2021

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	lb/day										lb/day					
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
Vendor	0.0658	2.3082	0.3902	5.8300e-003	0.1349	6.1500e-003	0.1410	0.0388	5.8800e-003	0.0447		610.2092	610.2092	0.0466		611.3749
Worker	0.3212	0.1891	2.4502	6.9900e-003	0.6897	4.4300e-003	0.6942	0.1829	4.0800e-003	0.1870		696.5941	696.5941	0.0182		697.0486
Total	**0.3871**	**2.4973**	**2.8404**	**0.0128**	**0.8246**	**0.0106**	**0.8352**	**0.2218**	**9.9600e-003**	**0.2317**		**1,306.8033**	**1,306.8033**	**0.0648**		**1,308.4235**

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	lb/day										lb/day					
Off-Road	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013	0.0000	2,553.3639	2,553.3639	0.6160		2,568.7643
Total	**1.9009**	**17.4321**	**16.5752**	**0.0269**		**0.9586**	**0.9586**		**0.9013**	**0.9013**	**0.0000**	**2,553.3639**	**2,553.3639**	**0.6160**		**2,568.7643**

3.4 Building Construction - 2021

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	lb/day										lb/day					
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
Vendor	0.0658	2.3082	0.3902	5.8300e-003	0.1349	6.1500e-003	0.1410	0.0388	5.8800e-003	0.0447		610.2092	610.2092	0.0466		611.3749
Worker	0.3212	0.1891	2.4502	6.9900e-003	0.6897	4.4300e-003	0.6942	0.1829	4.0800e-003	0.1870		696.5941	696.5941	0.0182		697.0486
Total	**0.3871**	**2.4973**	**2.8404**	**0.0128**	**0.8246**	**0.0106**	**0.8352**	**0.2218**	**9.9600e-003**	**0.2317**		**1,306.8033**	**1,306.8033**	**0.0648**		**1,308.4235**

3.4 Building Construction - 2022

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	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.3336	2,554.3336	0.6120		2,569.6322
Total	**1.7062**	**15.6156**	**16.3634**	**0.0269**		**0.8090**	**0.8090**		**0.7612**	**0.7612**		**2,554.3336**	**2,554.3336**	**0.6120**		**2,569.6322**

3.4 Building Construction - 2022

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	lb/day										lb/day					
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
Vendor	0.0611	2.1929	0.3591	5.7700e-003	0.1349	5.3200e-003	0.1402	0.0388	5.0800e-003	0.0439		604.5980	604.5980	0.0449		605.7213
Worker	0.2976	0.1690	2.2397	6.7400e-003	0.6897	4.2900e-003	0.6940	0.1829	3.9500e-003	0.1869		671.6610	671.6610	0.0162		672.0669
Total	**0.3588**	**2.3619**	**2.5989**	**0.0125**	**0.8246**	**9.6100e-003**	**0.8342**	**0.2218**	**9.0300e-003**	**0.2308**		**1,276.2590**	**1,276.2590**	**0.0612**		**1,277.7882**

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	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.3336	2,554.3336	0.6120		2,569.6322
Total	**1.7062**	**15.6156**	**16.3634**	**0.0269**		**0.8090**	**0.8090**		**0.7612**	**0.7612**	**0.0000**	**2,554.3336**	**2,554.3336**	**0.6120**		**2,569.6322**

3.4 Building Construction - 2022

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	lb/day										lb/day					
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
Vendor	0.0611	2.1929	0.3591	5.7700e-003	0.1349	5.3200e-003	0.1402	0.0388	5.0800e-003	0.0439		604.5980	604.5980	0.0449		605.7213
Worker	0.2976	0.1690	2.2397	6.7400e-003	0.6897	4.2900e-003	0.6940	0.1829	3.9500e-003	0.1869		671.6610	671.6610	0.0162		672.0669
Total	**0.3588**	**2.3619**	**2.5989**	**0.0125**	**0.8246**	**9.6100e-003**	**0.8342**	**0.2218**	**9.0300e-003**	**0.2308**		**1,276.2590**	**1,276.2590**	**0.0612**		**1,277.7882**

3.5 Trenching (on-site utilities) - 2021

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	lb/day										lb/day					
Off-Road	0.7308	7.7031	3.9859	9.2600e-003		0.3415	0.3415		0.3142	0.3142		897.0807	897.0807	0.2901		904.3341
Total	**0.7308**	**7.7031**	**3.9859**	**9.2600e-003**		**0.3415**	**0.3415**		**0.3142**	**0.3142**		**897.0807**	**897.0807**	**0.2901**		**904.3341**

3.5 Trenching (on-site utilities) - 2021

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	lb/day										lb/day					
Hauling	0.0207	0.6336	0.1056	2.3300e-003	0.0562	2.5700e-003	0.0587	0.0154	2.4600e-003	0.0179		244.2773	244.2773	7.5100e-003		244.4652
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
Worker	0.0476	0.0280	0.3630	1.0400e-003	0.1022	6.6000e-004	0.1028	0.0271	6.0000e-004	0.0277		103.1991	103.1991	2.6900e-003		103.2665
Total	**0.0682**	**0.6616**	**0.4686**	**3.3700e-003**	**0.1583**	**3.2300e-003**	**0.1616**	**0.0425**	**3.0600e-003**	**0.0456**		**347.4764**	**347.4764**	**0.0102**		**347.7316**

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	lb/day										lb/day					
Off-Road	0.7308	7.7031	3.9859	9.2600e-003		0.3415	0.3415		0.3142	0.3142	0.0000	897.0807	897.0807	0.2901		904.3341
Total	**0.7308**	**7.7031**	**3.9859**	**9.2600e-003**		**0.3415**	**0.3415**		**0.3142**	**0.3142**	**0.0000**	**897.0807**	**897.0807**	**0.2901**		**904.3341**

3.5 Trenching (on-site utilities) - 2021

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	lb/day										lb/day					
Hauling	0.0207	0.6336	0.1056	2.3300e-003	0.0562	2.5700e-003	0.0587	0.0154	2.4600e-003	0.0179		244.2773	244.2773	7.5100e-003		244.4652
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
Worker	0.0476	0.0280	0.3630	1.0400e-003	0.1022	6.6000e-004	0.1028	0.0271	6.0000e-004	0.0277		103.1991	103.1991	2.6900e-003		103.2665
Total	**0.0682**	**0.6616**	**0.4686**	**3.3700e-003**	**0.1583**	**3.2300e-003**	**0.1616**	**0.0425**	**3.0600e-003**	**0.0456**		**347.4764**	**347.4764**	**0.0102**		**347.7316**

3.6 Paving - 2022

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	lb/day										lb/day					
Off-Road	0.9765	9.5221	12.1940	0.0189		0.4877	0.4877		0.4504	0.4504		1,805.1297	1,805.1297	0.5672		1,819.3091
Paving	0.1369					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.1134**	**9.5221**	**12.1940**	**0.0189**		**0.4877**	**0.4877**		**0.4504**	**0.4504**		**1,805.1297**	**1,805.1297**	**0.5672**		**1,819.3091**

3.6 Paving - 2022

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	lb/day										lb/day					
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
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
Worker	0.1102	0.0626	0.8295	2.5000e-003	0.2555	1.5900e-003	0.2571	0.0678	1.4600e-003	0.0692		248.7633	248.7633	6.0100e-003		248.9137
Total	**0.1102**	**0.0626**	**0.8295**	**2.5000e-003**	**0.2555**	**1.5900e-003**	**0.2571**	**0.0678**	**1.4600e-003**	**0.0692**		**248.7633**	**248.7633**	**6.0100e-003**		**248.9137**

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	lb/day										lb/day					
Off-Road	0.9765	9.5221	12.1940	0.0189		0.4877	0.4877		0.4504	0.4504	0.0000	1,805.1297	1,805.1297	0.5672		1,819.3091
Paving	0.1369					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.1134**	**9.5221**	**12.1940**	**0.0189**		**0.4877**	**0.4877**		**0.4504**	**0.4504**	**0.0000**	**1,805.1297**	**1,805.1297**	**0.5672**		**1,819.3091**

3.6 Paving - 2022

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	lb/day										lb/day					
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
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
Worker	0.1102	0.0626	0.8295	2.5000e-003	0.2555	1.5900e-003	0.2571	0.0678	1.4600e-003	0.0692		248.7633	248.7633	6.0100e-003		248.9137
Total	**0.1102**	**0.0626**	**0.8295**	**2.5000e-003**	**0.2555**	**1.5900e-003**	**0.2571**	**0.0678**	**1.4600e-003**	**0.0692**		**248.7633**	**248.7633**	**6.0100e-003**		**248.9137**

3.7 Architectural Coating - 2022

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	lb/day										lb/day					
Archit. Coating	4.7769					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817		281.4481	281.4481	0.0183		281.9062
Total	**4.9814**	**1.4085**	**1.8136**	**2.9700e-003**		**0.0817**	**0.0817**		**0.0817**	**0.0817**		**281.4481**	**281.4481**	**0.0183**		**281.9062**

3.7 Architectural Coating - 2022

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	lb/day										lb/day					
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
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
Worker	0.0661	0.0376	0.4977	1.5000e-003	0.1533	9.5000e-004	0.1542	0.0407	8.8000e-004	0.0415		149.2580	149.2580	3.6100e-003		149.3482
Total	**0.0661**	**0.0376**	**0.4977**	**1.5000e-003**	**0.1533**	**9.5000e-004**	**0.1542**	**0.0407**	**8.8000e-004**	**0.0415**		**149.2580**	**149.2580**	**3.6100e-003**		**149.3482**

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	lb/day										lb/day					
Archit. Coating	4.7769					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817	0.0000	281.4481	281.4481	0.0183		281.9062
Total	**4.9814**	**1.4085**	**1.8136**	**2.9700e-003**		**0.0817**	**0.0817**		**0.0817**	**0.0817**	**0.0000**	**281.4481**	**281.4481**	**0.0183**		**281.9062**

3.7 Architectural Coating - 2022

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	lb/day										lb/day					
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
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
Worker	0.0661	0.0376	0.4977	1.5000e-003	0.1533	9.5000e-004	0.1542	0.0407	8.8000e-004	0.0415		149.2580	149.2580	3.6100e-003		149.3482
Total	**0.0661**	**0.0376**	**0.4977**	**1.5000e-003**	**0.1533**	**9.5000e-004**	**0.1542**	**0.0407**	**8.8000e-004**	**0.0415**		**149.2580**	**149.2580**	**3.6100e-003**		**149.3482**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Increase Density

Improve Destination Accessibility

	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	lb/day										lb/day					
Mitigated	1.6287	14.4969	12.6535	0.0606	3.3347	0.0474	3.3821	0.8948	0.0447	0.9395		6,205.0484	6,205.0484	0.4689		6,216.7701
Unmitigated	1.6515	14.7430	13.1503	0.0631	3.5102	0.0495	3.5597	0.9419	0.0467	0.9885		6,459.1477	6,459.1477	0.4749		6,471.0199

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.00	0.00	0.00		
Government Office Building	824.00	824.00	0.00	1,398,740	1,328,803
Other Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Total	824.00	824.00	0.00	1,398,740	1,328,803

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
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
City Park	14.70	6.60	6.60	33.00	48.00	19.00	66	28	6
Government Office Building	14.70	6.60	6.60	33.00	62.00	5.00	50	34	16
Other Asphalt Surfaces	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
Parking Lot	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.511925	0.031902	0.170344	0.119204	0.018408	0.005097	0.021580	0.111258	0.001794	0.001564	0.005229	0.000954	0.000741
Government Office Building	0.511925	0.031902	0.170344	0.119204	0.018408	0.005097	0.021580	0.111258	0.001794	0.001564	0.005229	0.000954	0.000741
Other Asphalt Surfaces	0.511925	0.031902	0.170344	0.119204	0.018408	0.005097	0.021580	0.111258	0.001794	0.001564	0.005229	0.000954	0.000741
Parking Lot	0.511925	0.031902	0.170344	0.119204	0.018408	0.005097	0.021580	0.111258	0.001794	0.001564	0.005229	0.000954	0.000741

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

Kilowatt Hours of Renewable Electricity Generated

	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	lb/day										lb/day					
NaturalGas Mitigated	4.0300e-003	0.0367	0.0308	2.2000e-004		2.7900e-003	2.7900e-003		2.7900e-003	2.7900e-003		44.0053	44.0053	8.4000e-004	8.1000e-004	44.2668
NaturalGas Unmitigated	4.2400e-003	0.0386	0.0324	2.3000e-004		2.9300e-003	2.9300e-003		2.9300e-003	2.9300e-003		46.2691	46.2691	8.9000e-004	8.5000e-004	46.5441

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas 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	lb/day										lb/day					
City Park	0	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
Government Office Building	393.288	4.2400e-003	0.0386	0.0324	2.3000e-004		2.9300e-003	2.9300e-003		2.9300e-003	2.9300e-003		46.2691	46.2691	8.9000e-004	8.5000e-004	46.5441
Other Asphalt Surfaces	0	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
Parking Lot	0	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
Total		**4.2400e-003**	**0.0386**	**0.0324**	**2.3000e-004**		**2.9300e-003**	**2.9300e-003**		**2.9300e-003**	**2.9300e-003**		**46.2691**	**46.2691**	**8.9000e-004**	**8.5000e-004**	**46.5441**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas 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	lb/day										lb/day					
City Park	0	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
Government Office Building	0.374045	4.0300e-003	0.0367	0.0308	2.2000e-004		2.7900e-003	2.7900e-003		2.7900e-003	2.7900e-003		44.0053	44.0053	8.4000e-004	8.1000e-004	44.2668
Other Asphalt Surfaces	0	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
Parking Lot	0	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
Total		**4.0300e-003**	**0.0367**	**0.0308**	**2.2000e-004**		**2.7900e-003**	**2.7900e-003**		**2.7900e-003**	**2.7900e-003**		**44.0053**	**44.0053**	**8.4000e-004**	**8.1000e-004**	**44.2668**

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	lb/day										lb/day					
Mitigated	0.3231	1.4000e-004	0.0157	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0336	0.0336	9.0000e-005		0.0358
Unmitigated	0.3231	1.4000e-004	0.0157	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0336	0.0336	9.0000e-005		0.0358

6.2 Area by SubCategory

Unmitigated

	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	lb/day										lb/day					
Architectural Coating	0.0524					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.2693					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.4600e-003	1.4000e-004	0.0157	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0336	0.0336	9.0000e-005		0.0358
Total	**0.3231**	**1.4000e-004**	**0.0157**	**0.0000**		**6.0000e-005**	**6.0000e-005**		**6.0000e-005**	**6.0000e-005**		**0.0336**	**0.0336**	**9.0000e-005**		**0.0358**

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	lb/day										lb/day					
Architectural Coating	0.0524					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.2693					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.4600e-003	1.4000e-004	0.0157	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0336	0.0336	9.0000e-005		0.0358
Total	**0.3231**	**1.4000e-004**	**0.0157**	**0.0000**		**6.0000e-005**	**6.0000e-005**		**6.0000e-005**	**6.0000e-005**		**0.0336**	**0.0336**	**9.0000e-005**		**0.0358**

7.0 Water Detail

7.1 Mitigation Measures Water

Apply Water Conservation Strategy

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

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

Delano DMV

San Joaquin Valley Unified APCD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Government Office Building	11.00	1000sqft	0.25	11,000.00	0
Other Asphalt Surfaces	57.78	1000sqft	1.33	57,784.00	0
Parking Lot	84.00	Space	0.76	33,600.00	0
City Park	0.66	Acre	0.66	28,749.60	0

1.2 Other Project Characteristics

Urbanization	Rural	**Wind Speed (m/s)**	2.7	**Precipitation Freq (Days)**	45
Climate Zone	3			**Operational Year**	2022
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	592.74	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Includes 33% RPS target by 2020.

Land Use - Based on project site plan and project description.

Construction Phase - Based on applicant provided data.

Off-road Equipment - Based on applicant provided information.

Off-road Equipment - Based on applicant provided information.

Off-road Equipment - Based on applicant provided information.

Off-road Equipment - Based on applicant provided information.

Off-road Equipment - Based on applicant provided information.

Off-road Equipment - Based on applicant provided information.

Trips and VMT - Based on applicant provided data.

On-road Fugitive Dust - CalEEMod defaults.

Grading - Based on applicant provided information.

Architectural Coating - CalEEMod defaults.

Vehicle Trips - Based on 824 daily trips from transportation impact analysis.

Consumer Products - CalEEMod defaults.

Area Coating - CalEEMod defaults.

Landscape Equipment - CalEEMod defaults.

Energy Use - CalEEMod defaults.

Water And Wastewater - CalEEMod defaults.

Solid Waste - CalEEMod defaults.

Construction Off-road Equipment Mitigation - watering twice daily

Energy Mitigation - Project includes a 100 kW solar PV system. 5% improvement over Title 24 per LEED scorecard.

Water Mitigation - No landscaping irrigation proposed. 35% indoor water use reduction per LEED scorecard.

Waste Mitigation - In accordance with AB 341.

Operational Off-Road Equipment -

Mobile Land Use Mitigation -

Mobile Commute Mitigation -

Delano DMV - San Joaquin Valley Unified APCD Air District, Winter

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	3.00	60.00
tblConstructionPhase	NumDays	220.00	300.00
tblConstructionPhase	NumDays	10.00	40.00
tblConstructionPhase	NumDays	10.00	40.00
tblGrading	MaterialImported	0.00	3,507.00
tblLandUse	LandUseSquareFeet	57,780.00	57,784.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	PhaseName		Earthwork and Site Preparation
tblOffRoadEquipment	UsageHours	8.00	5.00
tblProjectCharacteristics	CO2IntensityFactor	702.44	592.74
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblTripsAndVMT	HaulingTripLength	20.00	41.58
tblTripsAndVMT	HaulingTripLength	20.00	41.58
tblTripsAndVMT	HaulingTripLength	20.00	41.58
tblTripsAndVMT	HaulingTripNumber	438.00	208.00
tblTripsAndVMT	HaulingTripNumber	0.00	216.00
tblTripsAndVMT	HaulingTripNumber	0.00	186.00
tblTripsAndVMT	VendorTripNumber	21.00	22.00
tblTripsAndVMT	WorkerTripNumber	11.00	12.00
tblVehicleTrips	ST_TR	22.75	0.00
tblVehicleTrips	ST_TR	0.00	74.91
tblVehicleTrips	SU_TR	16.74	0.00
tblVehicleTrips	WD_TR	1.89	0.00
tblVehicleTrips	WD_TR	68.93	74.91

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

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	lb/day										lb/day					
2021	4.4404	44.0862	30.9163	0.0805	5.0404	1.8255	6.8659	2.4117	1.6995	4.1112	0.0000	7,890.4241	7,890.4241	1.6710	0.0000	7,932.1988
2022	8.3381	29.0710	33.7176	0.0638	1.2334	1.3908	2.6241	0.3302	1.3048	1.6350	0.0000	6,164.9168	6,164.9168	1.2706	0.0000	6,196.6813
Maximum	**8.3381**	**44.0862**	**33.7176**	**0.0805**	**5.0404**	**1.8255**	**6.8659**	**2.4117**	**1.6995**	**4.1112**	**0.0000**	**7,890.4241**	**7,890.4241**	**1.6710**	**0.0000**	**7,932.1988**

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	lb/day										lb/day					
2021	4.4404	44.0862	30.9163	0.0805	2.9656	1.8255	4.7911	1.2731	1.6995	2.9726	0.0000	7,890.4241	7,890.4241	1.6710	0.0000	7,932.1987
2022	8.3381	29.0710	33.7176	0.0638	1.2334	1.3908	2.6241	0.3302	1.3048	1.6350	0.0000	6,164.9168	6,164.9168	1.2706	0.0000	6,196.6813
Maximum	**8.3381**	**44.0862**	**33.7176**	**0.0805**	**2.9656**	**1.8255**	**4.7911**	**1.2731**	**1.6995**	**2.9726**	**0.0000**	**7,890.4241**	**7,890.4241**	**1.6710**	**0.0000**	**7,932.1987**

Delano DMV - San Joaquin Valley Unified APCD Air District, Winter

	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	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**33.07**	**0.00**	**21.86**	**41.53**	**0.00**	**19.82**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	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	lb/day										lb/day					
Area	0.3231	1.4000e-004	0.0157	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0336	0.0336	9.0000e-005		0.0358
Energy	4.2400e-003	0.0386	0.0324	2.3000e-004		2.9300e-003	2.9300e-003		2.9300e-003	2.9300e-003		46.2691	46.2691	8.9000e-004	8.5000e-004	46.5441
Mobile	1.3082	14.8605	12.8547	0.0579	3.5102	0.0511	3.5613	0.9419	0.0482	0.9901		5,937.6288	5,937.6288	0.5198		5,950.6230
Total	**1.6355**	**14.8992**	**12.9028**	**0.0582**	**3.5102**	**0.0541**	**3.5643**	**0.9419**	**0.0512**	**0.9931**		**5,983.9315**	**5,983.9315**	**0.5208**	**8.5000e-004**	**5,997.2029**

Mitigated Operational

	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	lb/day										lb/day					
Area	0.3231	1.4000e-004	0.0157	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0336	0.0336	9.0000e-005		0.0358
Energy	4.0300e-003	0.0367	0.0308	2.2000e-004		2.7900e-003	2.7900e-003		2.7900e-003	2.7900e-003		44.0053	44.0053	8.4000e-004	8.1000e-004	44.2668
Mobile	1.2862	14.5928	12.4505	0.0556	3.3347	0.0490	3.3837	0.8948	0.0462	0.9410		5,701.1658	5,701.1658	0.5142		5,714.0212
Total	**1.6133**	**14.6296**	**12.4970**	**0.0558**	**3.3347**	**0.0518**	**3.3865**	**0.8948**	**0.0491**	**0.9439**		**5,745.2047**	**5,745.2047**	**0.5152**	**8.1000e-004**	**5,758.3238**

	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	N20	CO2e
Percent Reduction	**1.36**	**1.81**	**3.14**	**4.01**	**5.00**	**4.12**	**4.99**	**5.00**	**4.14**	**4.95**	**0.00**	**3.99**	**3.99**	**1.08**	**4.71**	**3.98**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Earthwork and Site Preparation	Site Preparation	1/4/2021	3/26/2021	5	60	
2	Trenching (off-site utilities)	Trenching	1/4/2021	3/26/2021	5	60	
3	Building Construction	Building Construction	1/18/2021	3/11/2022	5	300	
4	Trenching (on-site utilities)	Trenching	3/27/2021	10/8/2021	5	140	
5	Paving	Paving	1/17/2022	3/11/2022	5	40	
6	Architectural Coating	Architectural Coating	1/17/2022	3/11/2022	5	40	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 2.09

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 16,500; Non-Residential Outdoor: 5,500; Striped Parking Area: 5,483 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Earthwork and Site Preparation		1	7.40	80	0.38
Earthwork and Site Preparation	Rubber Tired Dozers	1	5.00	247	0.40
Earthwork and Site Preparation	Rubber Tired Loaders	1	7.40	203	0.36
Earthwork and Site Preparation	Tractors/Loaders/Backhoes	0	8.00	97	0.37

Trenching (on-site utilities)	Excavators	1	3.40	158	0.38
Trenching (on-site utilities)	Rubber Tired Dozers	1	3.40	247	0.40
Trenching (on-site utilities)	Rubber Tired Loaders	1	4.40	203	0.36
Trenching (off-site utilities)	Excavators	1	7.80	158	0.38
Trenching (off-site utilities)	Rubber Tired Loaders	1	10.20	203	0.36
Trenching (off-site utilities)	Rubber Tired Loaders	1	7.80	203	0.36
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
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Cement and Mortar Mixers	2	6.00	9	0.56
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	2	6.00	132	0.36
Paving	Rollers	2	6.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48
	Earthwork and Site Preparation				5.00
	Trenching (off-site utilities)				5.00
	Building Construction				5.00
	Trenching (on-site utilities)				5.00
	Paving				5.00
	Architectural Coating				5.00

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
Earthwork and Site Preparation	3	8.00	0.00	208.00	16.80	6.60	41.58	LD_Mix	HDT_Mix	HHDT
Trenching (on-site utilities)	3	8.00	0.00	216.00	16.80	6.60	41.58	LD_Mix	HDT_Mix	HHDT
Trenching (off-site utilities)	3	8.00	0.00	186.00	16.80	6.60	41.58	LD_Mix	HDT_Mix	HHDT
Building Construction	9	54.00	22.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Paving	8	20.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	12.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Earthwork and Site Preparation - 2021

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	lb/day										lb/day					
Fugitive Dust					3.7724	0.0000	3.7724	2.0702	0.0000	2.0702			0.0000			0.0000
Off-Road	0.9713	10.4310	4.0024	0.0111		0.4520	0.4520		0.4158	0.4158		1,076.9294	1,076.9294	0.3483		1,085.6369
Total	**0.9713**	**10.4310**	**4.0024**	**0.0111**	**3.7724**	**0.4520**	**4.2244**	**2.0702**	**0.4158**	**2.4860**		**1,076.9294**	**1,076.9294**	**0.3483**		**1,085.6369**

3.2 Earthwork and Site Preparation - 2021

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	lb/day										lb/day					
Hauling	0.0473	1.4858	0.2525	5.1700e-003	0.1262	5.8400e-003	0.1320	0.0346	5.5900e-003	0.0402		542.5185	542.5185	0.0187		542.9869
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
Worker	0.0473	0.0332	0.2978	9.1000e-004	0.1022	6.6000e-004	0.1028	0.0271	6.0000e-004	0.0277		90.6982	90.6982	2.3200e-003		90.7561
Total	**0.0946**	**1.5191**	**0.5503**	**6.0800e-003**	**0.2284**	**6.5000e-003**	**0.2349**	**0.0617**	**6.1900e-003**	**0.0679**		**633.2166**	**633.2166**	**0.0211**		**633.7430**

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	lb/day										lb/day					
Fugitive Dust					1.6976	0.0000	1.6976	0.9316	0.0000	0.9316			0.0000			0.0000
Off-Road	0.9713	10.4310	4.0024	0.0111		0.4520	0.4520		0.4158	0.4158	0.0000	1,076.9294	1,076.9294	0.3483		1,085.6369
Total	**0.9713**	**10.4310**	**4.0024**	**0.0111**	**1.6976**	**0.4520**	**2.1496**	**0.9316**	**0.4158**	**1.3474**	**0.0000**	**1,076.9294**	**1,076.9294**	**0.3483**		**1,085.6369**

3.2 Earthwork and Site Preparation - 2021

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	lb/day										lb/day					
Hauling	0.0473	1.4858	0.2525	5.1700e-003	0.1262	5.8400e-003	0.1320	0.0346	5.5900e-003	0.0402		542.5185	542.5185	0.0187		542.9869
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
Worker	0.0473	0.0332	0.2978	9.1000e-004	0.1022	6.6000e-004	0.1028	0.0271	6.0000e-004	0.0277		90.6982	90.6982	2.3200e-003		90.7561
Total	**0.0946**	**1.5191**	**0.5503**	**6.0800e-003**	**0.2284**	**6.5000e-003**	**0.2349**	**0.0617**	**6.1900e-003**	**0.0679**		**633.2166**	**633.2166**	**0.0211**		**633.7430**

3.3 Trenching (off-site utilities) - 2021

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	lb/day										lb/day					
Off-Road	0.9952	10.7930	6.7871	0.0191		0.3917	0.3917		0.3604	0.3604		1,849.4462	1,849.4462	0.5982		1,864.3999
Total	**0.9952**	**10.7930**	**6.7871**	**0.0191**		**0.3917**	**0.3917**		**0.3604**	**0.3604**		**1,849.4462**	**1,849.4462**	**0.5982**		**1,864.3999**

3.3 Trenching (off-site utilities) - 2021

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	lb/day										lb/day					
Hauling	0.0423	1.3287	0.2258	4.6200e-003	0.1128	5.2200e-003	0.1181	0.0309	5.0000e-003	0.0359		485.1367	485.1367	0.0168		485.5556
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
Worker	0.0473	0.0332	0.2978	9.1000e-004	0.1022	6.6000e-004	0.1028	0.0271	6.0000e-004	0.0277		90.6982	90.6982	2.3200e-003		90.7561
Total	**0.0896**	**1.3619**	**0.5236**	**5.5300e-003**	**0.2150**	**5.8800e-003**	**0.2209**	**0.0580**	**5.6000e-003**	**0.0636**		**575.8349**	**575.8349**	**0.0191**		**576.3117**

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	lb/day										lb/day					
Off-Road	0.9952	10.7930	6.7871	0.0191		0.3917	0.3917		0.3604	0.3604	0.0000	1,849.4462	1,849.4462	0.5982		1,864.3999
Total	**0.9952**	**10.7930**	**6.7871**	**0.0191**		**0.3917**	**0.3917**		**0.3604**	**0.3604**	**0.0000**	**1,849.4462**	**1,849.4462**	**0.5982**		**1,864.3999**

3.3 Trenching (off-site utilities) - 2021

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	lb/day										lb/day					
Hauling	0.0423	1.3287	0.2258	4.6200e-003	0.1128	5.2200e-003	0.1181	0.0309	5.0000e-003	0.0359		485.1367	485.1367	0.0168		485.5556
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
Worker	0.0473	0.0332	0.2978	9.1000e-004	0.1022	6.6000e-004	0.1028	0.0271	6.0000e-004	0.0277		90.6982	90.6982	2.3200e-003		90.7561
Total	**0.0896**	**1.3619**	**0.5236**	**5.5300e-003**	**0.2150**	**5.8800e-003**	**0.2209**	**0.0580**	**5.6000e-003**	**0.0636**		**575.8349**	**575.8349**	**0.0191**		**576.3117**

3.4 Building Construction - 2021

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	lb/day										lb/day					
Off-Road	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013		2,553.3639	2,553.3639	0.6160		2,568.7643
Total	**1.9009**	**17.4321**	**16.5752**	**0.0269**		**0.9586**	**0.9586**		**0.9013**	**0.9013**		**2,553.3639**	**2,553.3639**	**0.6160**		**2,568.7643**

3.4 Building Construction - 2021

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	lb/day										lb/day					
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
Vendor	0.0696	2.3248	0.4676	5.6300e-003	0.1349	6.4000e-003	0.1413	0.0388	6.1300e-003	0.0450		589.4204	589.4204	0.0528		590.7394
Worker	0.3194	0.2242	2.0102	6.1400e-003	0.6897	4.4300e-003	0.6942	0.1829	4.0800e-003	0.1870		612.2127	612.2127	0.0156		612.6036
Total	**0.3889**	**2.5491**	**2.4778**	**0.0118**	**0.8246**	**0.0108**	**0.8354**	**0.2218**	**0.0102**	**0.2320**		**1,201.6331**	**1,201.6331**	**0.0684**		**1,203.3430**

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	lb/day										lb/day					
Off-Road	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013	0.0000	2,553.3639	2,553.3639	0.6160		2,568.7643
Total	**1.9009**	**17.4321**	**16.5752**	**0.0269**		**0.9586**	**0.9586**		**0.9013**	**0.9013**	**0.0000**	**2,553.3639**	**2,553.3639**	**0.6160**		**2,568.7643**

3.4 Building Construction - 2021

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	lb/day										lb/day					
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
Vendor	0.0696	2.3248	0.4676	5.6300e-003	0.1349	6.4000e-003	0.1413	0.0388	6.1300e-003	0.0450		589.4204	589.4204	0.0528		590.7394
Worker	0.3194	0.2242	2.0102	6.1400e-003	0.6897	4.4300e-003	0.6942	0.1829	4.0800e-003	0.1870		612.2127	612.2127	0.0156		612.6036
Total	**0.3889**	**2.5491**	**2.4778**	**0.0118**	**0.8246**	**0.0108**	**0.8354**	**0.2218**	**0.0102**	**0.2320**		**1,201.6331**	**1,201.6331**	**0.0684**		**1,203.3430**

3.4 Building Construction - 2022

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	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.3336	2,554.3336	0.6120		2,569.6322
Total	**1.7062**	**15.6156**	**16.3634**	**0.0269**		**0.8090**	**0.8090**		**0.7612**	**0.7612**		**2,554.3336**	**2,554.3336**	**0.6120**		**2,569.6322**

3.4 Building Construction - 2022

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	lb/day										lb/day					
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
Vendor	0.0646	2.2057	0.4315	5.5800e-003	0.1349	5.5600e-003	0.1404	0.0388	5.3100e-003	0.0442		583.8684	583.8684	0.0509		585.1418
Worker	0.2966	0.2003	1.8304	5.9200e-003	0.6897	4.2900e-003	0.6940	0.1829	3.9500e-003	0.1869		590.3186	590.3186	0.0139		590.6672
Total	**0.3612**	**2.4060**	**2.2619**	**0.0115**	**0.8246**	**9.8500e-003**	**0.8345**	**0.2218**	**9.2600e-003**	**0.2310**		**1,174.1870**	**1,174.1870**	**0.0649**		**1,175.8089**

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	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.3336	2,554.3336	0.6120		2,569.6322
Total	**1.7062**	**15.6156**	**16.3634**	**0.0269**		**0.8090**	**0.8090**		**0.7612**	**0.7612**	**0.0000**	**2,554.3336**	**2,554.3336**	**0.6120**		**2,569.6322**

3.4 Building Construction - 2022

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	lb/day										lb/day					
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
Vendor	0.0646	2.2057	0.4315	5.5800e-003	0.1349	5.5600e-003	0.1404	0.0388	5.3100e-003	0.0442		583.8684	583.8684	0.0509		585.1418
Worker	0.2966	0.2003	1.8304	5.9200e-003	0.6897	4.2900e-003	0.6940	0.1829	3.9500e-003	0.1869		590.3186	590.3186	0.0139		590.6672
Total	**0.3612**	**2.4060**	**2.2619**	**0.0115**	**0.8246**	**9.8500e-003**	**0.8345**	**0.2218**	**9.2600e-003**	**0.2310**		**1,174.1870**	**1,174.1870**	**0.0649**		**1,175.8089**

3.5 Trenching (on-site utilities) - 2021

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	lb/day										lb/day					
Off-Road	0.7308	7.7031	3.9859	9.2600e-003		0.3415	0.3415		0.3142	0.3142		897.0807	897.0807	0.2901		904.3341
Total	**0.7308**	**7.7031**	**3.9859**	**9.2600e-003**		**0.3415**	**0.3415**		**0.3142**	**0.3142**		**897.0807**	**897.0807**	**0.2901**		**904.3341**

3.5 Trenching (on-site utilities) - 2021

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	lb/day										lb/day					
Hauling	0.0210	0.6613	0.1124	2.3000e-003	0.0562	2.6000e-003	0.0588	0.0154	2.4900e-003	0.0179		241.4505	241.4505	8.3400e-003		241.6590
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
Worker	0.0473	0.0332	0.2978	9.1000e-004	0.1022	6.6000e-004	0.1028	0.0271	6.0000e-004	0.0277		90.6982	90.6982	2.3200e-003		90.7561
Total	**0.0683**	**0.6945**	**0.4102**	**3.2100e-003**	**0.1583**	**3.2600e-003**	**0.1616**	**0.0425**	**3.0900e-003**	**0.0456**		**332.1487**	**332.1487**	**0.0107**		**332.4151**

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	lb/day										lb/day					
Off-Road	0.7308	7.7031	3.9859	9.2600e-003		0.3415	0.3415		0.3142	0.3142	0.0000	897.0807	897.0807	0.2901		904.3341
Total	**0.7308**	**7.7031**	**3.9859**	**9.2600e-003**		**0.3415**	**0.3415**		**0.3142**	**0.3142**	**0.0000**	**897.0807**	**897.0807**	**0.2901**		**904.3341**

3.5 Trenching (on-site utilities) - 2021

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	lb/day										lb/day					
Hauling	0.0210	0.6613	0.1124	2.3000e-003	0.0562	2.6000e-003	0.0588	0.0154	2.4900e-003	0.0179		241.4505	241.4505	8.3400e-003		241.6590
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
Worker	0.0473	0.0332	0.2978	9.1000e-004	0.1022	6.6000e-004	0.1028	0.0271	6.0000e-004	0.0277		90.6982	90.6982	2.3200e-003		90.7561
Total	**0.0683**	**0.6945**	**0.4102**	**3.2100e-003**	**0.1583**	**3.2600e-003**	**0.1616**	**0.0425**	**3.0900e-003**	**0.0456**		**332.1487**	**332.1487**	**0.0107**		**332.4151**

3.6 Paving - 2022

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	lb/day										lb/day					
Off-Road	0.9765	9.5221	12.1940	0.0189		0.4877	0.4877		0.4504	0.4504		1,805.1297	1,805.1297	0.5672		1,819.3091
Paving	0.1369					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.1134**	**9.5221**	**12.1940**	**0.0189**		**0.4877**	**0.4877**		**0.4504**	**0.4504**		**1,805.1297**	**1,805.1297**	**0.5672**		**1,819.3091**

3.6 Paving - 2022

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	lb/day										lb/day					
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
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
Worker	0.1099	0.0742	0.6779	2.1900e-003	0.2555	1.5900e-003	0.2571	0.0678	1.4600e-003	0.0692		218.6365	218.6365	5.1600e-003		218.7656
Total	**0.1099**	**0.0742**	**0.6779**	**2.1900e-003**	**0.2555**	**1.5900e-003**	**0.2571**	**0.0678**	**1.4600e-003**	**0.0692**		**218.6365**	**218.6365**	**5.1600e-003**		**218.7656**

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	lb/day										lb/day					
Off-Road	0.9765	9.5221	12.1940	0.0189		0.4877	0.4877		0.4504	0.4504	0.0000	1,805.1297	1,805.1297	0.5672		1,819.3091
Paving	0.1369					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.1134**	**9.5221**	**12.1940**	**0.0189**		**0.4877**	**0.4877**		**0.4504**	**0.4504**	**0.0000**	**1,805.1297**	**1,805.1297**	**0.5672**		**1,819.3091**

3.6 Paving - 2022

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	lb/day										lb/day					
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
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
Worker	0.1099	0.0742	0.6779	2.1900e-003	0.2555	1.5900e-003	0.2571	0.0678	1.4600e-003	0.0692		218.6365	218.6365	5.1600e-003		218.7656
Total	**0.1099**	**0.0742**	**0.6779**	**2.1900e-003**	**0.2555**	**1.5900e-003**	**0.2571**	**0.0678**	**1.4600e-003**	**0.0692**		**218.6365**	**218.6365**	**5.1600e-003**		**218.7656**

3.7 Architectural Coating - 2022

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	lb/day										lb/day					
Archit. Coating	4.7769					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817		281.4481	281.4481	0.0183		281.9062
Total	**4.9814**	**1.4085**	**1.8136**	**2.9700e-003**		**0.0817**	**0.0817**		**0.0817**	**0.0817**		**281.4481**	**281.4481**	**0.0183**		**281.9062**

3.7 Architectural Coating - 2022

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	lb/day										lb/day					
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
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
Worker	0.0659	0.0445	0.4068	1.3200e-003	0.1533	9.5000e-004	0.1542	0.0407	8.8000e-004	0.0415		131.1819	131.1819	3.1000e-003		131.2594
Total	**0.0659**	**0.0445**	**0.4068**	**1.3200e-003**	**0.1533**	**9.5000e-004**	**0.1542**	**0.0407**	**8.8000e-004**	**0.0415**		**131.1819**	**131.1819**	**3.1000e-003**		**131.2594**

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	lb/day										lb/day					
Archit. Coating	4.7769					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817	0.0000	281.4481	281.4481	0.0183		281.9062
Total	**4.9814**	**1.4085**	**1.8136**	**2.9700e-003**		**0.0817**	**0.0817**		**0.0817**	**0.0817**	**0.0000**	**281.4481**	**281.4481**	**0.0183**		**281.9062**

3.7 Architectural Coating - 2022

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	lb/day										lb/day					
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
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
Worker	0.0659	0.0445	0.4068	1.3200e-003	0.1533	9.5000e-004	0.1542	0.0407	8.8000e-004	0.0415		131.1819	131.1819	3.1000e-003		131.2594
Total	**0.0659**	**0.0445**	**0.4068**	**1.3200e-003**	**0.1533**	**9.5000e-004**	**0.1542**	**0.0407**	**8.8000e-004**	**0.0415**		**131.1819**	**131.1819**	**3.1000e-003**		**131.2594**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Increase Density

Improve Destination Accessibility

	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	lb/day										lb/day					
Mitigated	1.2862	14.5928	12.4505	0.0556	3.3347	0.0490	3.3837	0.8948	0.0462	0.9410		5,701.1658	5,701.1658	0.5142		5,714.0212
Unmitigated	1.3082	14.8605	12.8547	0.0579	3.5102	0.0511	3.5613	0.9419	0.0482	0.9901		5,937.6288	5,937.6288	0.5198		5,950.6230

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.00	0.00	0.00		
Government Office Building	824.00	824.00	0.00	1,398,740	1,328,803
Other Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Total	824.00	824.00	0.00	1,398,740	1,328,803

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
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
City Park	14.70	6.60	6.60	33.00	48.00	19.00	66	28	6
Government Office Building	14.70	6.60	6.60	33.00	62.00	5.00	50	34	16
Other Asphalt Surfaces	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
Parking Lot	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.511925	0.031902	0.170344	0.119204	0.018408	0.005097	0.021580	0.111258	0.001794	0.001564	0.005229	0.000954	0.000741
Government Office Building	0.511925	0.031902	0.170344	0.119204	0.018408	0.005097	0.021580	0.111258	0.001794	0.001564	0.005229	0.000954	0.000741
Other Asphalt Surfaces	0.511925	0.031902	0.170344	0.119204	0.018408	0.005097	0.021580	0.111258	0.001794	0.001564	0.005229	0.000954	0.000741
Parking Lot	0.511925	0.031902	0.170344	0.119204	0.018408	0.005097	0.021580	0.111258	0.001794	0.001564	0.005229	0.000954	0.000741

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

Kilowatt Hours of Renewable Electricity Generated

	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	lb/day										lb/day					
NaturalGas Mitigated	4.0300e-003	0.0367	0.0308	2.2000e-004		2.7900e-003	2.7900e-003		2.7900e-003	2.7900e-003		44.0053	44.0053	8.4000e-004	8.1000e-004	44.2668
NaturalGas Unmitigated	4.2400e-003	0.0386	0.0324	2.3000e-004		2.9300e-003	2.9300e-003		2.9300e-003	2.9300e-003		46.2691	46.2691	8.9000e-004	8.5000e-004	46.5441

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas 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	lb/day										lb/day					
City Park	0	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
Government Office Building	393.288	4.2400e-003	0.0386	0.0324	2.3000e-004		2.9300e-003	2.9300e-003		2.9300e-003	2.9300e-003		46.2691	46.2691	8.9000e-004	8.5000e-004	46.5441
Other Asphalt Surfaces	0	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
Parking Lot	0	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
Total		**4.2400e-003**	**0.0386**	**0.0324**	**2.3000e-004**		**2.9300e-003**	**2.9300e-003**		**2.9300e-003**	**2.9300e-003**		**46.2691**	**46.2691**	**8.9000e-004**	**8.5000e-004**	**46.5441**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas 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	lb/day										lb/day					
City Park	0	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
Government Office Building	0.374045	4.0300e-003	0.0367	0.0308	2.2000e-004		2.7900e-003	2.7900e-003		2.7900e-003	2.7900e-003		44.0053	44.0053	8.4000e-004	8.1000e-004	44.2668
Other Asphalt Surfaces	0	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
Parking Lot	0	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
Total		**4.0300e-003**	**0.0367**	**0.0308**	**2.2000e-004**		**2.7900e-003**	**2.7900e-003**		**2.7900e-003**	**2.7900e-003**		**44.0053**	**44.0053**	**8.4000e-004**	**8.1000e-004**	**44.2668**

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	lb/day										lb/day					
Mitigated	0.3231	1.4000e-004	0.0157	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0336	0.0336	9.0000e-005		0.0358
Unmitigated	0.3231	1.4000e-004	0.0157	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0336	0.0336	9.0000e-005		0.0358

6.2 Area by SubCategory

Unmitigated

	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	lb/day										lb/day					
Architectural Coating	0.0524					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.2693					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.4600e-003	1.4000e-004	0.0157	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0336	0.0336	9.0000e-005		0.0358
Total	**0.3231**	**1.4000e-004**	**0.0157**	**0.0000**		**6.0000e-005**	**6.0000e-005**		**6.0000e-005**	**6.0000e-005**		**0.0336**	**0.0336**	**9.0000e-005**		**0.0358**

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	lb/day										lb/day					
Architectural Coating	0.0524					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.2693					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.4600e-003	1.4000e-004	0.0157	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0336	0.0336	9.0000e-005		0.0358
Total	**0.3231**	**1.4000e-004**	**0.0157**	**0.0000**		**6.0000e-005**	**6.0000e-005**		**6.0000e-005**	**6.0000e-005**		**0.0336**	**0.0336**	**9.0000e-005**		**0.0358**

7.0 Water Detail

7.1 Mitigation Measures Water

Apply Water Conservation Strategy

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

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

SMAQMD Construction Mitigation Program - Results

Version 8.0

12/6/2018 14:41

Project Name: Delano DMV Baseline

Overall Life-Of-Project (LOP) Emissions

Project Start Date: 01/04/2021

Comparison of your project fleet's emissions with the statewide average for construction equipment

		NOx	ROG	PM10	PM2.5
	Project fleet and statewide average construction equipment emission rates (g/bhp-hr)				
Your fleet's emission factors based on data entered >>	Project Fleet	5.21	0.41	0.29	0.26
Calculator estimated statewide average emission factors >>	Statewide Average	3.01	0.40	0.19	0.17
	Absolute Reduction	-2.19	-0.01	-0.10	-0.09
	Percent Reduction	**-73%**	**-2%**	**-51%**	**-51%**
	Project fleet construction equipment average daily emissions (lbs/day)				
Your fleet's average daily emissions based on data entered >>	Project Fleet	40.11	3.16	2.25	2.14
Calculator estimated average daily fleet emissions using statewide average emission factors >>	Statewide Average	23.22	3.10	1.49	1.41

Project haul truck(s) daily emissions

		NOx	ROG	PM10	PM2.5
	Project haul truck(s) average daily emissions (lbs/day)				
	Project Fleet	**18.75**	**1.19**	**0.59**	**0.41**

Project construction equipment and haul truck total emissions

		NOx	ROG	PM10	PM2.5
	Project total construction equipment and haul truck average daily emissions (lbs/day)				
Days Equipment will be Used on the Project: 328	Construction Equipment	40.11	3.16	2.25	2.14
Days of Hauling: 360	Haul Truck(s)	18.75	1.19	0.59	0.41
	Total	**58.86**	**4.35**	**2.85**	**2.54**

NOTE:

SMAQMD Construction Mitigation Program - Results

Version 8.0

12/6/2018 14:42

Project Name: Delano DMV - NOx

Overall Life-Of-Project (LOP) Emissions

Project Start Date: 01/04/2021

Comparison of your project fleet's emissions with the statewide average for construction equipment

		NOx	ROG	PM10	PM2.5
	Project fleet and statewide average construction equipment emission rates (g/bhp-hr)				
Your fleet's emission factors based on data entered >>	Project Fleet	2.40	0.23	0.09	0.09
Calculator estimated statewide average emission factors >>	Statewide Average	3.01	0.40	0.19	0.17
	Absolute Reduction	0.62	0.17	0.09	0.09
	Percent Reduction	**20%**	**43%**	**50%**	**50%**
	Project fleet construction equipment average daily emissions (lbs/day)				
Your fleet's average daily emissions based on data entered >>	Project Fleet	18.71	1.74	0.75	0.70
Calculator estimated average daily fleet emissions using statewide average emission factors >>	Statewide Average	23.51	3.08	1.49	1.40

Project haul truck(s) daily emissions

		NOx	ROG	PM10	PM2.5
	Project haul truck(s) average daily emissions (lbs/day)				
	Project Fleet	**18.75**	**1.19**	**0.59**	**0.41**

Project construction equipment and haul truck total emissions

		NOx	ROG	PM10	PM2.5
	Project total construction equipment and haul truck average daily emissions (lbs/day)				
Days Equipment will be Used on the Project: 328	Construction Equipment	18.71	1.74	0.75	0.70
Days of Hauling: 360	Haul Truck(s)	18.75	1.19	0.59	0.41
	Total	**37.46**	**2.93**	**1.34**	**1.11**

SMAQMD Construction Mitigation Program - Results

Version 8.0

12/6/2018 14:44

Project Name: Delano DMV - PM

Overall Life-Of-Project (LOP) Emissions

Project Start Date: 01/04/2021

Comparison of your project fleet's emissions with the statewide average for construction equipment

		NOx	ROG	PM10	PM2.5
	Project fleet and statewide average construction equipment emission rates (g/bhp-hr)				
Your fleet's emission factors based on data entered >>	Project Fleet	2.54	0.24	0.10	0.10
Calculator estimated statewide average emission factors >>	Statewide Average	3.01	0.40	0.19	0.17
	Absolute Reduction	0.48	0.16	0.08	0.08
	Percent Reduction	**16%**	**41%**	**45%**	**45%**
	Project fleet construction equipment average daily emissions (lbs/day)				
Your fleet's average daily emissions based on data entered >>	Project Fleet	19.44	1.79	0.79	0.74
Calculator estimated average daily fleet emissions using statewide average emission factors >>	Statewide Average	23.10	3.03	1.43	1.35

Project haul truck(s) daily emissions

		NOx	ROG	PM10	PM2.5
	Project haul truck(s) average daily emissions (lbs/day)				
	Project Fleet	**18.75**	**1.19**	**0.59**	**0.41**

Project construction equipment and haul truck total emissions

		NOx	ROG	PM10	PM2.5
	Project total construction equipment and haul truck average daily emissions (lbs/day)				
Days Equipment will be Used on the Project: 328	Construction Equipment	19.44	1.79	0.79	0.74
Days of Hauling: 360	Haul Truck(s)	18.75	1.19	0.59	0.41
	Total	**38.19**	**2.98**	**1.38**	**1.15**

NREL
NATIONAL RENEWABLE ENERGY LABORATORY

Caution: Photovoltaic system performance predictions calculated by PVWatts® include many inherent assumptions and uncertainties and do not reflect variations between PV technologies nor site-specific characteristics except as represented by PVWatts® inputs. For example, PV modules with better performance are not differentiated within PVWatts® from lesser performing modules. Both NREL and private companies provide more sophisticated PV modeling tools (such as the System Advisor Model at https://sam.nrel.gov) that allow for more precise and complex modeling of PV systems.

The expected range is based on 30 years of actual weather data at the given location and is intended to provide an indication of the variation you might see. For more information, please refer to this NREL report: The Error Report.

The energy output range is based on analysis of 30 years of historical weather data for nearby , and is intended to provide an indication of the possible interannual variability in generation for a Fixed (open rack) PV system at this location.

RESULTS

162,074 kWh/Year*

System output may range from 155,996 to 166,483 kWh per year near this location.

Month	Solar Radiation (kWh / m^2 / day)	AC Energy (kWh)	Value ($)
January	3.08	7,584	896
February	4.53	9,845	1,163
March	5.99	13,998	1,653
April	6.99	15,510	1,832
May	7.68	17,335	2,047
June	8.09	17,388	2,053
July	7.96	17,233	2,035
August	7.87	16,786	1,982
September	7.16	15,087	1,782
October	5.85	13,264	1,566
November	4.46	10,058	1,188
December	3.34	7,987	943
Annual	6.08	162,075	$ 19,140

Location and Station Identification

Requested Location	1694 dover parkway, delano ca
Weather Data Source	Lat, Lon: 35.77, -119.26 1.2 mi
Latitude	35.77° N
Longitude	119.26° W

PV System Specifications *(Commercial)*

DC System Size	100 kW
Module Type	Standard
Array Type	Fixed (open rack)
Array Tilt	20°
Array Azimuth	180°
System Losses	14.08%
Inverter Efficiency	96%
DC to AC Size Ratio	1.2

Economics

Average Retail Electricity Rate	0.118 $/kWh

Performance Metrics

Capacity Factor	18.5%

Southern California Edison
Effect of 33% Renewables - 2016 Power Content Label
Based on 2012 Baseline Data

2012 Emission Factor[1]	702.44	lb CO2/MWh
2012 Renewables[2]	20.6%	
Without RPS	884.69	lb CO2/MWh
2020 Renewables[3]	33%	
With 2020 Renewables	592.74	lb CO2/MWh

Notes:
All renewable energy is assumed to be carbon neutral (i.e., no GHG emissions or from biogenic sources).
1. CalEEMod User's Guide, Appendix D, Table 1.2
2. SCE 2012 CORPORATE RESPONSIBILITY & SUSTAINABILITY
https://www.sce.com/wps/wcm/connect/68145014-2eba-40c2-8587-6482ce056977/CRR_08202013.pdf?MOD=AJPERES&ContentCache=NONE
3. Renewables Portfolio Standard goal of 33% by 2020.

APPENDIX 3.4-1

Plant and Wildlife Species Observed On Site

APPENDIX 3.4-1
Plants and Wildlife Observed On Site

VASCULAR PLANT SPECIES OBSERVED ON SITE

MONOCOTS

POACEAE – GRASS FAMILY

* *Hordeum murinum* – mouse barley

EUDICOTS

BRASSICACEAE – MUSTARD FAMILY

* *Brassica nigra* – black mustard

CHENOPODIACEAE – GOOSEFOOT FAMILY

* *Salsola tragus* – Russian thistle

GERANIACEAE – GERANIUM FAMILY

* *Erodium cicutarium* – redstem stork's bill

* signifies introduced (non-native) species

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WILDLIFE SPECIES OBSERVED ON SITE

BIRD

FINCHES

FRINGILLIDAE – FRINGILLINE AND CARDUELINE FINCHES AND ALLIES
Haemorhous mexicanus – house finch

PIGEONS AND DOVES

COLUMBIDAE – PIGEONS AND DOVES
Zenaida macroura – mourning dove

MAMMAL

HARES AND RABBITS

LEPORIDAE – HARES AND RABBITS
Lepus californicus – black-tailed jackrabbit

SQUIRRELS

SCIURIDAE – SQUIRRELS
Spermophilus (Otospermophilus) beecheyi – California ground squirrel

REPTILE

LIZARDS

PHRYNOSOMATIDAE – IGUANID LIZARDS
Uta stansburiana – common side-blotched lizard

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APPENDIX 3.4-2

Special-Status Wildlife Species within Adjacent Quadrangles and their Potential to Occur

APPENDIX 3.4-2
Special-Status Wildlife Species within Adjacent Quadrangles and their Potential to Occur

Common Name	Scientific Name	Status (Federal/ State)	Habitat	Potential to Occur
Amphibians				
western spadefoot	*Spea hammondii*	None/SSC	Primarily grassland and vernal pools, but also in ephemeral wetlands that persist at least 3 weeks in chaparral, coastal scrub, valley-foothill woodlands, pastures, and other agriculture	Not expected to occur. No suitable vegetation present.
Reptiles				
blunt-nosed leopard lizard	*Gambelia sila*	FE/SE, FP	Sparsely vegetated alkali and desert scrubs, including semi-arid grasslands, alkali flats, and washes	Not expected to occur. There is no suitable vegetation present.
San Joaquin whipsnake	*Masticophis flagellum ruddocki*	None/SSC	Open, dry treeless areas including grassland and saltbush scrub	Not expected to occur. No suitable vegetation present.
Blainville's horned lizard	*Phrynosoma blainvillii*	None/SSC	Open areas of sandy soil in valleys, foothills and semi-arid mountains including coastal scrub, chaparral, valley-foothill hardwood, conifer, riparian, pine-cypress, juniper and annual grassland	Not expected to occur. No suitable vegetation present.
Birds				
burrowing owl	*Athene cunicularia*	BCC/SSC	Nests and forages in grassland, open scrub, and agriculture, particularly with ground squirrel burrows.	Moderate potential to occur. California ground squirrel burrows present on site could potentially be used by resident or migratory burrowing owls.
tricolored blackbird	*Agelaius tricolor (nesting colony)*	BCC/SSC	Nests near fresh water, emergent wetland with cattails or tules, but also in Himalayan blackberrry; forages in grasslands, woodland, and agriculture	Not expected to occur. No suitable vegetation present.
Fishes				
Kern brook lamprey	*Entosphenus hubbsi*	None/SSC	Slow, silty backwaters of foothill streams	Not expected to occur. No suitable habitat present on site.
Mammals				
American badger	*Taxidea taxus*	None/SSC	Dry, open, treeless areas; grasslands, coastal scrub, agriculture, pastures, especially with friable soils	Not expected to occur.
San Joaquin kit fox	*Vulpes macrotis mutica*	FE/ST	Grasslands and scrublands, including those that have been modified, oak woodland, alkali sink scrubland, vernal pool and alkali meadow	Moderate potential to occur. The project site is within the known range of the species. Presence of California ground squirrel burrows could potentially be used for denning.

Common Name	Scientific Name	Status (Federal/ State)	Habitat	Potential to Occur
Tipton kangaroo rat	*Dipodomys nitratoides nitratoides*	FE/SE	Alluvial fan and floodplain soils; habitat with one or two species of sparsely scattered shrubs and a ground cover of introduced and native annual grasses and forbs	Not expected to occur. The site has been significantly altered by agricultural production. No small mammal burrows were identified on the project site.
San Joaquin Pocket Mouse	*Perognathus inornatus*	None/ None	Open grassland and scrub areas on fine-textured soils	Not expected to occur. The site has been significantly altered by agricultural production. No small mammal burrows were identified on the project site.
Invertebrates				
Hopping's blister beetle	*Lytta hoppingi*	None/ None	Inhabits the foothills at the southern end of the Central Valley.	Not expected to occur. No suitable habitat present.
molestan blister beetle	*Lytta molesta*	None/ None	Inhabits the Central Valley of California, from Contra Costa to Kern and Tulare counties.	Not expected to occur. No suitable habitat present.

APPENDIX 3.5-1

Cultural Resources Report

605 THIRD STREET
ENCINITAS, CALIFORNIA 92024
T 760.942.5147 F 760.632.0164

September 20, 2018

Patricia Kelly
Department of General Services
Real Estate Services Division
707 3rd Street, 4th Floor
West Sacramento, California 95605

Subject: Cultural Resources Letter Report for the Delano DMV Field Office Replacement Project, City of Delano, California

Dear Ms. Kelly:

This letter report documents the cultural resources study conducted by Dudek for the proposed Delano DMV Field Office Project (proposed project). The Real Estate Services Division of the Department of General Services proposes to develop approximately 3 acres of former agricultural land into a Department of Motor Vehicles (DMV) field office. The DMV is the lead agency responsible for compliance with the California Environmental Quality Act (CEQA). The cultural resources study included a Southern San Joaquin Valley Information Center (SSJVIC) records search, Native American Heritage Commission (NAHC) Sacred Lands File search, tribal outreach, and an intensive pedestrian survey. The cultural resources study was conducted by Dudek in accordance with the standards and guidelines defined by the California Office of Historic Preservation (OHP) and CEQA.

Project Location and Description

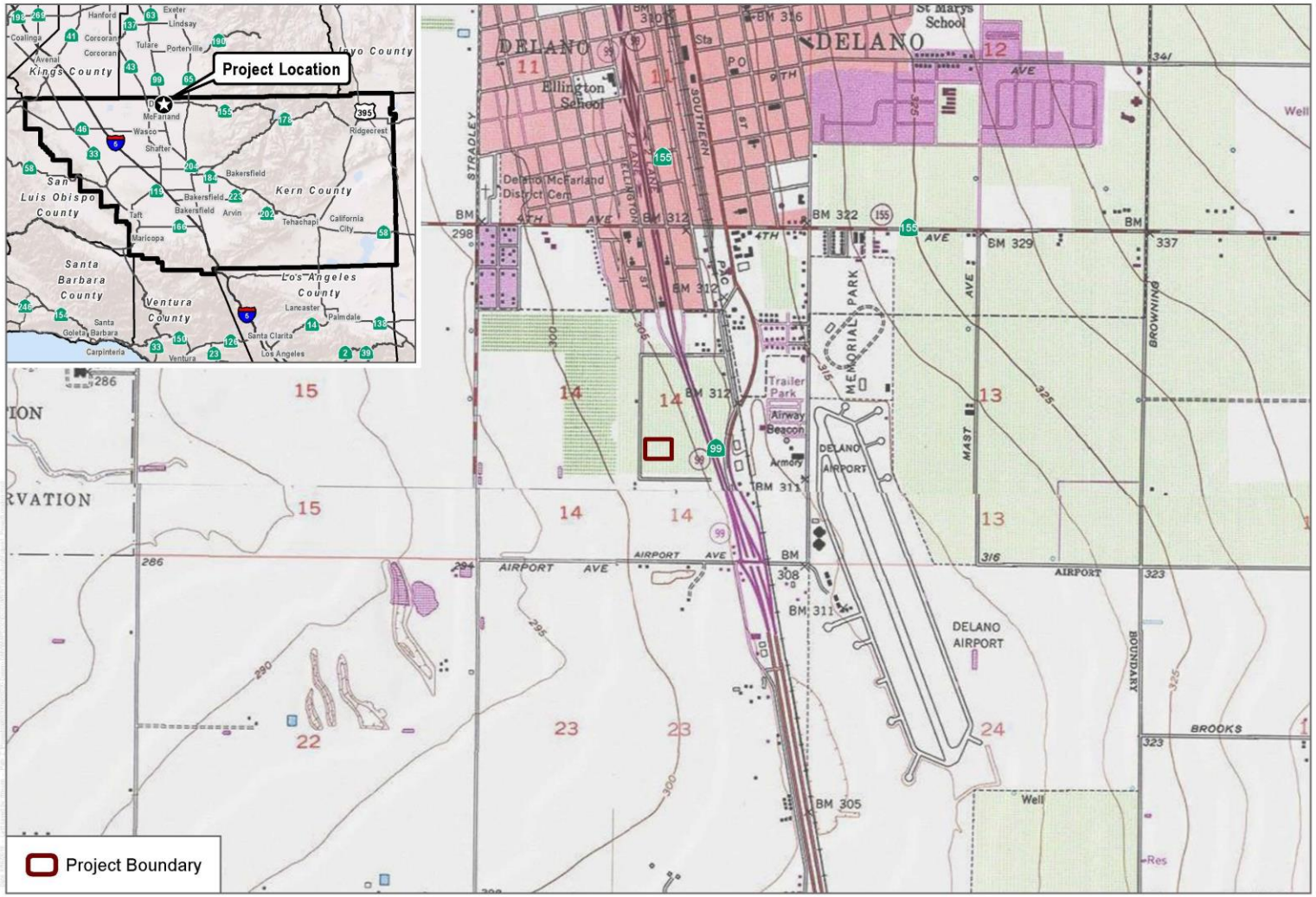
This project area is located in Section 14 of Township 25 South, Range 25 East, of the Delano, California 7.5' USGS Quadrangle map. The approximately 3-acre project site is located within the City of Delano (Figures 1 and 2). The project area is bounded by Dover Parkway to the west and agricultural fields to the north, south, and east. The project area is located in the southwestern corner of Assessor Parcel Number (APN) 521-030-06-00-5. This cultural resources study evaluates impacts to cultural resources associated with development of the 3-acre.

Regulatory Framework

National Register of Historic Places

While there is no federal nexus for this project, the National Register of Historic Places (NRHP) criteria was applied to the evaluation of historical resources within the UVM Component.

The NRHP is the United States' official list of districts, sites, buildings, structures, and objects worthy of preservation. Overseen by the National Park Service (NPS), under the U.S. Department of the Interior, the NRHP was authorized under the NHPA, as amended. Its listings encompass all National Historic Landmarks, as well as historic areas administered by NPS.



SOURCE: USGS 7.5-Minute Series Delano East Quadrangle
Township 25S / Range 25E / Section 14

DUDEK

0 1,000 2,000 Feet
0 285 570 Meters
1:24,000

FIGURE 1
Project Location
Delano DMV Field Office

SOURCE: USDA 2016, County of Kern 2018

DUDEK

0 100 200 Feet
0 25 50 Meters
1:2,400

FIGURE 2
Project Site
Delano DMV Field Office

NRHP guidelines for the evaluation of historic significance were developed to be flexible and to recognize the accomplishments of all who have made significant contributions to the nation's history and heritage. Its criteria are designed to guide state and local governments, federal agencies, and others in evaluating potential entries in the NRHP. For a property to be listed in or determined eligible for listing, it must be demonstrated to possess integrity and to meet at least one of the following criteria:

The quality of significance in American history, architecture, archaeology, engineering, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association, and:

A. That are associated with events that have made a significant contribution to the broad patterns of our history; or
B. That are associated with the lives of persons significant in our past; or
C. That embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
D. That have yielded, or may be likely to yield, information important in prehistory or history.

Integrity is defined in NRHP guidance, How to Apply the National Register Criteria, as "the ability of a property to convey its significance. To be listed in the NRHP, a property must not only be shown to be significant under the NRHP criteria, but it also must have integrity" (NPS 1990). NRHP guidance further asserts that properties be completed at least 50 years ago to be considered for eligibility. Properties completed fewer than 50 years before evaluation must be proven to be "exceptionally important" (criteria consideration G) to be considered for listing.

State Regulations

The California Register of Historical Resources (Public Resources Code Section 5020 et seq.)

In California, the term "historical resource" includes but is not limited to "any object, building, structure, site, area, place, record, or manuscript which is historically or archaeologically significant, or is significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California." (PRC Section 5020.1(j)). In 1992, the California legislature established the California Register of Historical Resources (CRHR) "to be used by state and local agencies, private groups, and citizens to identify the state's historical resources and to indicate what properties are to be protected, to the extent prudent and feasible, from substantial adverse change." (PRC section 5024.1(a).) The criteria for listing resources on the CRHR were expressly developed to be in accordance with previously established criteria developed for listing in the National Register of Historic Places (NRHP), enumerated below. According to PRC Section 5024.1(c)(1–4), a resource is considered historically significant if it (i) retains "substantial integrity," and (ii) meets at least one of the following criteria:

(1) Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage.

(2) Is associated with the lives of persons important in our past.

(3) Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values.

(4) Has yielded, or may be likely to yield, information important in prehistory or history.

In order to understand the historic importance of a resource, sufficient time must have passed to obtain a scholarly perspective on the events or individuals associated with the resource. A resource less than fifty years old may be considered for listing in the CRHR if it can be demonstrated that sufficient time has passed to understand its historical importance (see Cal. Code Regs., tit. 14, Section 4852(d)(2)).

The CRHR protects cultural resources by requiring evaluations of the significance of prehistoric and historic resources. The criteria for the CRHR are nearly identical to those for the NRHP and properties listed or formally designated as eligible for listing in the NRHP are automatically listed in the CRHR, as are the state landmarks and points of interest. The CRHR also includes properties designated under local ordinances or identified through local historical resource surveys.

California Environmental Quality Act

As described further below, the following CEQA statutes and CEQA Guidelines are of relevance to the analysis of archaeological, historic, and tribal cultural resources:

- PRC Section 21083.2(g) defines “unique archaeological resource.”
- PRC Section 21084.1 and CEQA Guidelines Section 15064.5(a) defines “historical resources.” In addition, CEQA Guidelines Section 15064.5(b) defines the phrase “substantial adverse change in the significance of an historical resource;” it also defines the circumstances when a project would materially impair the significance of an historical resource.
- PRC Section 21074(a) defines “tribal cultural resources.”
- PRC Section 5097.98 and CEQA Guidelines Section 15064.5(e): Set forth standards and steps to be employed following the accidental discovery of human remains in any location other than a dedicated ceremony.
- PRC Sections 21083.2(b)-(c) and CEQA Guidelines Section 15126.4: Provide information regarding the mitigation framework for archaeological and historic resources, including examples of preservation-in-place mitigation measures; preservation-in-place is the preferred manner of mitigating impacts to significant archaeological sites because it maintains the relationship between artifacts and the archaeological context, and may also help avoid conflict with religious or cultural values of groups associated with the archaeological site(s).

More specifically, under CEQA, a project may have a significant effect on the environment if it may cause "a substantial adverse change in the significance of an historical resource." (PRC Section 21084.1; CEQA Guidelines Section 15064.5(b)). If a site is either listed or eligible for listing in the CRHR, or if it is included in a local register of historic resources, or identified as significant in a historical resources survey (meeting the requirements of PRC Section 5024.1(q)), it is a "historical resource" and is presumed to be historically or culturally significant for purposes of CEQA. (PRC Section 21084.1; CEQA Guidelines Section 15064.5(a)). The lead agency is not

precluded from determining that a resource is a historical resource even if it does not fall within this presumption. (PRC Section 21084.1; CEQA Guidelines Section 15064.5(a)).

A "substantial adverse change in the significance of an historical resource" reflecting a significant effect under CEQA means "physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of an historical resource would be materially impaired" (CEQA Guidelines Section 15064.5(b)(1); PRC Section 5020.1(q). In turn, the significance of an historical resource is materially impaired when a project:

(1) Demolishes or materially alters in an adverse manner those physical characteristics of an historical resource that convey its historical significance and that justify its inclusion in, or eligibility for, inclusion in the California Register; or

(2) Demolishes or materially alters in an adverse manner those physical characteristics that account for its inclusion in a local register of historical resources pursuant to Section 5020.1(k) of the PRC or its identification in an historical resources survey meeting the requirements of Section 5024.1(g) of the PRC, unless the public agency reviewing the effects of the project establishes by a preponderance of evidence that the resource is not historically or culturally significant; or

(3) Demolishes or materially alters in an adverse manner those physical characteristics of a historical resource that convey its historical significance and that justify its eligibility for inclusion in the California Register as determined by a lead agency for purposes of CEQA (CEQA Guidelines Section 15064.5(b)(2)).

Pursuant to these sections, the CEQA inquiry begins with evaluating whether a project site contains any "historical resources," then evaluates whether that project will cause a substantial adverse change in the significance of a historical resource such that the resource's historical significance is materially impaired.

If it can be demonstrated that a project will cause damage to a unique archaeological resource, the lead agency may require reasonable efforts be made to permit any or all of these resources to be preserved in place or left in an undisturbed state. To the extent that they cannot be left undisturbed, mitigation measures are required (PRC Section 21083.2[a], [b], and [c]).

PRC Section 21083.2(g) defines a unique archaeological resource as an archaeological artifact, object, or site about which it can be clearly demonstrated that without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria:

(1) Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information.

(2) Has a special and particular quality such as being the oldest of its type or the best available example of its type.

(3) Is directly associated with a scientifically recognized important prehistoric or historic event or person.

Impacts to non-unique archaeological resources are generally not considered a significant environmental impact (PRC Section 21083.2(a); CEQA Guidelines Section 15064.5(c)(4)). However, if a non-unique archaeological resource qualifies as tribal cultural resource (PRC Sections 21074(c); 21083.2(h)), further consideration of significant impacts is required.

CEQA Guidelines Section 15064.5 assigns special importance to human remains and specifies procedures to be used when Native American remains are discovered. As described below, these procedures are detailed in PRC Section 5097.98.

Native American Historic Cultural Sites (PRC Section 5097 et seq.)

State law addresses the disposition of Native American burials in archaeological sites and protects such remains from disturbance, vandalism, or inadvertent destruction; establishes procedures to be implemented if Native American skeletal remains are discovered during construction of a project; and establishes the Heritage Commission to resolve disputes regarding the disposition of such remains. In addition, the Native American Historic Resource Protection Act makes it a misdemeanor punishable by up to 1 year in jail to deface or destroy an Indian historic or cultural site that is listed or may be eligible for listing in the CRHR.

California Health and Safety Code Section 7050.5

California law protects Native American burials, skeletal remains, and associated grave goods, regardless of their antiquity, and provides for the sensitive treatment and disposition of those remains. Health and Safety Code Section 7050.5 requires that if human remains are discovered in any place other than a dedicated cemetery, no further disturbance or excavation of the site or nearby area reasonably suspected to contain human remains shall occur until the County coroner has examined the remains (Section 7050.5b). PRC Section 5097.98 also outlines the process to be followed in the event that remains are discovered. If the coroner determines or has reason to believe the remains are those of a Native American, the coroner must contact the California Native American Heritage Commission (NAHC) within 24 hours (Section 7050.5c). The NAHC will notify the Most Likely Descendant. With the permission of the landowner, the Most Likely Descendant may inspect the site of discovery. The inspection must be completed within 48 hours of notification of the Most Likely Descendant by the NAHC. The Most Likely Descendant may recommend means of treating or disposing of, with appropriate dignity, the human remains and items associated with Native Americans.

Background Research

Records Search Results

A records search was completed for the current project area and a mile radius by Dudek staff at the SSJVIC at California State University Bakersfield on July 30, 2018 (Appendix A). This search included a review of their collection of mapped prehistoric, historical, and built-environment resources, Department of Parks and Recreation (DPR) Site Records, technical reports, historical maps, and local inventories. Additional consulted sources included the NRHP, California Inventory of Historical Resources/CRHR and listed OHP Archaeological Determinations of Eligibility, California Points of Historical Interest, and California Historical Landmarks.

Previously Conducted Studies

SSJVIC records indicate that sixteen (16) previous cultural resources technical investigations have been conducted within one mile of the proposed project area (Table 1). Of these studies, none intersect the project area.

Table 1
Previous Technical Studies

Report Number	Date	Title	Author
Reports within the Project Area			
No previously recorded reports			
Reports within the One Mile Search Area			
KE-00292	1991	A cultural resource inventory of the proposed McFarland-Delano Landfill Project Area, Kern County, California	Bergin, Kathleen Ann
KE-00317	1978	Cultural Resource Assessment, City of Delano, Project No. 1007	Chaloupka, Chris L.
KE-01818	1991	Archaeological Assessment of an 98 Acre Buffer Zone around the Kern County McFarland-Delano Landfill in the City of Delano, Kern County, California	Yohe II, Robert M.
KE-01832	1995	Cultural Resources Inventory Report for the Proposed Mojave Northward Expansion Project	Hatoff, Brian, Voss, Barb, Waechter, Sharon, Wee, Stephen, and Benté, Vance
KE-02588	2001	Waste Water Treatment Expansion and Collection System Upgrade	Helt, G.
KE-02919	2004	Cultural Resource Survey for Tract 5987, Between First Avenue and Diaz Avenue in Delano, Kern County, CA	Schiffman, Robert and Gold, Alan
KE-02940	2004	Cultural Resources Investigations for the Delano Home Depot Project	Nadolski, John
KE-03104	2005	A Cultural Resources Assessment for 77.43 Acres Immediately South of Woollomes Avenue and Immediately East of Stradley Avenue in Delano, Kern County, California	Fleagle, Dorothy
KE-03105	2005	A Cultural Resources Assessment for 77.27 Acres Immediately North of Woollomes Avenue and Immediately East of Stradley Avenue in Delano, Kern County, California	Fleagle, Dorothy
KE-03237	2006	Draft Environmental Impact Report for the Delano Marketplace	Nadolski, John
KE-03237A	2005	Cultural Resources Investigations for the Delano Marketplace Project in the City of Delano, Kern County	Pacific Municipal Consultants
KE-03390	2006	Cultural Resource Survey for a Community Development Block Grant for Repairs to Sidewalks, Curbs and Gutters throughout the City of Delano, Kern County, California	Schiffman, Robert A. and Gold, Alan P.

Table 1
Previous Technical Studies

Report Number	Date	Title	Author
KE-03528	2006	Cultural Resources Final Report of Monitoring and Findings for the Qwest Network Construction Project, State of California	Arrington, Cindy, Bass, Bryon, Brown, Joan, Corey, Chris, and Hunt, Kevin
KE-03599	2009	Delano Water Wells (Arsenic Remediation) Project	Armstrong, Matthew
KE-04610	2011	Cultural Resources Assessment of the New Delano Courthouse Property in the City of Delano, Kern County, California	Brunzell, David
KE-04739	2014	Cultural Resources Survey Report Vineyard at Delano & West Pavilion Projects, Kern County, California	Garcia-Herbst, Arleenand Tutschulte, Lucas

Previously Identified Cultural Resources

SSJVIC records indicate that nine (9) archaeological and built environment resources have been previously identified within one mile of the project area (Table 2). None of these resources are within the current project area.

Table 2
Previously Recorded Cultural Resources

Trinomial P-	Period	Type	NRHP/CRHR Status
Resources within the Project Area			
No previously recorded resources			
Resources within the One Mile Search Area			
15-002050	Historic	Southern Pacific Railroad	6Z: Ineligible
15-011697	Historic	Trash Scatter	No Formal Recommendation
15-018580	Historic	Structure	6Z: Ineligible
15-018581	Historic	Structure	6Z: Ineligible
15-018582	Historic	Structure	6Z: Ineligible
15-018583	Historic	Structure	6Z: Ineligible
15-018584	Historic	Structure	6Z: Ineligible
15-018585	Historic	Structure	6Z: Ineligible
15-018586	Historic	Structure	6Z: Ineligible

Archival and Building Development Research

Dudek consulted historic maps and aerial photographs to understand development of the project area and surrounding properties. Historic aerial photographs were available for 1969, 1994, 2005, 2009, 2010, 2012,

and 2014 (NETR 2018). All aerial images display only agricultural use of the project. The Kern County Assessor's online system was accessed on August 15, 2018, and provided a property record with basic information about the parcel. Historic maps from 1929, 1942, 1955, 1971, 1979, 2012, and 2015 were inspected to observe previous development in the project area. These maps indicate the project area has only been used for agriculture; no structures are displayed on the maps.

NAHC and Tribal Correspondence

Dudek requested a NAHC search of their Sacred Lands File (SLF) on July 25, 2018 for the proposed project area. The NAHC results, received August 9, 2018, failed to indicate the presence of Native American cultural resources within the project area or within one mile or the project area. Dudek sent information outreach letters to all NAHC-listed Native American tribal representatives on August 28, 2018 (Appendix B). No responses to these outreach efforts have been received to date. Any subsequent tribal outreach responses will be forwarded to the lead agency.

Intensive Pedestrian Survey

Dudek archaeologist William Burns, MSc, RPA, inspected all portions of the 3-acre project area on July 30, 2018, using standard archaeological procedures and techniques that meet the Secretary of Interior's Standards and Guidelines for cultural resources inventory. All portions of the project area are recently utilized agricultural fields. The entire area was subject to an intensive pedestrian survey utilizing parallel transects spaced 15 meters apart. Mr. Burns examined the ground surface for surface artifacts, undisturbed areas, or archaeological deposits. Subsurface exposures and rodent burrows were opportunistically inspected for indications of soils with the potential to contain archaeological deposits. Ground visibility was excellent throughout the most of the area (100%). The entirety of the project area has been subject to substantial disturbances related to agricultural use. No archaeological resources were identified within the project area during the field survey.

Summary and Management Recommendations

Archaeological Resources

Observation of the present conditions within the proposed project indicates that all areas have been subject to a substantial degree of past disturbances related to agricultural activities. No newly identified archaeological resources were recorded during the pedestrian survey of the project area. Further, a SSJVIC records search did not identify the presence of cultural resources within the proposed project area. An NAHC Sacred Lands File search and subsequent information outreach with NAHC-listed tribal representatives also failed to indicate the presence cultural resources. The project, as currently designed, appears to have a low potential for encountering intact cultural deposits during ground disturbing activities, and would have no impact to known cultural resources. Based on these negative findings and the observed conditions of the present project area, no additional cultural resources efforts, including archaeological monitoring, are recommended to be necessary beyond standard protection measures for unanticipated discoveries of cultural resources and human remains.

Unanticipated Discovery of Archaeological Resources

In the event that archaeological resources (sites, features, or artifacts) are exposed during construction activities for the proposed project, all construction work occurring within 100 feet of the find shall immediately stop until a qualified archaeologist, meeting the Secretary of the Interior's Professional Qualification Standards, can evaluate the significance of the find and determine whether or not additional study is warranted. Depending upon the significance of the find under CEQA (14 CCR 15064.5(f); PRC Section 21082), the archaeologist may simply record the find and allow work to continue. If the discovery proves significant under CEQA, additional work such as preparation of an archaeological treatment plan, testing, or data recovery may be warranted.

Unanticipated Discovery of Human Remains

In accordance with Section 7050.5 of the California Health and Safety Code, if human remains are found, the County Coroner shall be immediately notified of the discovery. No further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains shall occur until the County Coroner has determined, within 2 working days of notification of the discovery, the appropriate treatment and disposition of the human remains. If the County Coroner determines that the remains are, or are believed to be, Native American, he or she shall notify the NAHC in Sacramento within 24 hours. In accordance with California Public Resources Code, Section 5097.98, the NAHC must immediately notify those persons it believes to be the most likely descendent (MLD) from the deceased Native American. The MLD shall complete their inspection within 48 hours of being granted access to the site. The designated Native American representative would then determine, in consultation with the property owner, the disposition of the human remains.

If you have any questions about this report, please contact Senior Archaeologist Brad Comeau at bcomeau@dudek.com.

Respectfully Submitted,

William Burns, MSc, RPA
Archaeologist

cc: *Brad Comeau, Dudek*
Angela Pham, Dudek

Att: *Appendix A: SSJVIC Records Search Results*
Appendix B: NAHC and Tribal Correspondence

References Cited

NETR (Nationwide Environmental Title Research). 1946, 1958, 1999, 2005, 2009, 2010, 2012. Accessed August 15, 2018. www.historicaerials.com.

National Archaeological Database (NADB) Information

Authors:	William Burns, MSc, RPA
Firm:	Dudek
Project Proponent:	Department of General Services
Report Date:	September, 2018
Report Title:	Cultural Resources Letter Report for the Delano DMV Field Office Replacement Project, City of Delano, California
Type of Study:	Archaeological Inventory, Intensive Pedestrian Survey
Acreage:	3 acres
Resources:	None
USGS Quads:	Section 14, Township 25 South, Range 25 East, Delano Quadrangle USGS map
Keywords:	Intensive Pedestrian Survey, Delano

Appendix A

CONFIDENTIAL
SSJVIC Records Search Results
(Not Included)

Appendix B

NAHC and Tribal Correspondence

DUDEK

MAIN OFFICE
605 THIRD STREET
ENCINITAS, CALIFORNIA 92024
T 760.942.5147 T 800.450.1818 F 760.632.0164

July 25, 2018

Native America Heritage Commission (NAHC) Staff
Associate Government Program Analyst
Native American Heritage Commission

Subject: ***NAHC Sacred Lands File Records Search Request for the Delano Department of Motor Vehicles Field Office Replacement Project, Kern County, California***

Dear NAHC Staff,

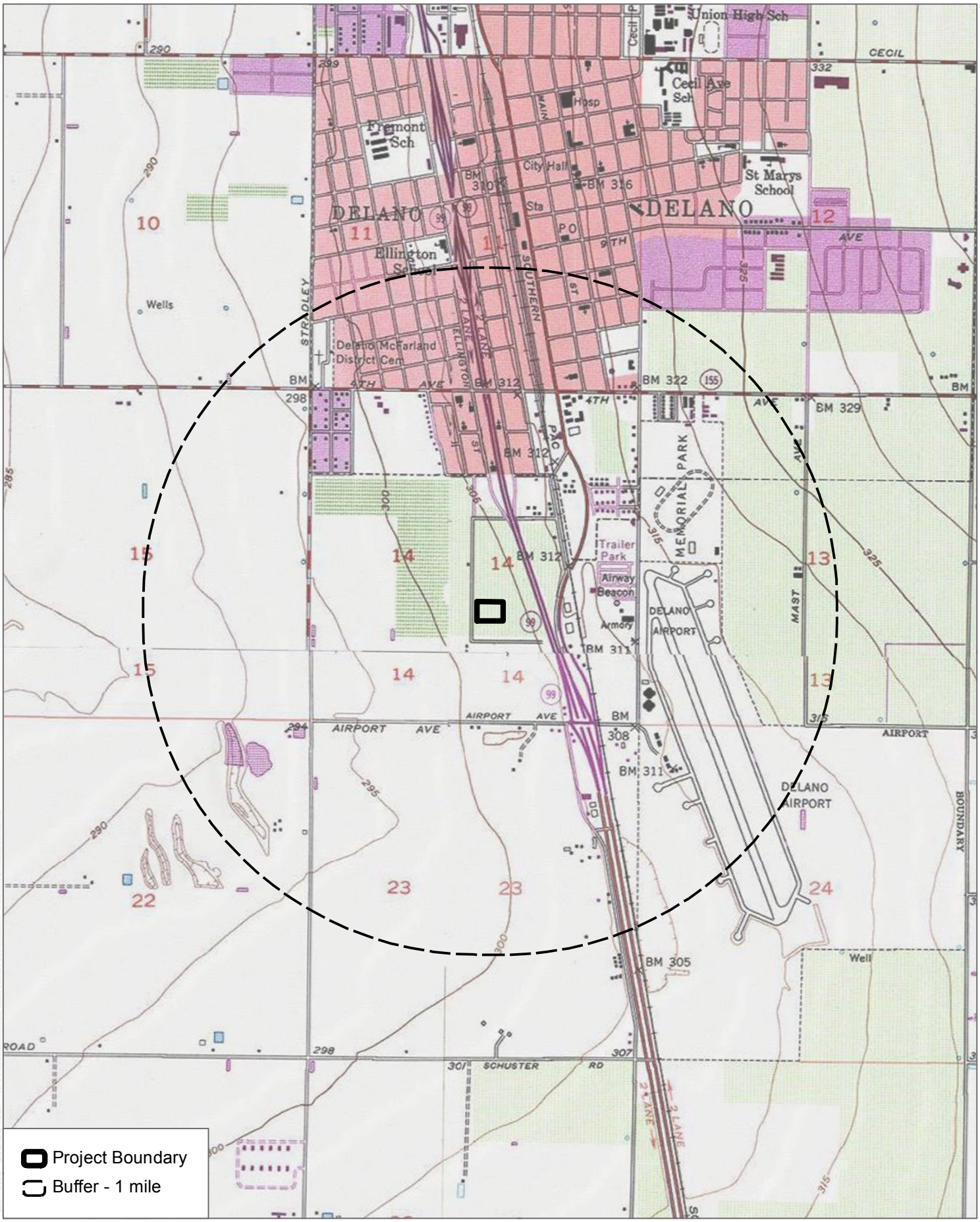
The Delano Department of Motor Vehicles (DMV) Field Office Replacement Project is being proposed in the City of Delano, Kern County, California. The DMV is proposing to construct a new modern facility on an approximately 3 acres site located on former agricultural land; the project site is adjacent to Dover Parkway on the west and State Route 99 on the east. This area falls within the following Public Land Survey System area: Township 25S/ Range 25E - Section 14; on the Delano East, CA 1:24,000 USGS topographic quadrangle (Figure 1). The existing Delano DMV facility is located at 631 Jefferson Street. DMV leases the existing building and upon completion of the new facility along Dover Parkway, DMV will not renew the lease at the current location.

Dudek is requesting a NAHC search for any sacred sites or other Native American cultural resources that may fall within the proposed project location or a surrounding one-mile buffer. Please provide a Contact List with all Native American tribal representatives that may have traditional interests in this parcel or the surrounding search area. The results of this search can be faxed to 760-632-0164. If you have any questions relating to this investigation, please contact me directly by email or phone.

Regards,

Angela Pham, M.A., RPA
Archaeologist
DUDEK
Phone: (760) 479-4855
Email: apham@dudek.com

Attachments:
Figure 1. SLF Records Search Request Map



SOURCE: USGS 7.5 Minute Delano East Quadrangle
Township 25S / Range 25E / Section 14

0 250 500 Meters

0 1,000 2,000 Feet

DUDEK

Records Search Map

Delano DMV Field Office

NATIVE AMERICAN HERITAGE COMMISSION
Environmental and Cultural Department
1550 Harbor Blvd., Suite 100
West Sacramento, CA 95691
(916) 373-3710

August 9, 2018

Angela Pham
DUDEK

Sent by Email: apham@dudek.com
Number of Pages: 2

RE: Field Office Replacement Project, Delano East, Kern County

Dear Ms. Pham:

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
(916) 573-0168

Native American Heritage Commission
Native American Consultation List
8/7/2018

Big Pine Paiute Tribe of the Owens Valley
Genevieve Jones, Chairperson
P. O. Box 700
Big Pine , CA 93513
(760) 938-2003
(976) 938-2942 Fax
Paiute - Shoshone

Big Pine Paiute Tribe of the Owens Valley
Danelle Gutierrez THPO
P.O. Box 700
Big Pine , CA 93513
d.gutierrez@bigpinepaiute.org
(760) 938-2003, ext. 228
(760) 938-2942 Fax
Paiute

Chumash Council of Bakersfield
Julio Quair, Chairperson
729 Texas Street
Bakersfield , CA 93307
chumashtribe@sbcglobal.net
661-322-0121
Chumash

Kern Valley Indian Community
Julie Turner, Secretary
P.O. Box 1010
Lake Isabella , CA 93240
(661) 340-0032 Cell
Kawaiisu
Tubatulabal

Kern Valley Indian Community
Robert Robinson, Chairperson
P.O. Box 1010
Lake Isabella , CA 93283
brobinson@iwvisp.com
(760) 378-2915 Cell
Tubatulabal
Kawaiisu

Kitanemuk & Yowlumne Tejon Indians
Delia Dominguez, Chairperson
115 Radio Street
Bakersfield , CA 93305
deedominguez@juno.com
(626) 339-6785
Yowlumne
Kitanemuk

San Manuel Band of Mission Indians
Lee Clauss, Director-CRM Dept.
26569 Community Center Drive
Highland , CA 92346
lclauss@sanmanuel-nsn.gov
(909) 864-8933
(909) 864-3370 Fax
Serrano

San Manuel Band of Mission Indians
Lynn Valbuena
26569 Community Center Dr.
Highland , CA 92346
(909) 864-8933
Serrano

Santa Rosa Rancheria Tachi Yokut Tribe
Rueben Barrios Sr., Chairperson
P.O. Box 8
Lemoore , CA 93245
(559) 924-1278
(559) 924-3583 Fax
Tache
Tachi
Yokut

Tejon Indian Tribe
Octavio Escobedo, Chairperson
1731 Hasti-acres Drive, Suite 108
Bakersfield , CA 93309
oescobedo@tejonindiantribe-nsn.gov
(661) 834-8566
(661) 834-8564 Fax
Kitanemuk

This list is current only as of the date of this document and is based on the information available to the Commission on the date it was produced.

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 Code, or Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native American Tribes for the proposed:
Field Office Replacement Project, Delano East, Kern County.

Native American Heritage Commission
Native American Consultation List
8/7/2018

Tubatulabals of Kern Valley
Robert L. Gomez, Jr., Tribal Chairperson
P.O. Box 226 Tubatulabal
Lake Isabella , CA 93240
(760) 379-4590
(760) 379-4592 Fax

Tule River Indian Tribe
Neil Peyron, Chairperson
P.O. Box 589 Yokuts
Porterville , CA 93258
neal.peyron@tulerivertribe-nsn.gov
(559) 781-4271
(559) 781-4610 Fax

Wuksache Indian Tribe/Eshom Valley Band
Kenneth Woodrow, Chairperson
1179 Rock Haven Ct. Foothill Yokuts
Salinas , CA 93906 Mono
kwood8934@aol.com Wuksache
(831) 443-9702

This list is current only as of the date of this document and is based on the information available to the Commission on the date it was produced.

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 Code, or Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native American Tribes for the proposed:
Field Office Replacement Project, Delano East, Kern County.

NATIVE AMERICAN HERITAGE COMMISSION
Environmental and Cultural Department
1550 Harbor Blvd., Suite 100
West Sacramento, CA 95691
(916) 373-3710

August 9, 2018

Angela Pham
DUDEK

Sent by Email: apham@dudek.com
Number of Pages: 2

RE: Field Office Replacement Project, Delano East, Kern County

Dear Ms. Pham:

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
(916) 573-0168

DUDEK

MAIN OFFICE
605 THIRD STREET
ENCINITAS, CALIFORNIA 92024
T 760.942.5147 T 800.450.1818 F 760.632.0164

August 27, 2018

Mr. Rueben Barrios, Chairperson
Santa Rosa Rancheria Tachi Yokout Tribe
P.O. Box 8
Lemoore, CA, CA 93245

Subject: Information Request for the Delano Department of Motor Vehicles Field Office Replacement Project, Kern County, California

Dear Mr. Barrios,

The Delano Department of Motor Vehicles (DMV) Field Office Replacement Project is being proposed in the City of Delano, Kern County, California. The DMV (as lead agency) is proposing to construct a new modern facility on an approximately 3 acres site located on former agricultural land; the project site is adjacent to Dover Parkway on the west and State Route 99 on the east. The existing Delano DMV facility is located at 631 Jefferson Street. DMV leases the existing building and upon completion of the new facility along Dover Parkway, DMV will not renew the lease at the current location. This area falls within the following Public Land Survey System area: Township 25S/ Range 25E - Section 14; on the Delano East, CA 1:24,000 USGS topographic quadrangle (Figure 1).

As part of the cultural resources study prepared for the proposed project, Dudek contacted the California Native American Heritage Commission (NAHC) to request a Sacred Lands File (SLF) search and a list of Native American individuals and/or tribal organizations who may have knowledge of cultural resources in or near the proposed project area. The NAHC emailed a response on August 9, 2018, which stated that the SLF search did not identify the presence of Native American cultural resources in the immediate project area.

The NAHC recommended that we contact you regarding your knowledge of the presence of cultural resources that may be impacted by this project. If you have any knowledge of cultural resources that may exist within or near the proposed project area, please contact me directly at (760) 479-4855 or at apham@dudek.com within 30 days of receipt of this letter.

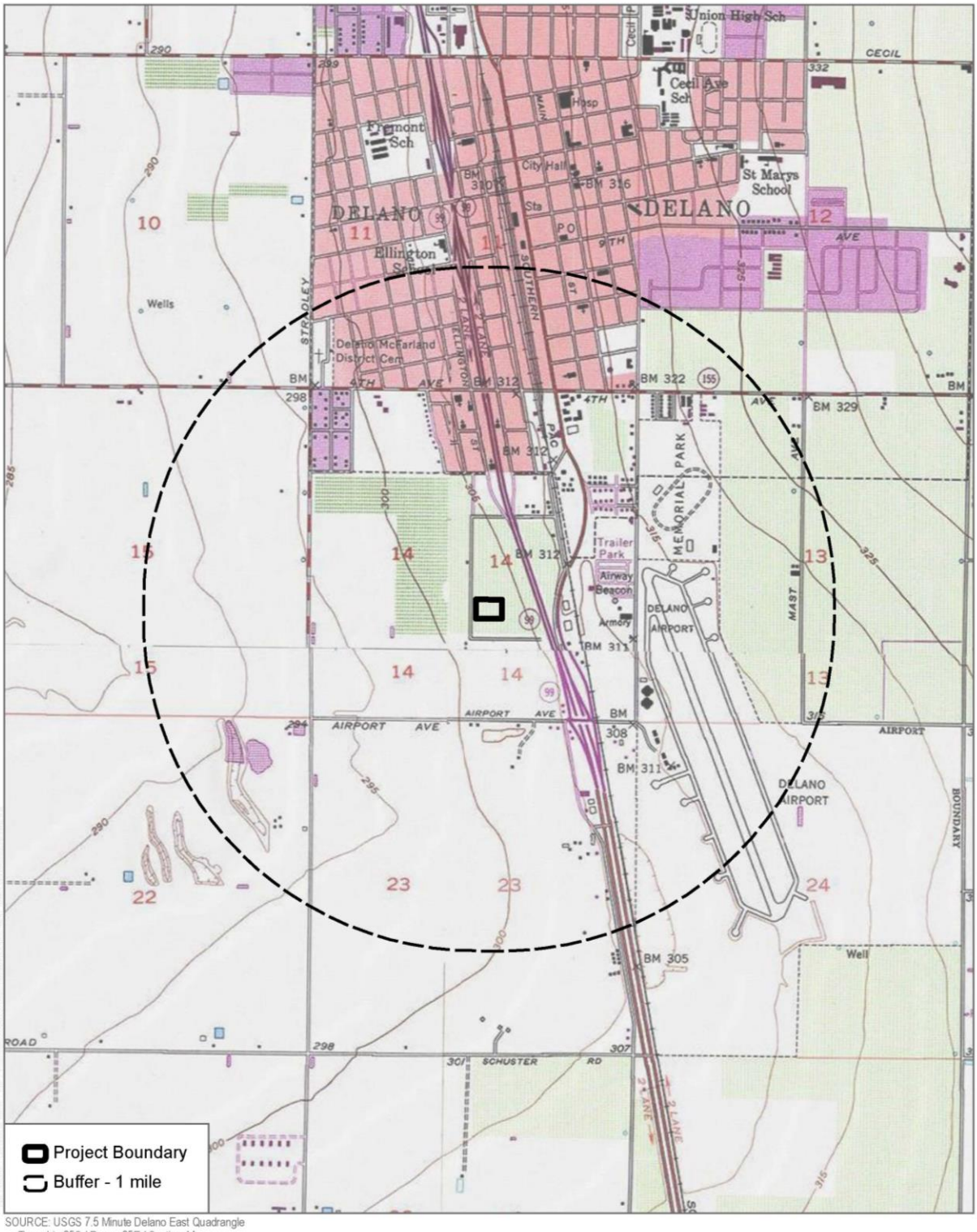
Please note that this letter does not constitute Assembly Bill (AB) 52 notification or initiation of consultation. AB 52 is a process between the lead agency and California Native American Tribes concerning potential impacts to tribal cultural resources. Tribes that wish to be notified of projects for the purposes of AB 52 must contact the Department of General Services (DGS; see contact info below), who is assisting the lead agency, DMV, in writing (pursuant to Public Resources Code Section 21080.3.1 (b)).

Respectfully,

Angela Pham, M.A., RPA
Archaeologist
DUDEK
Phone: (760) 479-4855
Email:apham@dudek.com

Attachments: *Figure 1. Records Search Area Map*

cc: Patricia Kelly, Environmental Project Manager, DGS
707 Third Street, Suite 401, West Sacramento, California 95605
Tel: 916.376.1609 or Email: pat.kelly@dgs.ca.gov



SOURCE: USGS 7.5 Minute Delano East Quadrangle
Township 25S / Range 25E / Section 14

0 250 500 Meters
0 1,000 2,000 Feet

DUDEK

Records Search Map
Delano DMV Field Office

DUDEK

MAIN OFFICE
605 THIRD STREET
ENCINITAS, CALIFORNIA 92024
T 760.942.5147 T 800.450.1818 F 760.632.0164

August 27, 2018

Mr. Lee Clauss, Director of Cultural Resources
San Manuel Band of Mission Indians
26569 Community Center
Highland, CA 92346

Subject: Information Request for the Delano Department of Motor Vehicles Field Office Replacement Project, Kern County, California

Dear Mr. Clauss,

The Delano Department of Motor Vehicles (DMV) Field Office Replacement Project is being proposed in the City of Delano, Kern County, California. The DMV (as lead agency) is proposing to construct a new modern facility on an approximately 3 acres site located on former agricultural land; the project site is adjacent to Dover Parkway on the west and State Route 99 on the east. The existing Delano DMV facility is located at 631 Jefferson Street. DMV leases the existing building and upon completion of the new facility along Dover Parkway, DMV will not renew the lease at the current location. This area falls within the following Public Land Survey System area: Township 25S/ Range 25E - Section 14; on the Delano East, CA 1:24,000 USGS topographic quadrangle (Figure 1).

As part of the cultural resources study prepared for the proposed project, Dudek contacted the California Native American Heritage Commission (NAHC) to request a Sacred Lands File (SLF) search and a list of Native American individuals and/or tribal organizations who may have knowledge of cultural resources in or near the proposed project area. The NAHC emailed a response on August 9, 2018, which stated that the SLF search did not identify the presence of Native American cultural resources in the immediate project area.

The NAHC recommended that we contact you regarding your knowledge of the presence of cultural resources that may be impacted by this project. If you have any knowledge of cultural resources that may exist within or near the proposed project area, please contact me directly at (760) 479-4855 or at apham@dudek.com within 30 days of receipt of this letter.

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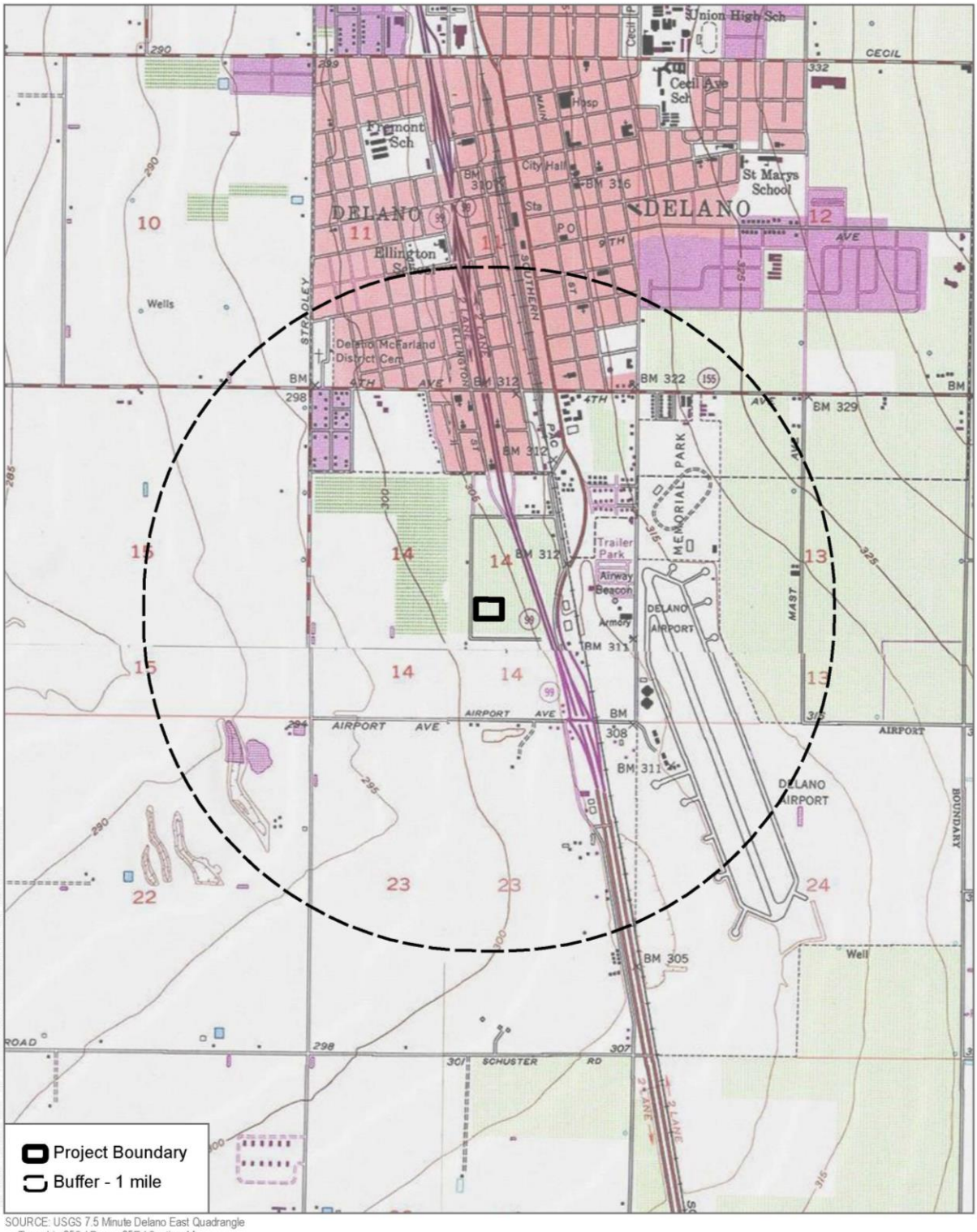
Respectfully,

Angela Pham, M.A., RPA
Archaeologist
DUDEK
Phone: (760) 479-4855
Email:apham@dudek.com

Attachments: *Figure 1. Records Search Area Map*

cc: Patricia Kelly, Environmental Project Manager, DGS
707 Third Street, Suite 401, West Sacramento, California 95605
Tel: 916.376.1609 or Email: pat.kelly@dgs.ca.gov



SOURCE: USGS 7.5 Minute Delano East Quadrangle
Township 25S / Range 25E / Section 14

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0 1,000 2,000 Feet

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Records Search Map
Delano DMV Field Office

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August 27, 2018

Ms. Delia Dominguez, Chairperson
Kitanemuk & Yowlumne Tejon Indians
115 Radio St.
Bakersfield, CA 93305

Subject: Information Request for the Delano Department of Motor Vehicles Field Office Replacement Project, Kern County, California

Dear Ms. Dominguez,

The Delano Department of Motor Vehicles (DMV) Field Office Replacement Project is being proposed in the City of Delano, Kern County, California. The DMV (as lead agency) is proposing to construct a new modern facility on an approximately 3 acres site located on former agricultural land; the project site is adjacent to Dover Parkway on the west and State Route 99 on the east. The existing Delano DMV facility is located at 631 Jefferson Street. DMV leases the existing building and upon completion of the new facility along Dover Parkway, DMV will not renew the lease at the current location. This area falls within the following Public Land Survey System area: Township 25S/ Range 25E - Section 14; on the Delano East, CA 1:24,000 USGS topographic quadrangle (Figure 1).

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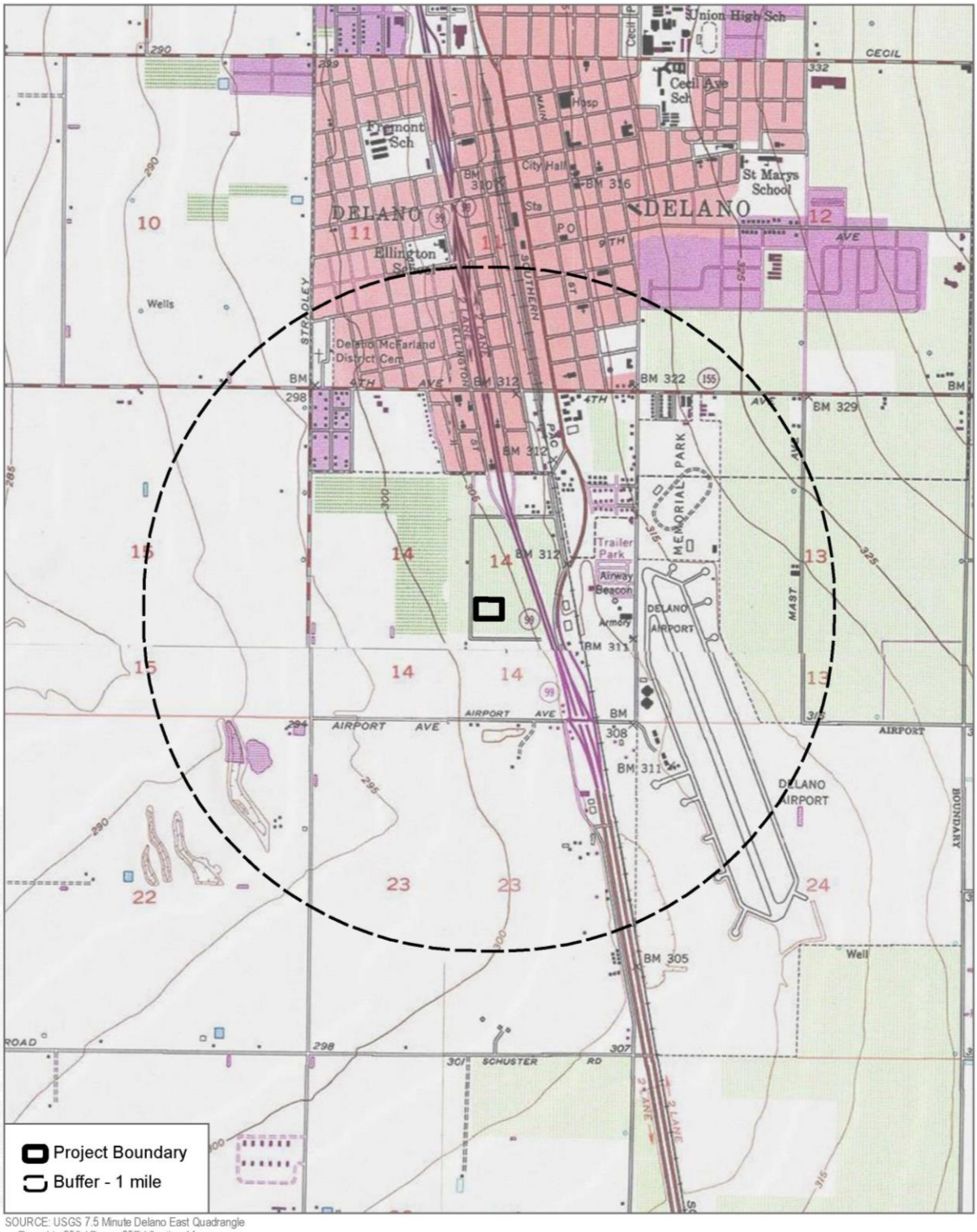

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August 27, 2018

Mr. Octavio Escobedo, Chairperson
Tejon Indian Tribe
1731 Hasti-acres Dr. Suite 108
Bakersfield, CA 93309

Subject: Information Request for the Delano Department of Motor Vehicles Field Office Replacement Project, Kern County, California

Dear Mr. Escobedo,

The Delano Department of Motor Vehicles (DMV) Field Office Replacement Project is being proposed in the City of Delano, Kern County, California. The DMV (as lead agency) is proposing to construct a new modern facility on an approximately 3 acres site located on former agricultural land; the project site is adjacent to Dover Parkway on the west and State Route 99 on the east. The existing Delano DMV facility is located at 631 Jefferson Street. DMV leases the existing building and upon completion of the new facility along Dover Parkway, DMV will not renew the lease at the current location. This area falls within the following Public Land Survey System area: Township 25S/ Range 25E - Section 14; on the Delano East, CA 1:24,000 USGS topographic quadrangle (Figure 1).

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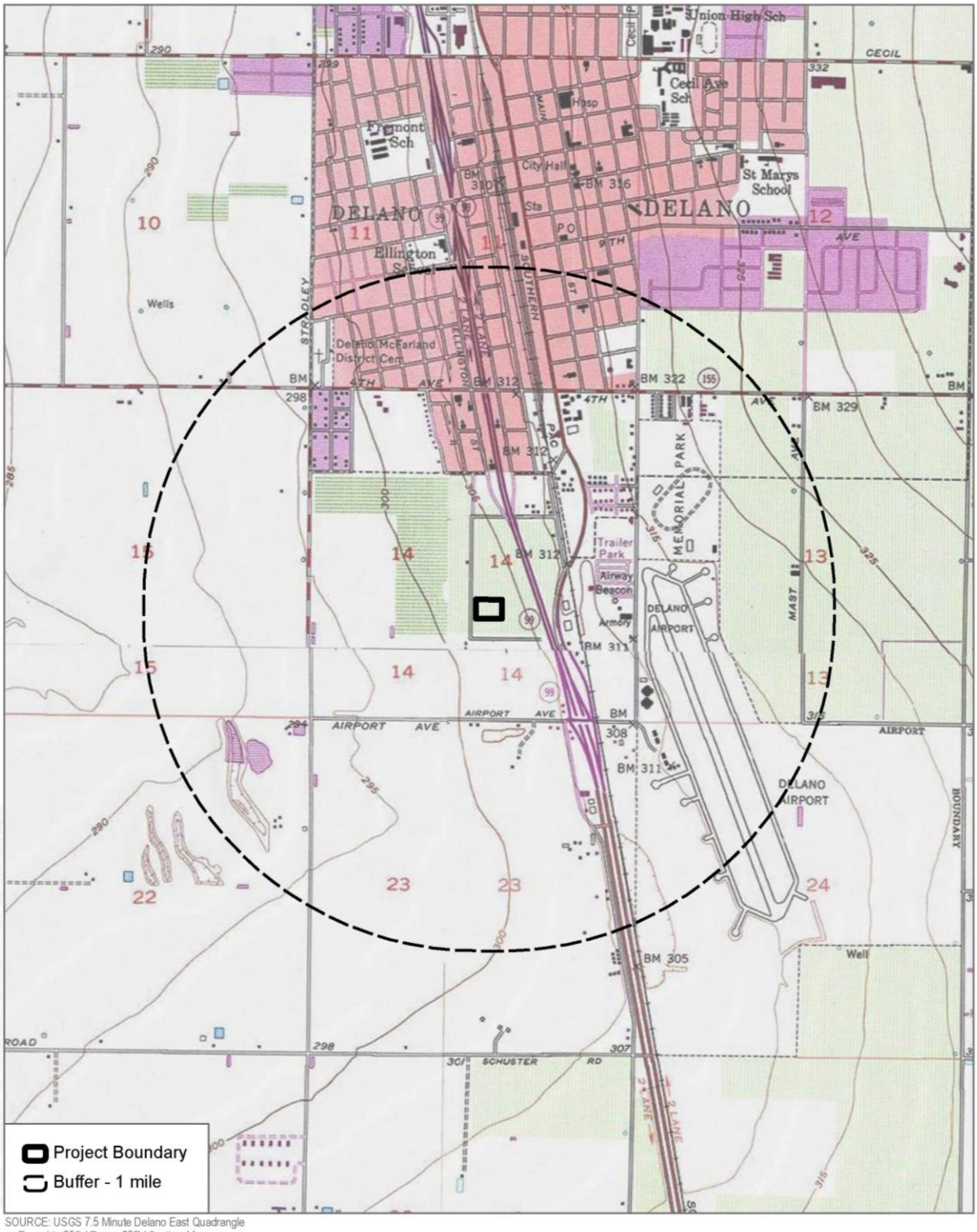

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Delano DMV Field Office

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August 27, 2018

Mr. Robert L. Gomez Jr., Tribal Chairperson
Tubatulabals of Kern Valley
P.O. Box 226
Lake Isabella, CA 93240

Subject: Information Request for the Delano Department of Motor Vehicles Field Office Replacement Project, Kern County, California

Dear Mr. Gomez Jr.,

The Delano Department of Motor Vehicles (DMV) Field Office Replacement Project is being proposed in the City of Delano, Kern County, California. The DMV (as lead agency) is proposing to construct a new modern facility on an approximately 3 acres site located on former agricultural land; the project site is adjacent to Dover Parkway on the west and State Route 99 on the east. The existing Delano DMV facility is located at 631 Jefferson Street. DMV leases the existing building and upon completion of the new facility along Dover Parkway, DMV will not renew the lease at the current location. This area falls within the following Public Land Survey System area: Township 25S/ Range 25E - Section 14; on the Delano East, CA 1:24,000 USGS topographic quadrangle (Figure 1).

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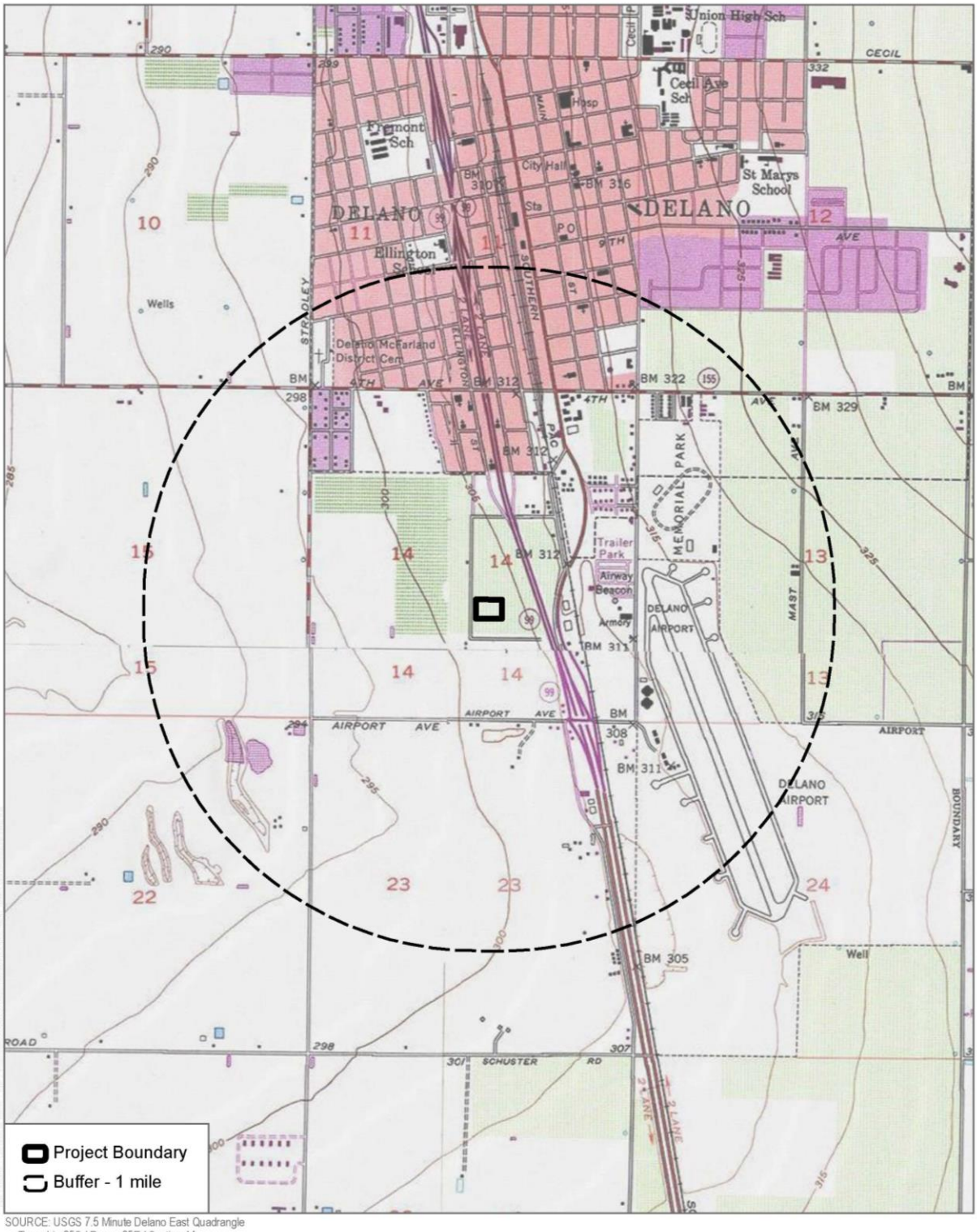

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August 27, 2018

Ms. Danelle Guiterrez, Tribal Historic Preservation Officer
Big Pine Paiute Tribe of the Ownes Valley
P.O. Box 700
Big Pine, CA 93513

Subject: Information Request for the Delano Department of Motor Vehicles Field Office Replacement Project, Kern County, California

Dear Ms. Guiterrez,

The Delano Department of Motor Vehicles (DMV) Field Office Replacement Project is being proposed in the City of Delano, Kern County, California. The DMV (as lead agency) is proposing to construct a new modern facility on an approximately 3 acres site located on former agricultural land; the project site is adjacent to Dover Parkway on the west and State Route 99 on the east. The existing Delano DMV facility is located at 631 Jefferson Street. DMV leases the existing building and upon completion of the new facility along Dover Parkway, DMV will not renew the lease at the current location. This area falls within the following Public Land Survey System area: Township 25S/ Range 25E - Section 14; on the Delano East, CA 1:24,000 USGS topographic quadrangle (Figure 1).

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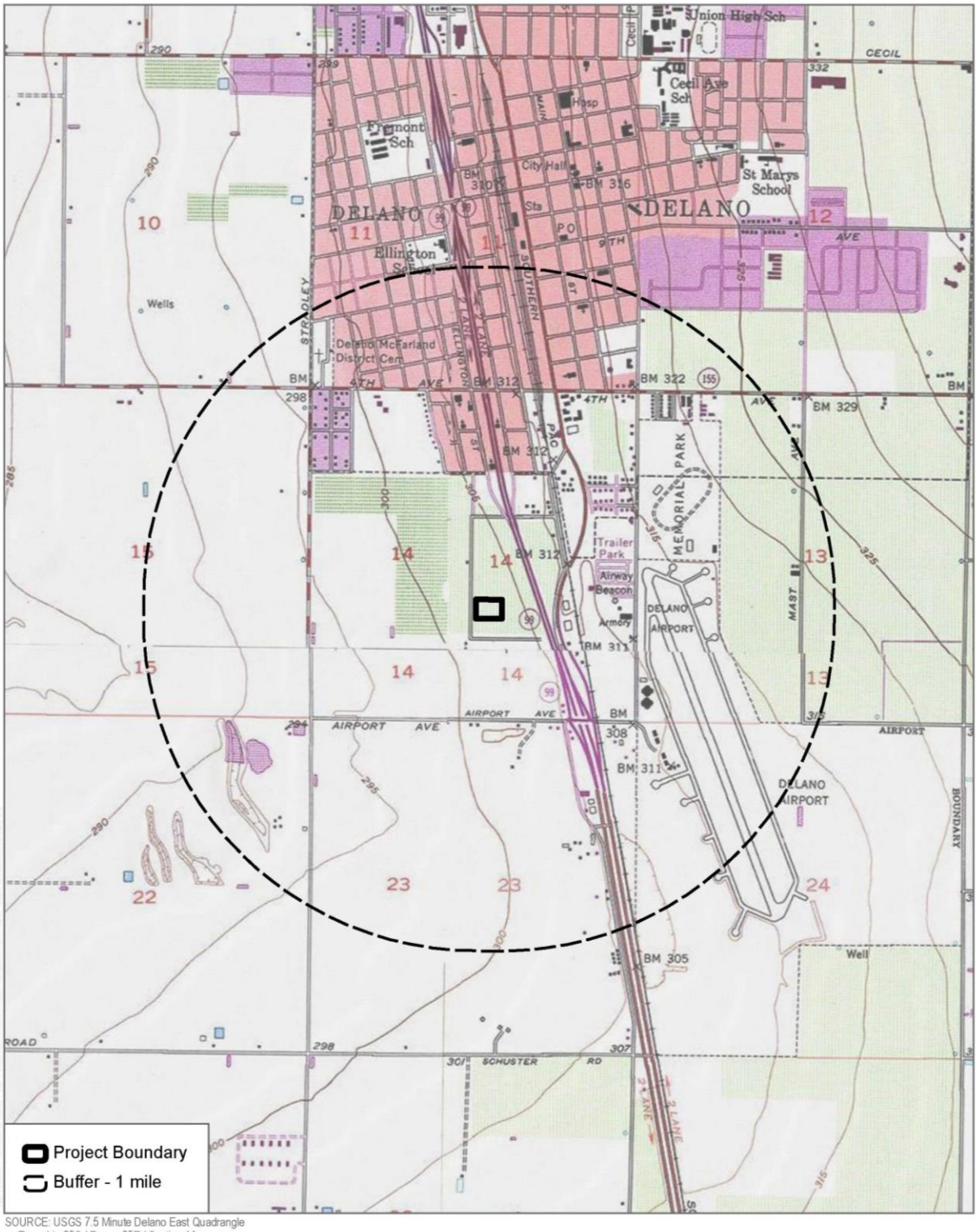

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605 THIRD STREET
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T 760.942.5147 T 800.450.1818 F 760.632.0164

August 27, 2018

Ms. Genevieve Jones, Chairperson
Big Pine Paiute Tribe of the Ownes Valley
P.O. Box 700
Big Pine, CA 93513

Subject: Information Request for the Delano Department of Motor Vehicles Field Office Replacement Project, Kern County, California

Dear Ms. Jones,

The Delano Department of Motor Vehicles (DMV) Field Office Replacement Project is being proposed in the City of Delano, Kern County, California. The DMV (as lead agency) is proposing to construct a new modern facility on an approximately 3 acres site located on former agricultural land; the project site is adjacent to Dover Parkway on the west and State Route 99 on the east. The existing Delano DMV facility is located at 631 Jefferson Street. DMV leases the existing building and upon completion of the new facility along Dover Parkway, DMV will not renew the lease at the current location. This area falls within the following Public Land Survey System area: Township 25S/ Range 25E - Section 14; on the Delano East, CA 1:24,000 USGS topographic quadrangle (Figure 1).

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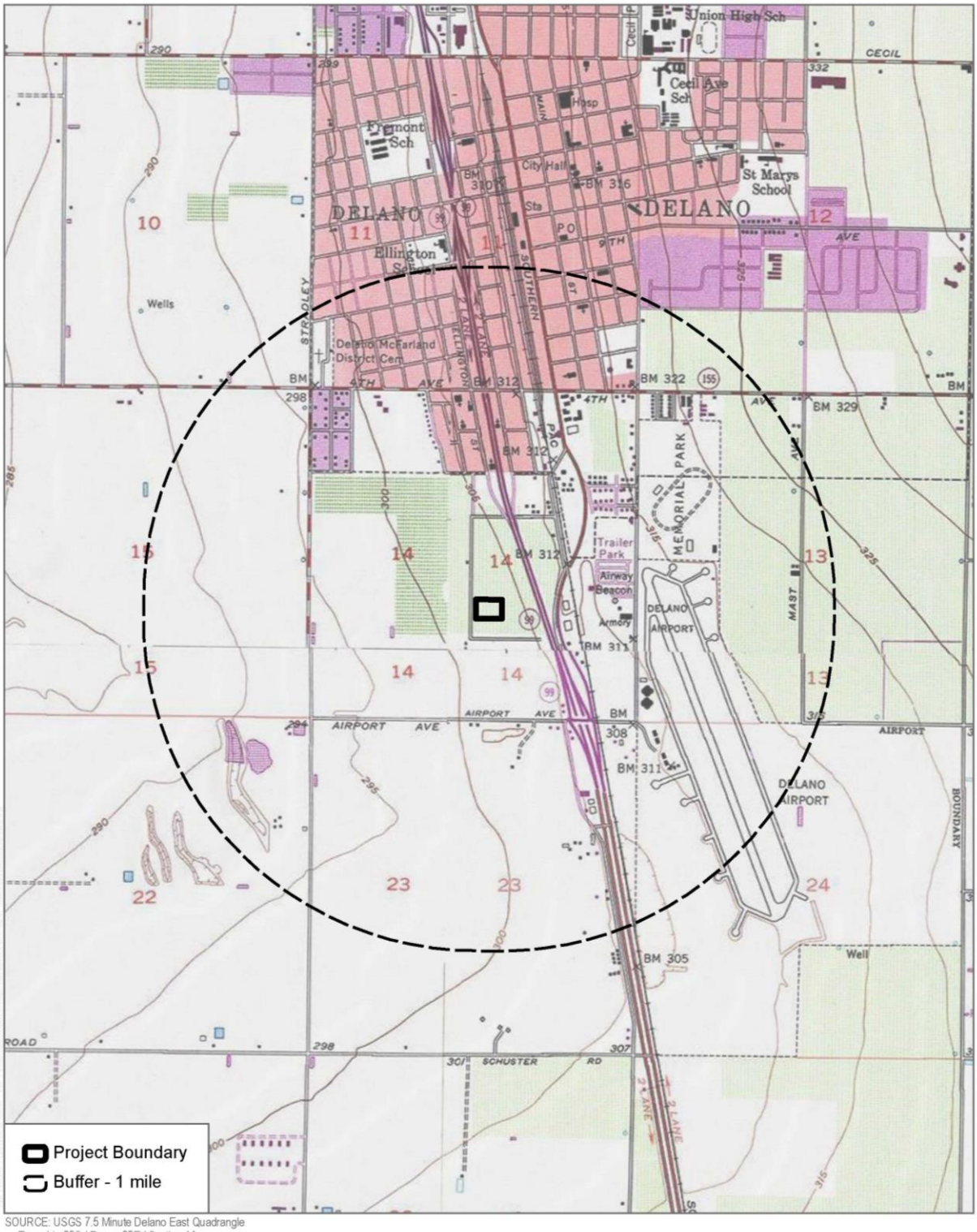

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605 THIRD STREET
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August 27, 2018

Mr. Neil Peyron, Chairperson
Tule River Indian Tribe
P.O. Box 589
Porterville, CA 93258

Subject: Information Request for the Delano Department of Motor Vehicles Field Office Replacement Project, Kern County, California

Dear Mr. Peyron,

The Delano Department of Motor Vehicles (DMV) Field Office Replacement Project is being proposed in the City of Delano, Kern County, California. The DMV (as lead agency) is proposing to construct a new modern facility on an approximately 3 acres site located on former agricultural land; the project site is adjacent to Dover Parkway on the west and State Route 99 on the east. The existing Delano DMV facility is located at 631 Jefferson Street. DMV leases the existing building and upon completion of the new facility along Dover Parkway, DMV will not renew the lease at the current location. This area falls within the following Public Land Survey System area: Township 25S/ Range 25E - Section 14; on the Delano East, CA 1:24,000 USGS topographic quadrangle (Figure 1).

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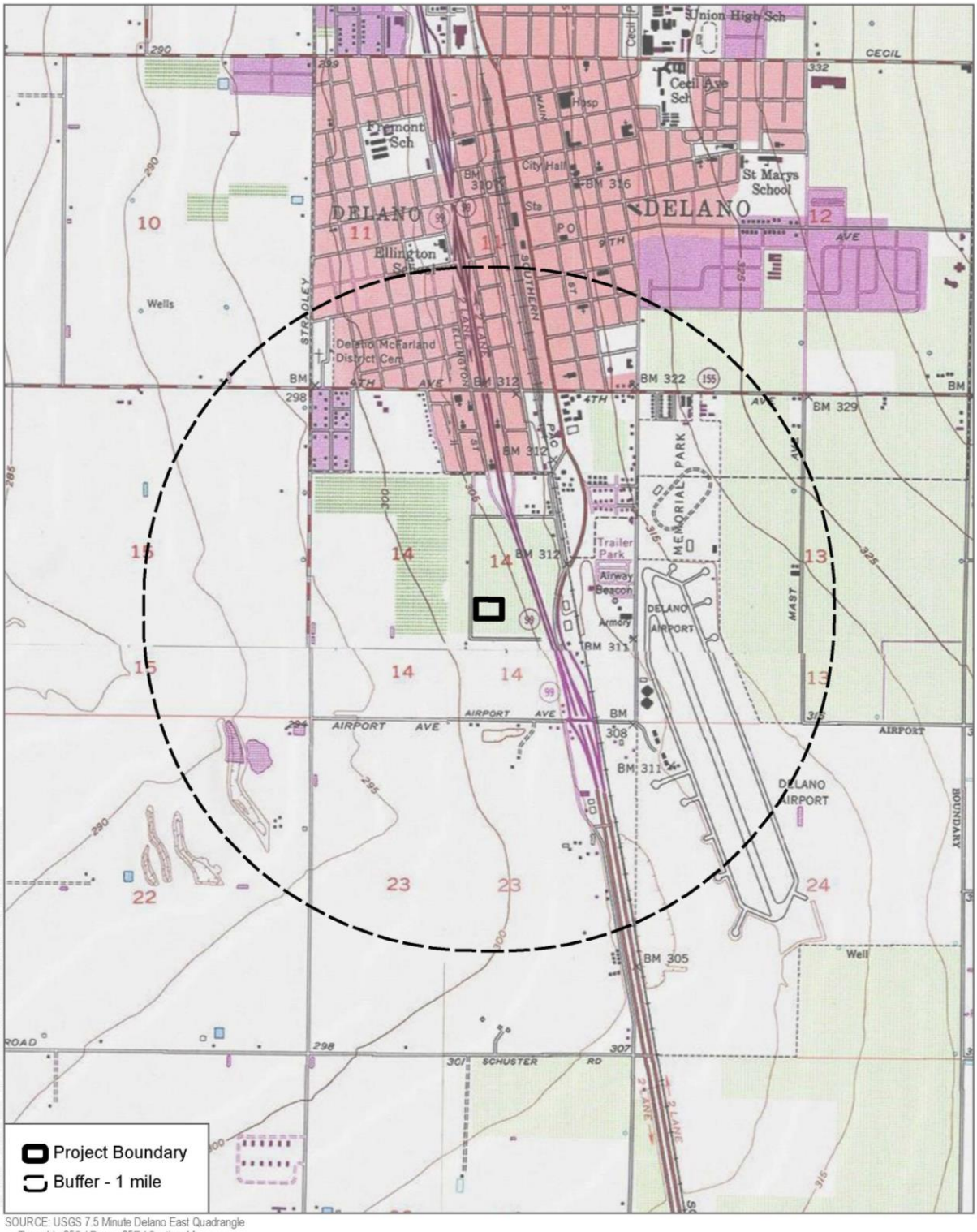

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August 27, 2018

Mr. Robert Robinson, Chairperson
Kern Valley Indian Council
P.O. Box 401
Weldon, CA 93283

Subject: Information Request for the Delano Department of Motor Vehicles Field Office Replacement Project, Kern County, California

Dear Mr. Robinson,

The Delano Department of Motor Vehicles (DMV) Field Office Replacement Project is being proposed in the City of Delano, Kern County, California. The DMV (as lead agency) is proposing to construct a new modern facility on an approximately 3 acres site located on former agricultural land; the project site is adjacent to Dover Parkway on the west and State Route 99 on the east. The existing Delano DMV facility is located at 631 Jefferson Street. DMV leases the existing building and upon completion of the new facility along Dover Parkway, DMV will not renew the lease at the current location. This area falls within the following Public Land Survey System area: Township 25S/ Range 25E - Section 14; on the Delano East, CA 1:24,000 USGS topographic quadrangle (Figure 1).

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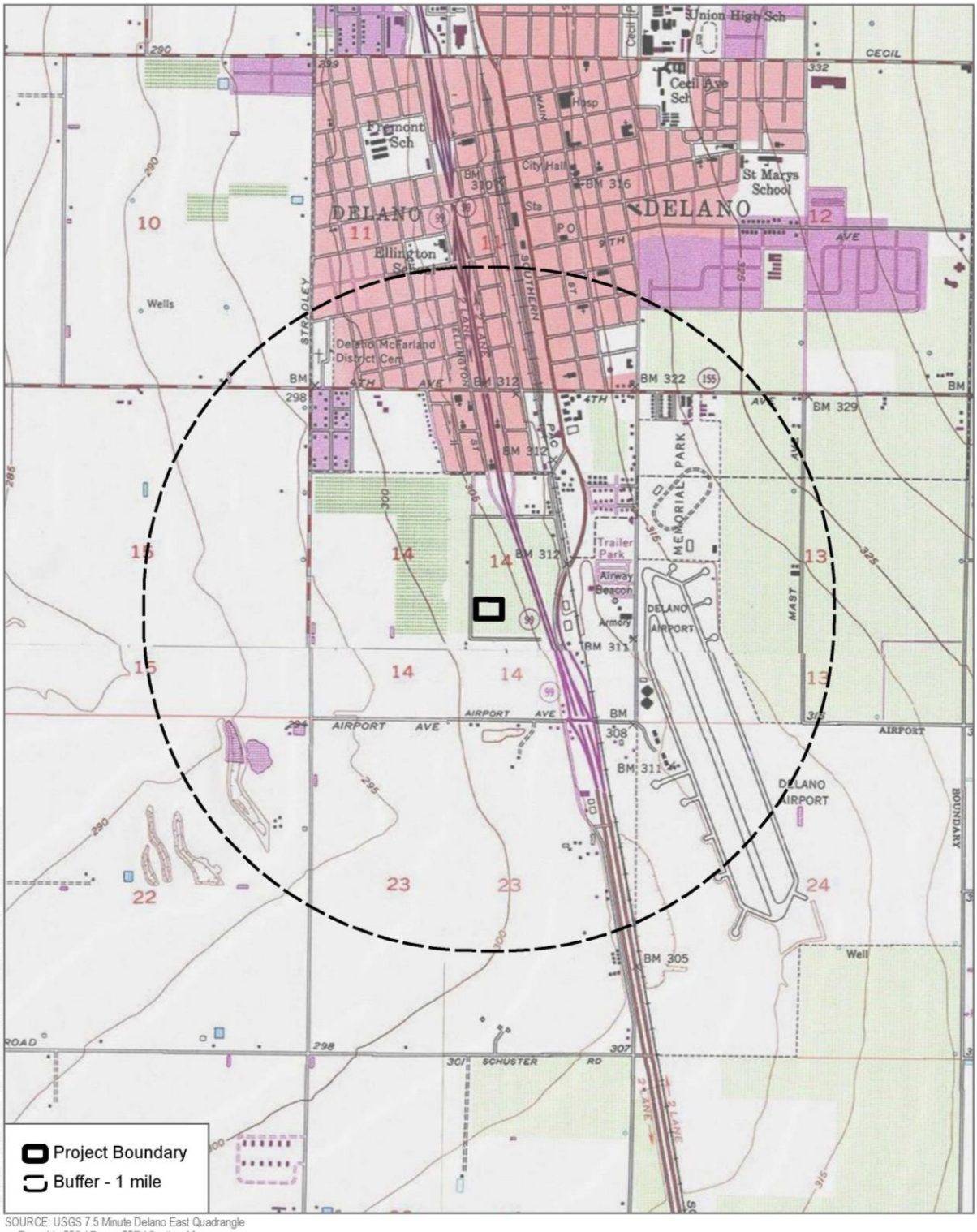

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August 27, 2018

Ms. Julie Turner, Secretary
Kern Valley Indian Council
P.O. Box 1010
Lake Isabella, CA 93240

Subject: Information Request for the Delano Department of Motor Vehicles Field Office Replacement Project, Kern County, California

Dear Ms. Turner,

The Delano Department of Motor Vehicles (DMV) Field Office Replacement Project is being proposed in the City of Delano, Kern County, California. The DMV (as lead agency) is proposing to construct a new modern facility on an approximately 3 acres site located on former agricultural land; the project site is adjacent to Dover Parkway on the west and State Route 99 on the east. The existing Delano DMV facility is located at 631 Jefferson Street. DMV leases the existing building and upon completion of the new facility along Dover Parkway, DMV will not renew the lease at the current location. This area falls within the following Public Land Survey System area: Township 25S/ Range 25E - Section 14; on the Delano East, CA 1:24,000 USGS topographic quadrangle (Figure 1).

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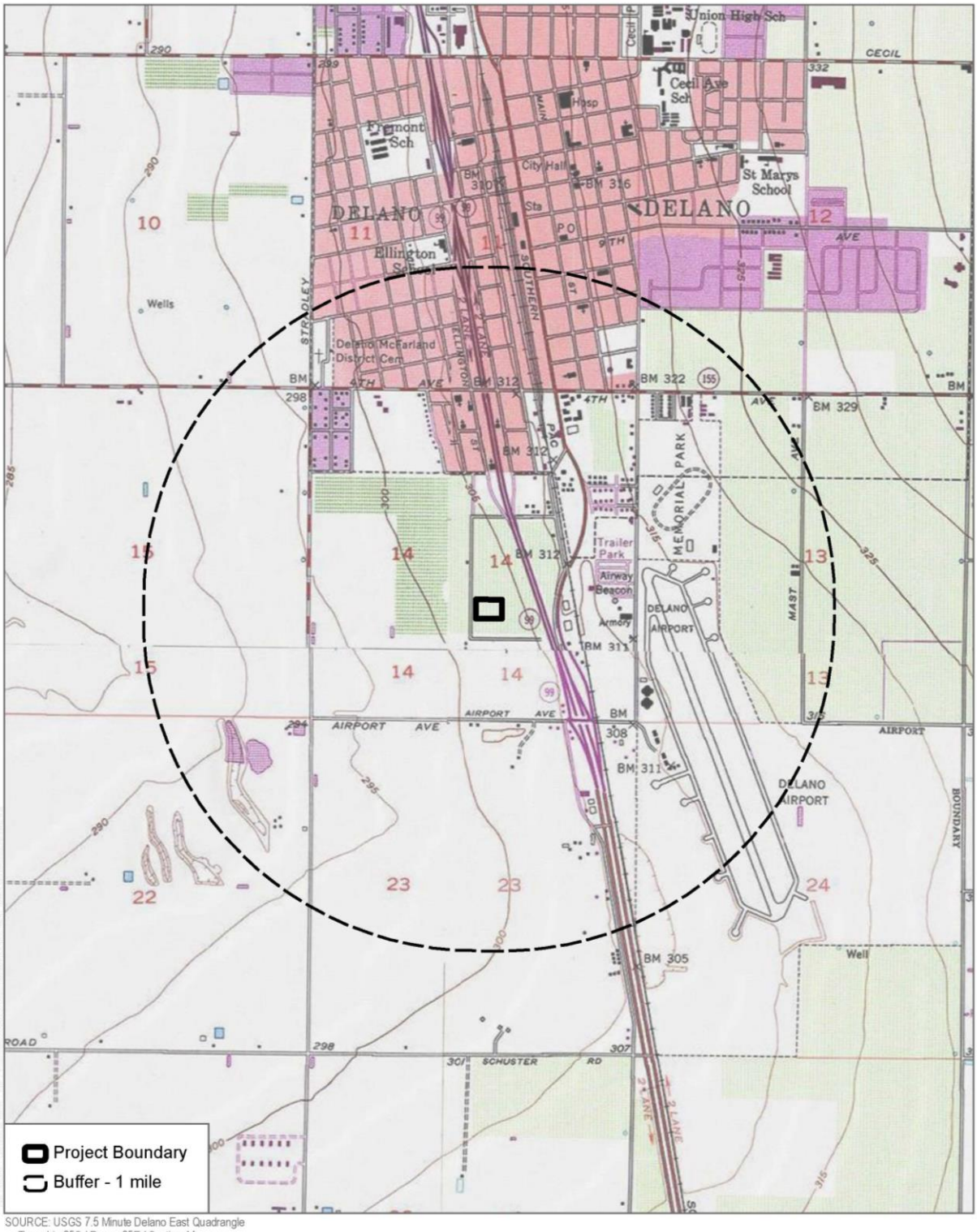

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605 THIRD STREET
ENCINITAS, CALIFORNIA 92024
T 760.942.5147 T 800.450.1818 F 760.632.0164

August 27, 2018

Mr. Kenneth Woodrow, Charperson
Wuksache Indian Tribe/ Eshom Valley Band
1179 Rock Haven Ct.
Salinas, CA 93906

Subject: Information Request for the Delano Department of Motor Vehicles Field Office Replacement Project, Kern County, California

Dear Mr. Woodrow,

The Delano Department of Motor Vehicles (DMV) Field Office Replacement Project is being proposed in the City of Delano, Kern County, California. The DMV (as lead agency) is proposing to construct a new modern facility on an approximately 3 acres site located on former agricultural land; the project site is adjacent to Dover Parkway on the west and State Route 99 on the east. The existing Delano DMV facility is located at 631 Jefferson Street. DMV leases the existing building and upon completion of the new facility along Dover Parkway, DMV will not renew the lease at the current location. This area falls within the following Public Land Survey System area: Township 25S/ Range 25E - Section 14; on the Delano East, CA 1:24,000 USGS topographic quadrangle (Figure 1).

As part of the cultural resources study prepared for the proposed project, Dudek contacted the California Native American Heritage Commission (NAHC) to request a Sacred Lands File (SLF) search and a list of Native American individuals and/or tribal organizations who may have knowledge of cultural resources in or near the proposed project area. The NAHC emailed a response on August 9, 2018, which stated that the SLF search did not identify the presence of Native American cultural resources in the immediate project area.

The NAHC recommended that we contact you regarding your knowledge of the presence of cultural resources that may be impacted by this project. If you have any knowledge of cultural resources that may exist within or near the proposed project area, please contact me directly at (760) 479-4855 or at apham@dudek.com within 30 days of receipt of this letter.

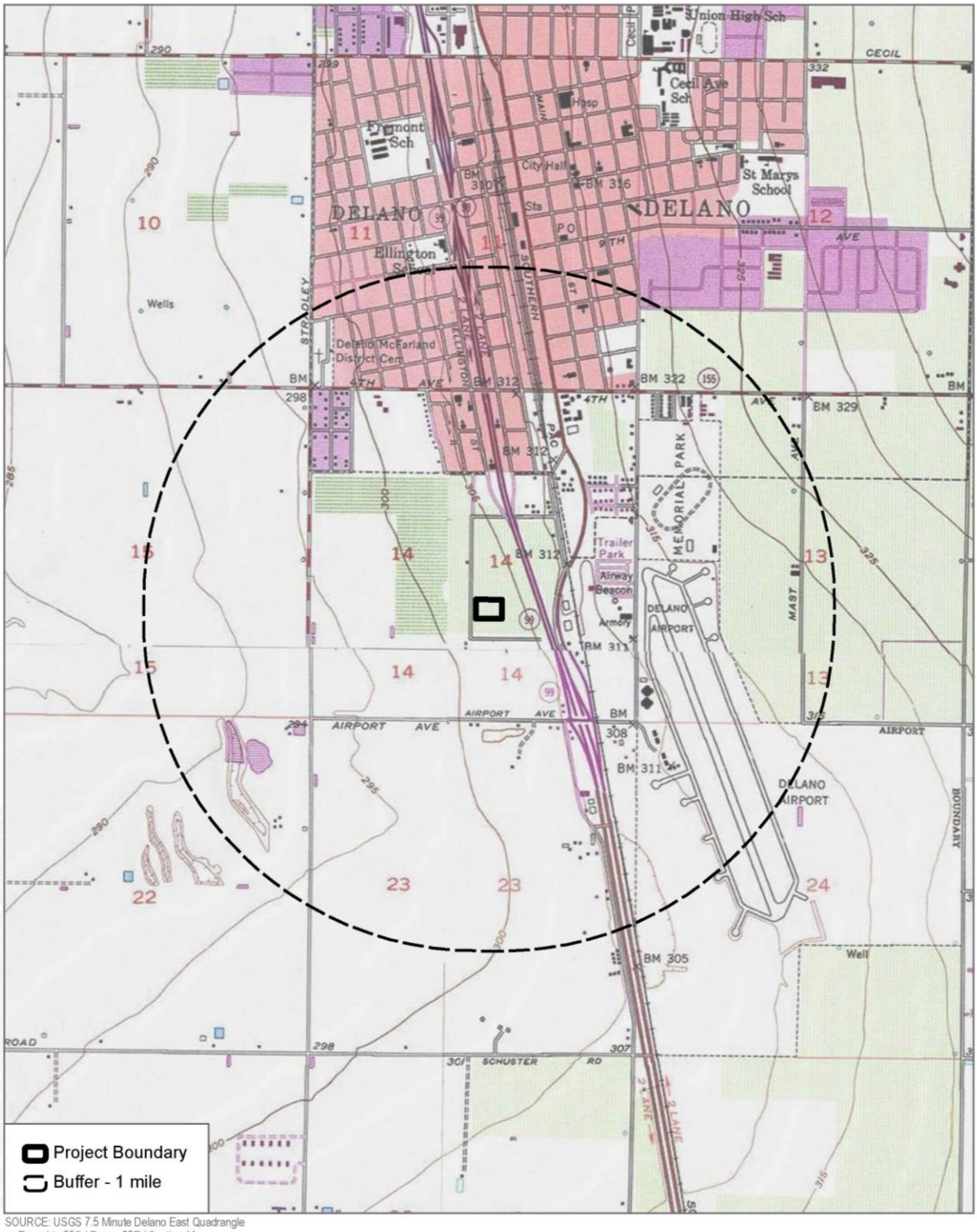
Please note that this letter does not constitute Assembly Bill (AB) 52 notification or initiation of consultation. AB 52 is a process between the lead agency and California Native American Tribes concerning potential impacts to tribal cultural resources. Tribes that wish to be notified of projects for the purposes of AB 52 must contact the Department of General Services (DGS; see contact info below), who is assisting the lead agency, DMV, in writing (pursuant to Public Resources Code Section 21080.3.1 (b)).

Respectfully,

Angela Pham, M.A., RPA
Archaeologist
DUDEK
Phone: (760) 479-4855
Email:apham@dudek.com

Attachments: *Figure 1. Records Search Area Map*

cc: Patricia Kelly, Environmental Project Manager, DGS
707 Third Street, Suite 401, West Sacramento, California 95605
Tel: 916.376.1609 or Email: pat.kelly@dgs.ca.gov



SOURCE: USGS 7.5 Minute Delano East Quadrangle
Township 25S / Range 25E / Section 14

0 250 500 Meters
0 1,000 2,000 Feet

DUDEK

Records Search Map
Delano DMV Field Office

DUDEK

MAIN OFFICE
605 THIRD STREET
ENCINITAS, CALIFORNIA 92024
T 760.942.5147 T 800.450.1818 F 760.632.0164

APPENDIX 3.5-2

Paleontological Records Search Results

Natural History Museum
of Los Angeles County
900 Exposition Boulevard
Los Angeles, CA 90007

tel 213.763.DINO
www.nhm.org

Vertebrate Paleontology Section
Telephone: (213) 763-3325

e-mail: smcleod@nhm.org

6 December 2018

Dudek
605 Third Street
Encinitas, CA 92024

Attn: Sarah Siren, Senior Paleontologist

re: Vertebrate Paleontology Records Check for paleontological resources for the proposed Delano DMV Office Project, in the City of Delano, Kern County, project area

Dear Sarah:

I have conducted a thorough search of our paleontology collection records for the locality and specimen data for the proposed Delano DMV Office Project, in the City of Delano, Kern County, project area as outlined on the portion of the Delano East USGS topographic quadrangle map that you sent to me via e- mail on 29 November 2018. We do not have any vertebrate fossil localities that lie within the proposed project site boundaries, but we do have localities nearby from sedimentary deposits similar to those that occur in the proposed project area, either at the surface or at depth.

Surface deposits in the entire proposed project area consist of younger Quaternary Alluvium, derived as alluvial basin deposits, that typically do not contain significant vertebrate fossils, at least in the uppermost layers. Our closest vertebrate fossil locality from these deposits though is LACM 1156, just east of due north of the proposed project area north of Delano and east of Radnor, that produced a fossil specimen of horse, *Equus*, at a depth of 45 feet. We have two other vertebrate fossil localities somewhat nearby to the proposed project areas from Quaternary Alluvial deposits in areas otherwise mapped as the Kern River Formation: LACM 6701, east-northeast of the proposed project area between Fountain Springs and the White River and LACM 4087, northeast of the proposed project area due east of Terra Bella. Both of these localities produced specimens of fossil mammoth, *Mammuthus*.

Shallow excavations in the Quaternary alluvial basin deposits in the proposed project area are unlikely to encounter significant vertebrate fossil remains. Deeper excavations that extend down into older sedimentary deposits, however, may well uncover significant vertebrate fossils. Any substantial excavations in the proposed project area, therefore, should be monitored closely to quickly and professionally collect any specimens without impeding development. Also, sediment samples should be collected and processed to determine the small fossil potential in the proposed project area. Any fossils recovered during mitigation should be deposited in an accredited and permanent scientific institution for the benefit of current and future generations.

This records search covers only the vertebrate paleontology records of the Natural History Museum of Los Angeles County. It is not intended to be a thorough paleontological survey of the proposed project area covering other institutional records, a literature survey, or any potential on-site survey.

Sincerely,

Samuel A. McLeod

Samuel A. McLeod, Ph.D.
Vertebrate Paleontology

enclosure: invoice

APPENDIX 3.6-1

Geotechnical Engineering Report

Geotechnical Engineering Report

DELANO DEPARTMENT OF MOTOR VEHICLES

WKA No. 11743.01P

January 10, 2018

Prepared for:

Nacht and Lewis Architects

600 Q Street, Suite 100

Sacramento, California 95814

Geotechnical Engineering Report

DELANO DEPARTMENT OF MOTOR VEHICLES

Delano, California

WKA No. 11743.01P

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Geotechnical Engineering Report

DELANO DEPARTMENT OF MOTOR VEHICLES

Delano, California

WKA No. 11743.01P

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Wallace Kuhl & Associates

Corporate Office
3050 Industrial Boulevard
West Sacramento, CA 95691
916.372.1434 phone
916.372.2565 fax

Stockton Office
3422 West Hammer Lane, Suite D
Stockton, CA 95219
209.234.7722 phone
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Geotechnical Engineering Report
DELANO DEPARTMENT OF MOTOR VEHICLES
Dover Parkway
Delano, California
WKA No. 11743.01P
January 10, 2018

INTRODUCTION

We have completed a geotechnical engineering study for the Delano Department of Motor Vehicles project to be constructed on the east side of Dover Parkway, approximately 1300 feet north of Woollomes Avenue in Delano, California. The purpose of our study has been to explore the existing site, soil and groundwater conditions, and to provide geotechnical engineering conclusions and recommendations for the design and construction of the planned development. This report presents the results of our study.

Scope of Services

Our scope of services for this project included the following tasks:

1. a site reconnaissance;
2. review of historic United States Geological Survey (USGS) topographic maps, historical aerial photographs, and available groundwater information;
3. subsurface exploration, including the drilling and sampling of four borings to depths of approximately 16½ feet below the existing ground surface;
4. bulk sampling of anticipated pavement subgrade soils;
5. laboratory testing of selected soil samples to determine engineering properties of the soil;
6. engineering analyses; and,
7. preparation of this report.

Figures and Attachments

This report contains a Vicinity Map as Figure 1; a Site Plan showing the boring locations as Figure 2; and, the Logs of Soil Borings as Figures 3 through 6. An explanation of the symbols and classification system used on the boring logs is contained on Figure 7. Appendix A contains general information regarding project concepts, exploratory methods used during our field investigation, and laboratory test results that are not included on the logs. Appendix B

contains *Guide Earthwork Specifications* that may be used in the preparation of project plans and specifications.

Proposed Development

We understand the project will consist of the design and construction of a new 10,718-square foot, field office for the Department of Motor Vehicles. We anticipate the single-story field office will be wood-framed or concrete block construction with an interior concrete slab-on-grade floors. Structural loads for the structure are anticipated to be relatively light based on this type of construction. Associated development is anticipated to consist of landscaping, underground utilities, asphalt concrete pavements, perimeter walls, and concrete flatwork improvements. Two small, shallow retention basins are planned to be constructed within the parking lot. We anticipate that these basins will be unlined and allow storm water to naturally percolate into the soil. We anticipate the depth of basins will be on the order of one to three feet.

Grading plans were not available at the time this report was prepared; however, based on existing topography, we anticipate maximum excavations and fills on the order of about one to three feet will be required to establish final site grades.

FINDINGS

Site Description

The subject site is located on the east side of Dover Parkway, approximately 1300 feet north of Woollomes Avenue in Delano, California (Figure 1). The site is bounded to the north, east and south by undeveloped property, and to the west by Dover Parkway. The property is relatively flat with an average surface elevation of about +305 feet mean sea level (msl) based on review of the USGS *7.5-Minute Topographic Map of the Delano East Quadrangle, California*, dated 2015.

At the time of our field exploration on December 13, 2017, the site was vacant and undeveloped. The surface soil across the site was loose and appeared to be recently disced for weed abatement. A sparse growth of volunteer weeds was observed across the property. A fence runs east-west near the northern site boundary, and turns north-south near the western boundary.

Historical Aerial Photograph Review

Review of available historical aerial photographs taken in 1969 indicate the site was vacant and used for agricultural farming. The site appears to have remained essentially unchanged during the period from at least 1993 through 2005.

Soil Conditions

Four exploratory borings were drilled across the property on December 13, 2017 at the approximate location shown on the attached Site Plan (Figure 2). The results of the borings indicate the near surface soils consist of about 16½ feet of light brown to brown, loose to medium dense, clayey sand. Silty sand was encountered below the near-surface clayey sand within Borings D1 and D4 below depths of about 13 and 14 feet respectively. The sands varied in density and amount of fines present.

For detailed soil conditions at a particular location, please refer to the Logs of Soil Borings presented as Figures 3 through 6.

Groundwater

We did not encounter groundwater during our subsurface explorations on December 13, 2017. Review of available groundwater information provided by the California Department of Water Resources indicates that regional groundwater beneath the site is generally present at an elevation of approximately 80 feet msl, or about 225 feet below the existing ground surface. (https://gis.water.ca.gov/app/gicima/).

CONCLUSIONS

Bearing Capacity

In our opinion, the native soils are considered capable of supporting proposed development provided the surface and near-surface soils are properly moisture conditioned and compacted during earthwork operations. Thorough moisture conditioning and recompaction of the upper soils, which have been disturbed by discing, will be important to provide uniform support for the planned structure and pavements.

Our experience also indicates that engineered fills composed of native soils or approved import soils that are placed and compacted in accordance with general engineering practices will be suitable for support of the proposed structure, pavements and other site improvements.

2016 CBC/ASCE 7-10 Seismic Design Criteria

The 2016 edition of the *California Building Code* (CBC) references the American Society of Civil Engineers (ASCE) Standard 7-10 for seismic design. The following seismic parameters provided in Table 1 were determined based on the site latitude and longitude using the public domain computer program developed by the USGS. The seismic design parameters summarized in Table 1 may be used for seismic design of the proposed structure.

TABLE 1
2016 CBC, ASCE 7-10 SEISMIC DESIGN PARAMETERS

Latitude: 35.75184° N Longitude: 119.24959° W	ASCE 7-10 Table/Figure	2016 CBC Table/Figure	Factor/ Coefficient	Value
Short-Period MCE at 0.2 seconds	Figure 22-1	Figure 1613.3.1(1)	S_S	0.760 g
1.0 second Period MCE	Figure 22-2	Figure 1613.3.1(2)	S_1	0.308 g
Soil Class	Table 20.3-1	Section 1613.3.2	Site Class	D
Site Coefficient	Table 11.4-1	Table 1613.3.3(1)	F_a	1.196
Site Coefficient	Table 11.4-2	Table 1613.3.3(2)	F_v	1.784
Adjusted MCE Spectral Response Parameters	Equation 11.4-1	Equation 16-37	S_{MS}	0.909 g
	Equation 11.4-2	Equation 16-38	S_{M1}	0.549 g
Design Spectral Acceleration Parameters	Equation 11.4-3	Equation 16-39	S_{DS}	0.606 g
	Equation 11.4-4	Equation 16-40	S_{D1}	0.366 g
Seismic Design Category	Table 11.6-1	Section 1613.3.5(1)	Risk Category I to IV	D
	Table 11.6-2	Section 1613.3.5(2)	Risk Category I to IV	D

Notes: MCE = Maximum Considered Earthquake
g = gravity

Liquefaction Potential

Based on the results of our subsurface exploration, the known geologic, seismic, groundwater and soil conditions, it is our opinion that the potential for liquefaction occurring at the site during seismic events is very low.

Soil Expansion Potential

Laboratory testing of the near-surface soil indicate these materials possess a low expansion potential when tested in accordance with ASTM D4829 (Figure A2). Based on the soil conditions encountered at the borings and the results of the laboratory testing, deepening of foundations, special reinforcement of foundations or floor slabs, or special moisture conditioning during site grading to resist or control soil expansion pressures, are not considered necessary on this project.

Soil Suitability for Engineered Fill Construction

The on-site native soils encountered in the borings are considered suitable for use in engineered fill construction, provided these materials do not contain significant organics, rubble, and other deleterious debris, and are at moisture contents capable of achieving the desired degree of compaction. Imported materials, if necessary, should be granular and approved by our office prior to importing the materials to the site.

Excavation Conditions

The on-site soils should be readily excavatable with conventional construction equipment. In our opinion, shallow excavations less than five feet in depth will stand at a near-vertical inclination for the short periods of time required for utility construction. However, minor sloughing and "running" conditions could occur if the soils are saturated, or where zones of clean (cohesionless) sands are encountered, especially when subjected to construction vibrations or allowed to dry significantly.

Excavations or trenches exceeding five feet in depth that will be entered by workers should be sloped, braced or shored to conform to current Occupational Safety and Health Administration (OSHA) requirements. The contractor must provide an adequately constructed and braced shoring system in accordance with federal, state and local safety regulations for individuals working in an excavation that may expose them to the danger of moving ground.

Temporarily sloped excavations less than 20 feet in depth should be constructed no steeper than a one horizontal to one vertical (1H:1V) inclination. Temporary slopes likely will stand at this inclination for the short-term duration of construction, provided significant pockets of loose and/or saturated granular soils are not encountered. Flatter slopes would be required if these conditions are encountered.

Excavated materials should not be stockpiled directly adjacent to an open excavation to prevent surcharge loading of the excavation sidewalls. Excessive truck and equipment traffic should be avoided near excavations. If material is stored or heavy equipment is stationed and/or operated near an excavation, a shoring system must be designed to resist the additional pressure due to the superimposed loads.

Pavement Subgrade Quality

Laboratory test results indicate the anticipated pavement subgrade soils are considered poor quality materials for support of asphalt concrete pavements and will require thicker pavement sections to compensate for the lower strength of the soils. Laboratory tests indicate that the anticipated subgrade soils possess a Resistance ("R") value of 14 when tested in accordance with California Test 301 (Figure A3). Based on the recent laboratory test results and the anticipated mixing of soils during earthwork construction, we have used an R-value of 10 for our pavement design.

Soil Corrosion Potential

One sample of near-surface soil was submitted to Sunland Analytical Lab of Rancho Cordova, California, for testing to determine pH, chloride and sulfate concentrations, and minimum resistivity to help evaluate the potential for corrosive attack upon buried concrete. The results of the corrosivity testing are summarized below in Table 2. Copies of the test reports are presented in Figures A4 and A5.

TABLE 2
SOIL CORROSIVITY TESTING

Analyte	Test Method	Sample Identification
		D2 (0'-3')
pH	CA DOT 643 Modified*	7.70
Minimum Resistivity	CA DOT 643 Modified*	1880 Ω-cm
Chloride	CA DOT 422	28.7 ppm
Sulfate	CA DOT 417	31.8 ppm
Sulfate – SO4	ASTM D-516	31.51 mg/kg

Notes: * = Small cell method; Ω-cm = Ohm-centimeters; ppm = Parts per million; mg/kg= milligrams per kilogram

The California Department of Transportation Corrosion and Structural Concrete Field Investigation Branch, 2015 Corrosion Guidelines (Version 2.1), considers a site to be corrosive to foundation elements if one or more of the following conditions exists for the representative soil and/or water samples taken: has a chloride concentration greater than or equal to 500 ppm, sulfate concentration greater than or equal to 2000 ppm, or the pH is 5.5 or less. Based on this

criterion, the on-site soils tested are not considered corrosive to steel reinforcement properly embedded within Portland cement concrete (PCC).

Table 19.3.1.1 – Exposure Categories and Classes, of American Concrete Institute (ACI) 318-14, Section 19.3 – Concrete Design and Durability Requirements, as referenced in Section 1904.1 of the 2016 CBC, indicates the severity of sulfate exposure for the sample tested is Exposure Class S0 (water-soluble sulfate concentration in contact with concrete is low and injurious sulfate attack is not a concern). The project structural engineer should evaluate the requirements of ACI 318-14 and determine their applicability to the site.

Wallace-Kuhl & Associates are not corrosion engineers. Therefore, if it is desired to further define the soil corrosion potential at the site, a corrosion engineer should be consulted.

Soil Permeability

Review of the *Site Plan* dated September 22, 2017, prepared by Nacht & Lewis, indicates two, shallow storm water retention basins will be constructed in the parking lot area located on the west side of the building. We understand these features will be used to dispose of on-site water prior to its discharge from the site.

Review of the U.S. Department of Agriculture, Soil Conservation Service (SCS) *Soil Survey of Kern County, California, Northwestern Part* indicate the near-surface soils underlying the site consist of the “Wasco Sandy Loam” which is designated hydrologic soil group “A” considered to have relatively high infiltration characteristics. The soil survey indicates the capacity of the most limiting layer to transmit water to have a permeability ranging from about 2 to 6 inches per hour.

Based on the soil conditions encountered at the borings, information contained in the soil survey, and our experience with similar soil types, it is our opinion that an average infiltration rate of about 2 inches per hour is suitable for infiltration design at the site. However, the infiltration rate provided above is for preliminary design purposes only. Permeability testing was beyond the scope of our work for this project.

Groundwater Conditions and Seasonal Moisture

Based upon the absence of groundwater during our field exploration and the published information regarding groundwater elevations in the vicinity, we conclude that a permanent groundwater level should not be a significant factor in the design or construction of the proposed structure and shallow utilities.

During the wet season, infiltrating surface runoff water can create a saturated surface condition. Grading operations attempted following the onset of winter rains and prior to prolonged drying periods will be hampered by high soil moisture contents. Such soils, intended for use as engineered fill, will require considerable aeration and/or drying to reach a moisture content that will permit the soils to be properly compacted.

RECOMMENDATIONS

General

We anticipate maximum excavations and fills on the order of one to three feet to develop the site. The recommendations in this report are based upon this assumption. Also, the recommendations presented below are appropriate for typical construction in the late spring through fall months. The on-site soils likely will be saturated by rainfall in the winter and early spring months, and will not be compactable without aeration or chemical treatment to dry the soils. Should the construction schedule require work during wet conditions, additional recommendations can be provided, as conditions warrant.

Site preparation should be accomplished in accordance with the provisions of this report. A representative of the Geotechnical Engineer should be present during site grading to evaluate compliance with our recommendations. The Geotechnical Engineer of Record referenced herein should be considered the Geotechnical Engineer that is retained to provide geotechnical engineering observation and testing services during construction.

Site Clearing

Initially, the site should be cleared of any surface debris and rubble. Any existing underground utilities designated to be removed or relocated should include all trench backfill. Depressions resulting from clearing operations, as well as any loose, saturated, or organically contaminated soils, as identified by our representative, should be cleaned out to firm, undisturbed soils and widened, as necessary, to allow access with construction equipment. Depressions should be backfilled with engineered fill in accordance with the recommendations in this report.

Subgrade Preparation

Following clearing operations, the remaining surface organics should be removed by stripping. Strippings should not be used in general fill construction, but may be used in landscape areas, provided they are kept at least five feet from the building pad, moisture conditioned and compacted and do not exceed a depth of two feet. Discing of organics may be a suitable

alternative to stripping depending upon the quantity and condition of the surface vegetation at the time of grading. Discing will be allowed only with our prior approval and should be observed by our representative. Discing, if approved, must be continuous until organics are adequately mixed with the soil to provide a compactable mixture. Pockets or concentrations of organics will not be allowed.

Areas designated to receive fill, remain at-grade or achieved by excavation, including an area at least five feet horizontally beyond the exterior edge of the structure, should be scarified to a depth of 12 inches, thoroughly moisture conditioned to achieve at least the optimum moisture content, and compacted to at least 90 percent of the ASTM D1557 maximum dry density.

Compaction of the soil subgrade should be achieved using a heavy, self-propelled, sheepsfoot compactor (such as a Caterpillar 815 or equivalent) and must be performed in the presence of our representative who will evaluate the performance of the subgrade under the compaction loads, and identify loose or unstable soil conditions that could require additional excavation. Loose, soft or saturated soil deposits encountered below the depth of scarification during compaction operations should be removed to expose firm undisturbed soils as identified by our representative and backfilled with engineered fill as recommended in this report. Difficulty in achieving subgrade compaction or unusual soil instability may be indications of loose soils associated with past subsurface items such as burn pits or dump pits. Should these conditions exist, the materials should be excavated to check for subsurface structures and the excavations backfilled with engineered fill. We recommend construction bid documents contain a unit price (price per cubic yard) for additional excavation due to unsuitable materials and replacement with engineered fill.

Engineered Fill

On-site soils will be suitable for engineered fill construction in structural areas provided these materials do not contain rubbish, rubble greater than three inches, and significant organic concentrations. Imported fill materials, if required, should be similar to but less expansive than native soil and does not contain particles greater than three inches in maximum dimension. Imported soils should be approved by our office prior to being transported to the site. Also, if import fills are required (other than aggregate base), the contractor must provide appropriate documentation that the import is clean of known contamination and within acceptable corrosion limits.

Engineered fill should be placed in lifts not exceeding six inches in compacted thickness with each lift being thoroughly moisture conditioned to at least the optimum moisture content and uniformly compacted to not less than 90 percent of the ASTM D1557 maximum dry density.

Final Subgrade Preparation

The upper 12 inches of final building pad subgrade should be thoroughly moisture conditioned to at least the optimum moisture content and uniformly compacted to 90 percent of the maximum dry density regardless of whether final grade is left at the existing grade or is completed by excavation or filling.

The upper six inches of pavement subgrades should be uniformly compacted to at least 95 percent of the ASTM D1557 maximum dry density at a moisture content of at least the optimum moisture content, regardless of whether final grade is completed by excavation, filling or left at existing grade. Final subgrade compaction should be performed just prior to placement of aggregate base, after construction of underground utilities is complete. The compacted subgrade should be kept in a moist condition until the placement of the aggregate base. If subgrade soils are disturbed or allowed to dry they must be re-moisture conditioned and compacted before the aggregate base is placed.

Permanent excavation and fill slopes should be constructed no steeper than two horizontal to one vertical (2H:1V) and should be vegetated as soon as practical following grading to minimize erosion. As a minimum, the following erosion control measures should be considered: placement of straw bale sediment barriers or construction of silt filter fences in areas where surface run-off may be concentrated. The final decision of erosion control measures should be made by the Project Stormwater Pollution Prevention Plan (SWPPP) Engineer.

Site preparation should be accomplished in accordance with the recommendations of this section and the *Guide Earthwork Specifications* provided in Appendix B. We recommend that a representative from our office be present during site clearing and preparation and grading operations to observe and test the fill to verify compliance with these recommendations.

Utility Trench Backfill

Bedding of utilities and initial backfill should be in accordance with the manufacturer's recommendations for the pipe materials selected and Kern County standards, latest edition. Utility trench backfill should be placed in thin lifts, thoroughly moisture conditioned to the optimum moisture content and mechanically compacted to at least 90 percent of the ASTM D1557 maximum dry density. The thickness of each lift will depend on the type of compaction equipment used. Utility trench backfill should be continuously observed and tested during construction.

Trench backfill materials and compaction within street right-of-ways should conform to the applicable portions of the current Kern County standards, latest edition. The upper six inches of utility trench backfill within pavement areas should be uniformly compacted to at least 95 percent of the ASTM D1557 maximum dry density.

Underground utility trenches, which are aligned nearly parallel with foundations, should be at least three feet from the outer edge of foundations. Trenches should not encroach into the zone extending outward at a 1H:1V inclination below the bottom of the foundations. The intent of these recommendations is to prevent loss of both lateral and vertical support of foundations, resulting in possible settlement.

Additionally, trenches near foundations should not remain open longer than 72 hours to prevent drying of the soils. The intent of these recommendations is to prevent loss of both lateral and vertical support of foundations, resulting in possible settlement.

Foundation Design

The proposed single-story structure may be supported upon continuous and/or isolated spread foundations extending at least 12 inches below lowest adjacent soil grade. Lowest adjacent soil grade is defined as the grade upon which the capillary break material is placed or exterior soil grade, whichever is lower. All continuous foundations should maintain a minimum width of 12 inches; isolated spread foundations should be at least 18 inches in plan dimension. Foundations should be continuous around the perimeter of the building to help minimize moisture variations beneath the structure.

Foundations bearing on undisturbed or re-compacted native soils, engineered fill, or a combination of those materials may be sized for maximum allowable “net” soil bearing pressure of 3000 pounds per square foot (psf) for dead plus live load; this bearing value may be increased by one-third to include the effects of seismic or wind forces. The weight of the foundation concrete extending below lowest adjacent soil grade may be disregarded in sizing computations.

We recommend that all foundations be adequately reinforced to provide structural continuity, mitigate cracking and permit spanning of local soil irregularities. The structural engineer or civil engineering consultant should determine final foundation reinforcing requirements.

Resistance to lateral foundation displacement may be computed using an allowable friction factor of 0.30, which may be multiplied by the effective vertical load on each foundation. Additional lateral resistance may be computed using an allowable passive lateral earth pressure against the vertical projection of foundations equal to an equivalent fluid pressure of 300 psf per

foot of depth. These two modes of resistance should not be added unless the frictional component is reduced by 50 percent since full mobilization of these resistances may occur at different degrees of horizontal movement.

Interior Floor Slab Support

Interior concrete slab-on-grade floors can be supported upon the soil subgrade prepared in accordance with the recommendations in this report. Slabs-on-grade should be at least four inches thick, and final thickness, reinforcement and joint spacing should be determined by the slab designer. Proper and consistent location of the reinforcement near mid-slab is essential to its performance. The risk of uncontrolled shrinkage cracking is increased if the reinforcement is not properly located within the slab.

Floor slabs should be underlain by a layer of free-draining crushed rock, serving as a deterrent to migration of capillary moisture. The crushed rock layer should be at least four inches thick and graded such that 100 percent passes a one-inch sieve and no appreciable amount passes a No. 4 sieve. Additional moisture protection may be provided by placing a vapor retarder membrane (at least 10-mils thick) directly over the crushed rock. The membrane should meet or exceed the minimum specifications as outlined in ASTM E1745 and be installed in strict conformance with the manufacturer's recommendations.

Floor slab construction over the past 30 years or more has included placement of a thin layer of sand or pea gravel over the vapor retarder membrane. The intent of the sand/pea gravel is to aid in the proper curing of the slab concrete. However, recent debate over excessive moisture vapor emissions from floor slabs includes concern for water trapped within the sand/pea gravel. As a consequence, we consider the use of the sand/pea gravel layer as optional. The concrete curing benefits should be weighed against efforts to reduce slab moisture vapor transmission.

The recommendations presented above are intended to mitigate any significant soils-related cracking of the slab-on-grade floors. More important to the performance and appearance of a Portland cement concrete slab is the quality of the concrete, the workmanship of the concrete contractor, the curing techniques utilized, and the spacing of control joints.

Floor Slab Moisture Penetration Resistance

It is considered likely that floor slab subgrade soils will become saturated at some time during the life of the structure. This is a certainty when slabs are constructed during the wet season or when constantly wet ground or poor drainage conditions exist adjacent to the structure. For this reason, it should be assumed that interior slabs, particularly those intended for moisture-sensitive floor coverings or materials, require protection against moisture or moisture vapor penetration. Standard practice includes the rock and vapor retarder membrane suggested above. However, the rock and membrane offer only a limited, first line of defense against soil-related moisture. Recommendations contained in this report concerning floor slab design are presented as *minimum* requirements only from the geotechnical engineering standpoint.

It is emphasized that the use of sub-slab gravel and vapor retarder membrane will not "moisture proof" the slab, nor does it assure that slab moisture transmission levels will prevent damage to floor coverings or other building components. If increased protection against moisture vapor penetration of slabs is desired, a concrete moisture protection specialist should be consulted. The design team should consider all available measures for slab moisture protection. It is commonly accepted that maintaining the lowest practical water-cement ratio in the slab concrete is one of the most effective ways to reduce future moisture vapor penetration of the completed slabs.

Exterior Flatwork

Soil subgrades supporting exterior concrete flatwork (i.e., sidewalks, patios, etc.) should be brought to at least the optimum moisture content and uniformly compacted prior to the placement of the concrete. Proper moisture conditioning of the subgrade soils is considered important to the performance of exterior flatwork. Expansion joints should be provided to allow for minor vertical movement of the flatwork. Exterior flatwork should be constructed independent of the perimeter building foundation and isolated column foundations by the placement of a layer of felt material between the flatwork and the foundation.

Sidewalks and other concrete flatwork should be at least four inches thick and may be constructed directly on the prepared subgrade. The subgrade should be uniformly moisture conditioned to at least the optimum moisture content, and compacted to at least 95 percent of the maximum dry density just prior to concrete placement.

Consideration should be given to thickening the edges of sidewalks and patios to at least twice the slab thickness. Flatwork reinforcement for crack control, if desired, should be determined by the structural engineer.

Practices recommended by the Portland Cement Association (PCA) for proper placement, curing, joint depth and spacing, construction, and placement of concrete should be followed during exterior concrete flatwork construction.

Areas adjacent to new exterior flatwork should be landscaped to maintain more uniform soil moisture conditions adjacent to and beneath flatwork. We recommend final landscaping plans not allow fallow ground adjacent to exterior concrete flatwork.

Perimeter Sound Walls

If perimeter sound walls (i.e. Proto II walls) will be constructed, the walls may be supported upon conventional foundations utilizing the design parameters provided in the Foundation Design section of this report, or drilled, cast-in-place reinforced concrete piers (drilled piers). Piers for support of sound walls should be at least 12 inches in diameter and extend at least five feet below lowest adjacent soil grade.

Drilled piers extending at least five feet below the ground surface may be sized utilizing a maximum allowable vertical “net” bearing capacity of 4000 psf or an allowable skin friction of 250 psf for dead plus live loads, which may be applied over the surface of the pier. The upper 12 inches of skin friction should be disregarded unless the pier is completely surrounded by concrete or pavements for a distance of at least three feet from the edge of the foundation pier. These values may be increased by one-third to include the short-term wind or seismic forces. The weight of foundation concrete below grade may be disregarded in sizing computations for the end-bearing condition.

Uplift resistance of pier foundations may be computed using the following resisting forces, where applicable: 1) weight of the pier concrete (150 pounds per cubic foot), and 2) the allowable skin friction of 250 psf applied over the shaft area of the pier. Increased uplift resistance can be achieved by increasing the diameter of the pier or increasing the depth. Lateral resistance of pier foundations may be evaluated by applying a passive lateral earth pressure of equivalent to a fluid pressure of 300 psf per foot of depth.

Pavement Design

The following pavement sections provided in Table 3 have been calculated based on the results of R-value testing, and the procedures contained within Chapters 600 to 670 of the California Highway Design Manual, 6th edition, utilizing design Traffic Indices (TI) considered appropriate for the proposed development. The project civil engineer should determine the appropriate traffic index based on anticipated traffic conditions. We can provide alternative pavement sections based on other traffic indices, upon request.

TABLE 3
PAVEMENT DESIGN ALTERNATIVES

Traffic Index (TI)	Pavement Use	Pavement Subgrade R-value = 14	
		Type B Asphalt Concrete (inches)	Class 2 Aggregate Base (inches)
4.5	Automobile Parking and Drive Areas	2½*	8
		3	7
6.5	Drive Aisles, Moderate Truck Traffic and Entry/Exit Drive	3	15
		4*	13

Note: * = Asphalt concrete thickness includes the Caltrans Safety Factor.

We emphasize that the performance of pavements is critically dependent upon uniform and adequate compaction of the soil subgrade, as well as all engineered fill and utility trench backfill within the limits of the pavements. We recommend that pavement subgrade preparation, (i.e. scarification, moisture conditioning and compaction), be performed after underground utility construction is completed and just prior to aggregate base placement. The upper six inches of pavement subgrade soils should be compacted to at least 95 percent relative compaction at no less than the optimum moisture content. All aggregate base should be compacted to at least 95 percent of the ASTM D1557 maximum dry density. Materials quality and construction of the structural section should conform to the applicable provisions of the Caltrans Standard Specifications and Kern County Standards, latest editions.

We recommend consideration be given to using the Portland cement concrete pavements in areas subjected to concentrated heavy wheel loading, such as at truck loading/unloading areas and in front of trash enclosures. Portland cement concrete pavements, where used should be at least six inches thick over at least six inches of Class 2 aggregate base. We suggest that concrete slabs be constructed with thickened edges at least two inches plus the slab thickness and at least 36 inches wide in accordance with ACI design standards. Reinforcing for crack control, if desired, should consist of No. 3 reinforcing bars placed on maximum 18-inch centers each way throughout the slab. Reinforcement must be located at mid-slab depth to be effective. Portland cement concrete should achieve a minimum compressive strength of 3500 psi at 28 days. Concrete curing and joint spacing and details should conform with current PCA and ACI guidelines.

Efficient drainage of all surface water to avoid infiltration and saturation of the supporting aggregate base and subgrade soils is important to pavement performance. Weep holes could

be provided at drainage inlets, located at the subgrade-base interface, to allow accumulated water to drain from beneath the pavements.

Consideration should be given to using full-depth curbs between landscaped areas and pavements to serve as a cut off for water that could migrate into the pavement base materials or subgrade soils, especially in area adjacent to the on-site drainage systems.

Site Drainage

Final site grading should be accomplished to provide positive drainage of surface water away from the building and prevent ponding of water adjacent to foundations, slabs and pavements. The grades adjacent to the building should be sloped away from foundations at a minimum two percent slope for a distance of at least five feet, where possible. Roof gutter downspouts and surface drains should drain onto pavements or be connected to rigid, non-perforated piping directed to an appropriate drainage point away from the building. Ponding of surface water should not be allowed adjacent to the building or pavements.

Geotechnical Engineering Construction Observation Services

Site preparation should be accomplished in accordance with the recommendations of this report. Representatives of the Geotechnical Engineer should be present during site preparation and all grading operations to observe and test the fill to verify compliance with our recommendations and the job specifications. Testing frequency will depend on how the site is graded and should be determined during the rough grading operations. These services are beyond the scope of work authorized for this investigation.

In the event that Wallace-Kuhl & Associates is not retained to provide geotechnical engineering observation and testing services during construction, the Geotechnical Engineer retained to provide these services should indicate in writing that they agree with the recommendations of this report, or prepare supplemental recommendations as necessary. A final report by the Geotechnical Engineer providing construction testing services should be prepared upon completion of the project.

LIMITATIONS

Our recommendations are based upon the information provided regarding the proposed project, combined with our analysis of site conditions revealed by the field exploration and laboratory testing programs. We have used our engineering judgment based upon the information provided and the data generated from our investigation. This report has been prepared in substantial compliance with generally accepted geotechnical engineering practices that exist in the area of the project at the time the report was prepared. No warranty, either express or implied, is provided.

If the proposed construction is modified or re-sited; or, if it is found during construction that subsurface conditions differ from those we encountered at the boring locations, we should be afforded the opportunity to review the new information or changed conditions to determine if our conclusions and recommendations must be modified.

We emphasize that this report is applicable only to the proposed construction and the investigated site, and should not be utilized for construction on any other site.

The conclusions and recommendations of this report are considered valid for a period of three years. If design is not completed and construction has not started within three years of the date of this report, the report must be reviewed and updated if necessary.

Wallace - Kuhl & Associates

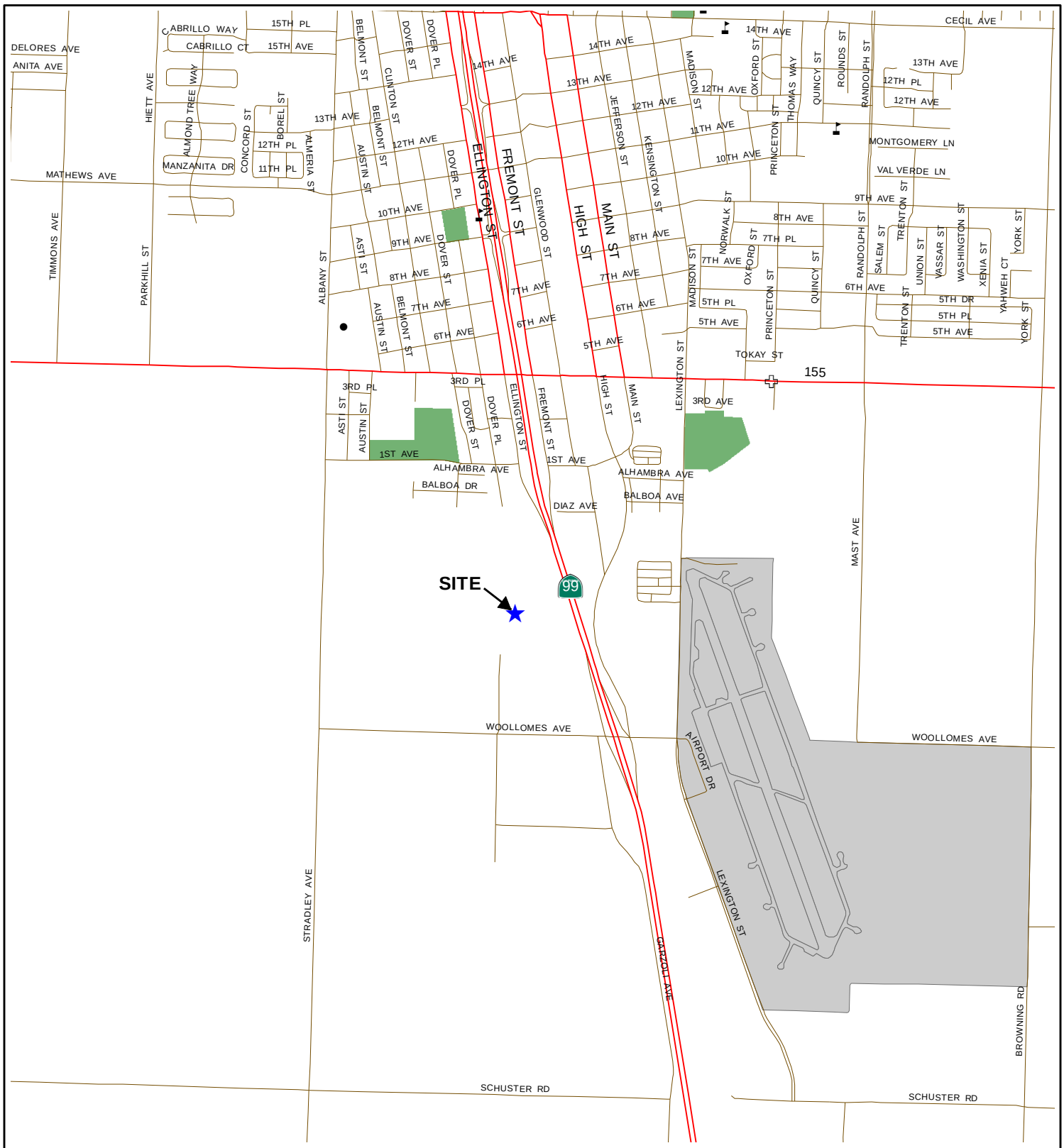
Derek M. Bays
Staff Geologist

Michael M. Watari
Senior Engineer

REGISTERED PROFESSIONAL ENGINEER
MICHAEL M. WATARI
NO. 2675
Exp. 12-31-19
GEOTECHNICAL
STATE OF CALIFORNIA

1/10/18

DMB:MMW:/dmb



Street data courtesy of Kern County.
Hydrography courtesy of the U.S. Geological Survey
acquired from the GIS Data Depot, December, 2007
Projection: NAD 83, California State Plane, Zone V

N

0 1,000 2,000
Feet

WallaceKuhl & ASSOCIATES

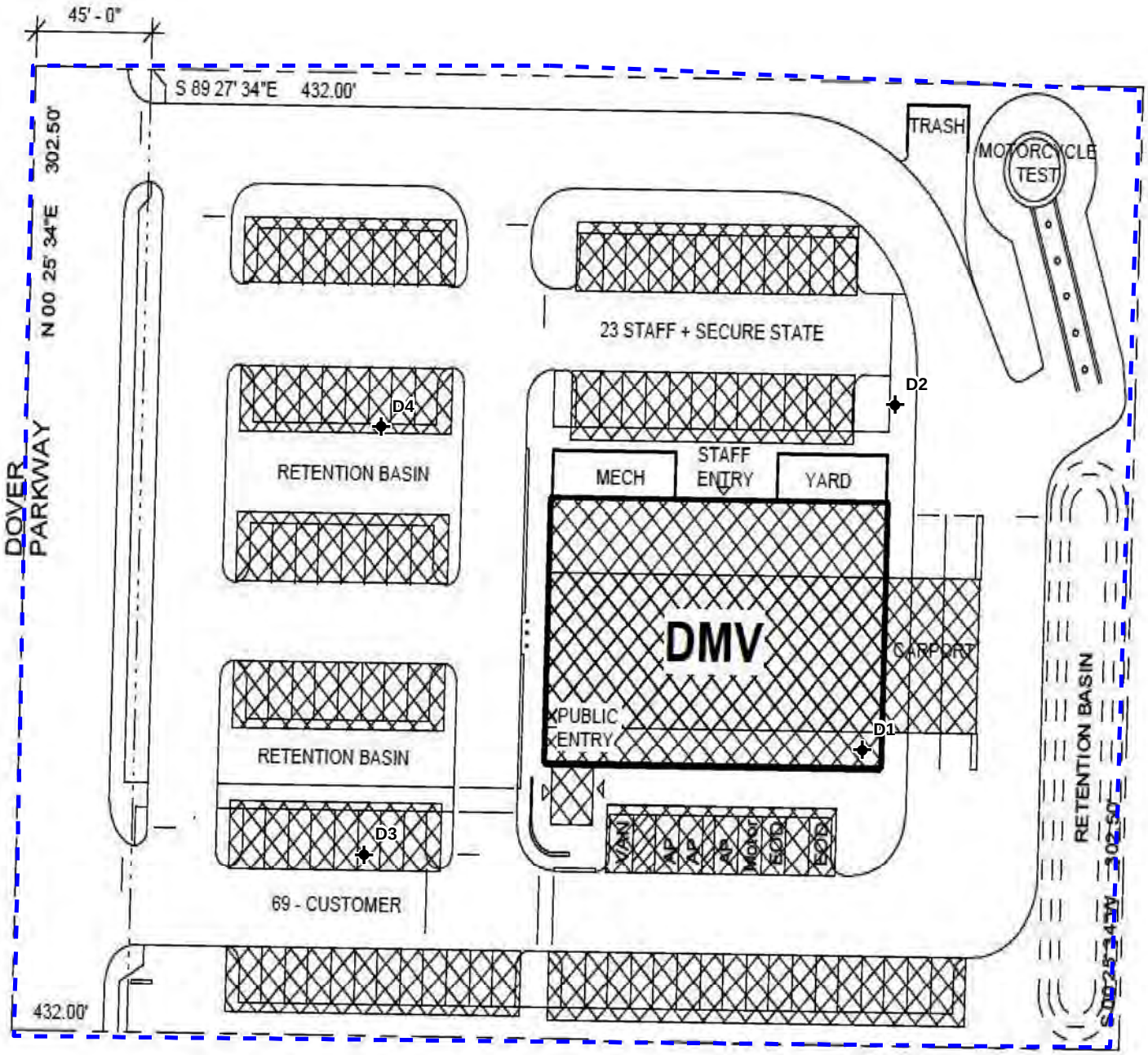
VICINITY MAP

DELANO DEPARTMENT OF MOTOR VEHICLES

Delano, California

FIGURE	1
DRAWN BY	RWO
CHECKED BY	DMB
PROJECT MGR	MMW
DATE	01/18

WKA NO. 11743.01P



Site Plan adapted from a drawing provided by Nacht & Lewis, dated 09/22/2017.
Projection: NAD 83, California State Plane, Zone V

Legend

Approximate Site Boundary

Approximate Soil Boring Location

N

0 25 50
Feet

WallaceKuhl & ASSOCIATES

SITE PLAN

DELANO DEPARTMENT OF MOTOR VEHICLES

Delano, California

FIGURE	2
DRAWN BY	RWO
CHECKED BY	DMB
PROJECT MGR	MMW
DATE	01/18

WKA NO.11743.01P

Project: Delano DMV
Project Location: Delano, California
WKA Number: 11743.01P

LOG OF SOIL BORING D1

Sheet 1 of 1

Date(s) Drilled	**12/13/17**	Logged By	**DB**	Checked By	**MMW**
Drilling Method	**Solid Flight Auger**	Drilling Contractor	**V&W Drilling, Inc.**	Total Depth of Drill Hole	**16.5 feet**
Drill Rig Type	**CME 55**	Diameter(s) of Hole, inches	**6"**	Approx. Surface Elevation, ft MSL	
Groundwater Depth [Elevation], feet		Sampling Method(s)	**Modified California**	Drill Hole Backfill	**Soil Cuttings**
Remarks				Driving Method and Drop	**140-lb automatic hammer, 30-inch drop**

ELEVATION, feet	DEPTH, feet	GRAPHIC LOG	ENGINEERING CLASSIFICATION AND DESCRIPTION	SAMPLE DATA: SAMPLE	SAMPLE DATA: SAMPLE NUMBER	SAMPLE DATA: NUMBER OF BLOWS	TEST DATA: MOISTURE CONTENT, %	TEST DATA: DRY UNIT WEIGHT, pcf	TEST DATA: ADDITIONAL TESTS
			Light brown, moist, loose, clayey fine SAND with varying amount of fines (SC).						
					D1-1	6			
	5				D1-2	7	15.0	93	
	10		Medium dense.		D1-3	30	10.4	99	
			Light brown, moist, dense, silty fine SAND (SM).						
	15				D1-4	44			
			Boring terminated at 16.5 feet below existing site grade. Groundwater was not encountered.						

BORING LOG 11743.01P - DELANO DMV.GPJ WKA.GDT 1/5/18 10:16 AM

Wallace Kuhl & ASSOCIATES

FIGURE 3

Project: Delano DMV
Project Location: Delano, California
WKA Number: 11743.01P

LOG OF SOIL BORING D2

Sheet 1 of 1

Date(s) Drilled	**12/13/17**	Logged By	**DB**	Checked By	**MMW**
Drilling Method	**Solid Flight Auger**	Drilling Contractor	**V&W Drilling, Inc.**	Total Depth of Drill Hole	**16.5 feet**
Drill Rig Type	**CME 55**	Diameter(s) of Hole, inches	**6"**	Approx. Surface Elevation, ft MSL	
Groundwater Depth [Elevation], feet		Sampling Method(s)	**Modified California**	Drill Hole Backfill	**Soil Cuttings**
Remarks				Driving Method and Drop	**140-lb automatic hammer, 30-inch drop**

ELEVATION, feet	DEPTH, feet	GRAPHIC LOG	ENGINEERING CLASSIFICATION AND DESCRIPTION	SAMPLE DATA: SAMPLE	SAMPLE DATA: SAMPLE NUMBER	SAMPLE DATA: NUMBER OF BLOWS	TEST DATA: MOISTURE CONTENT, %	TEST DATA: DRY UNIT WEIGHT, pcf	TEST DATA: ADDITIONAL TESTS
			Light brown, moist, medium dense, clayey fine SAND (SC).						
					D2-1	15	6.0	96	
	5				D2-2	18			
	10		Dense.		D2-3	49	6.4	110	
	15				D2-4	47			
			Boring terminated at 16.5 feet below existing site grade. Groundwater was not encountered.						

BORING LOG 11743.01P - DELANO DMV.GPJ WKA.GDT 1/5/18 10:16 AM

Wallace Kuhl & ASSOCIATES

FIGURE 4

Project: Delano DMV
Project Location: Delano, California
WKA Number: 11743.01P

LOG OF SOIL BORING D3

Sheet 1 of 1

Date(s) Drilled	**12/13/17**	Logged By	**DB**	Checked By	**MMW**
Drilling Method	**Solid Flight Auger**	Drilling Contractor	**V&W Drilling, Inc.**	Total Depth of Drill Hole	**16.5 feet**
Drill Rig Type	**CME 55**	Diameter(s) of Hole, inches	**6"**	Approx. Surface Elevation, ft MSL	
Groundwater Depth [Elevation], feet		Sampling Method(s)	**Modified California**	Drill Hole Backfill	**Soil Cuttings**
Remarks				Driving Method and Drop	**140-lb automatic hammer, 30-inch drop**

ELEVATION, feet	DEPTH, feet	GRAPHIC LOG	ENGINEERING CLASSIFICATION AND DESCRIPTION	SAMPLE DATA: SAMPLE	SAMPLE DATA: SAMPLE NUMBER	SAMPLE DATA: NUMBER OF BLOWS	TEST DATA: MOISTURE CONTENT, %	TEST DATA: DRY UNIT WEIGHT, pcf	TEST DATA: ADDITIONAL TESTS
			Light brown, moist, loose, clayey fine SAND with varying amount of fines (SC).						
					D3-1	12	6.8	90	
	5		Medium dense.						
					D3-2	16			
	10				D3-3	32			
	15		Very dense.						
					D3-4	50/6"	10.0	97	
			Boring terminated at 16.5 feet below existing site grade. Groundwater was not encountered.						

BORING LOG 11743.01P - DELANO DMV.GPJ WKA.GDT 1/5/18 10:16 AM

Wallace Kuhl & ASSOCIATES

FIGURE 5

Project: Delano DMV
Project Location: Delano, California
WKA Number: 11743.01P

LOG OF SOIL BORING D4

Sheet 1 of 1

Date(s) Drilled	**12/13/17**	Logged By	**DB**	Checked By	**MMW**
Drilling Method	**Solid Flight Auger**	Drilling Contractor	**V&W Drilling, Inc.**	Total Depth of Drill Hole	**16.5 feet**
Drill Rig Type	**CME 55**	Diameter(s) of Hole, inches	**6"**	Approx. Surface Elevation, ft MSL	
Groundwater Depth [Elevation], feet		Sampling Method(s)	**Modified California**	Drill Hole Backfill	**Soil Cuttings**
Remarks				Driving Method and Drop	**140-lb automatic hammer, 30-inch drop**

ELEVATION, feet	DEPTH, feet	GRAPHIC LOG	ENGINEERING CLASSIFICATION AND DESCRIPTION	SAMPLE DATA: SAMPLE	SAMPLE DATA: SAMPLE NUMBER	SAMPLE DATA: NUMBER OF BLOWS	TEST DATA: MOISTURE CONTENT, %	TEST DATA: DRY UNIT WEIGHT, pcf	TEST DATA: ADDITIONAL TESTS
			Light brown, moist, medium dense, clayey fine SAND with varying amount of fines (SC).						
					D4-1	21			
	5				D4-2	20	15.8	84	
	10		Dense.		D4-3	48			
			Light tan, moist, medium dense, fine to medium SAND .						
	15				D4-4	27	1.9	87	
			Boring terminated at 16.5 feet below existing site grade. Groundwater was not encountered.						

BORING LOG 11743.01P - DELANO DMV.GPJ WKA.GDT 1/5/18 10:16 AM

Wallace Kuhl & ASSOCIATES

FIGURE 6

UNIFIED SOIL CLASSIFICATION SYSTEM (ASTM D2487)

MAJOR DIVISIONS		USCS[4]	CODE	CHARACTERISTICS
COARSE GRAINED SOILS (More than 50% of soil > no. 200 sieve size)	GRAVELS[1] (More than 50% of coarse fraction > no. 4 sieve size)	GW		Well-graded gravels or gravel - sand mixtures, trace or no fines
		GP		Poorly graded gravels or gravel - sand mixtures, trace or no fines
		GM		Silty gravels, gravel - sand - silt mixtures, containing little to some fines[2]
		GC		Clayey gravels, gravel - sand - clay mixtures, containing little to some fines[2]
	SANDS[1] (50% or more of coarse fraction < no. 4 sieve size)	SW		Well-graded sands or sand - gravel mixtures, trace or no fines
		SP		Poorly graded sands or sand - gravel mixtures, trace or no fines
		SM		Silty sands, sand - gravel - silt mixtures, containing little to some fines[2]
		SC		Clayey sands, sand - gravel - clay mixtures, containing little to some fines[2]
FINE GRAINED SOILS (50% or more of soil < no. 200 sieve size)	SILTS & CLAYS LL < 50	ML		Inorganic silts, gravely silts, and sandy silts that are non-plastic or with low plasticity
		CL		Inorganic lean clays, gravelly lean clays, sandy lean clays of low to medium plasticity[3]
		OL		Organic silts, organic lean clays, and organic silty clays
	SILTS & CLAYS LL ≥ 50	MH		Inorganic elastic silts, gravelly elastic silts, and sandy elastic silts
		CH		Inorganic fat clays, gravelly fat clays, sandy fat clays of medium to high plasticity
		OH		Organic fat clays, gravelly fat clays, sandy fat clays of medium to high plasticity
HIGHLY ORGANIC SOILS		PT		Peat
ROCK		RX		Rocks, weathered to fresh
FILL		FILL		Artificially placed fill material

OTHER SYMBOLS

- = Drive Sample: 2-1/2" O.D. Modified California sampler
- = Drive Sampler: no recovery
- = SPT Sampler
- = Initial Water Level
- = Final Water Level
- = Estimated or gradational material change line
- = Observed material change line

Laboratory Tests

CR = Corrosion
PI = Plasticity Index
EI = Expansion Index
UCC = Unconfined Compression Test (TSF)
TR = Triaxial Compression Test
GR = Gradational Analysis (Sieve/Hydro)
FC = Wash (Fines Content)
PP = Pocket Penetrometer Test (TSF)
PID = Photo Ionization Detector Test (PPM)
RV = Resistance ("R") Value

REF = Refusal (>50 blows in 6 inches)

GRAIN SIZE CLASSIFICATION

CLASSIFICATION	RANGE OF GRAIN SIZES	
	U.S. Standard Sieve Size	Grain Size in Millimeters
BOULDERS (b)	Above 12"	Above 300
COBBLES (c)	12" to 3"	300 to 75
GRAVEL (g)	3" to No. 4	75 to 4.75
coarse	3" to 3/4"	75 to 19
fine	3/4" to No. 4	19 to 4.75
SAND	No. 4 to No. 200	4.75 to 0.075
coarse	No. 4 to No. 10	4.75 to 2.00
medium	No. 10 to No. 40	2.00 to 0.425
fine	No. 40 to No. 200	0.425 to 0.075
SILT & CLAY	Below No. 200	Below 0.075

Trace - Less than 5 percent
Few - 5 to 10 percent
Little - 15 to 25 percent
Some - 35 to 45 percent
Mostly - 50 to 100 percent

* Percents as given in ASTM D2488

NOTES:

1. Coarse grained soils containing 5% to 12% fines, use dual classification symbol (ex. SP-SM).
2. If fines classify as CL-ML (4<PI<7), use dual symbol (ex. SC-SM).
3. Silty Clays, use dual symbol (CL-ML).
4. Borderline soils with uncertain classification list both classifications (ex. CL/ML).

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UNIFIED SOIL CLASSIFICATION SYSTEM

DELANO DEPARTMENT OF MOTOR VEHICLES

Delano, California

FIGURE	7
DRAWN BY	RWO
CHECKED BY	DMB
PROJECT MGR	MMW
DATE	01/18

WKA NO. 11743.01P

APPENDICES

APPENDIX A
General Information, Field and Laboratory Testing

APPENDIX A

A. GENERAL INFORMATION

The performance of a geotechnical engineering study for the proposed Delano Department of Motor Vehicles project to be constructed approximately 1300 feet north of Woollomes Avenue on the east side of Dover Parkway in Delano, California, was authorized by Nacht & Lewis Architects, Inc. on November 9, 2017. Authorization was for an investigation as described in our proposal letter dated November 19, 2015, sent to our client Nacht & Lewis, Inc., whose address is 600 Q Street, Sacramento, California; telephone (916) 329-4000.

In performing this investigation, we referenced a Site *Plan* prepared by Nacht & Lewis Architects, Inc., dated September 22, 2017.

B. FIELD EXPLORATION

Four borings were drilled across the site on December 13, 2017, at the approximate locations indicated in Figure 2 utilizing a CME-75 truck-mounted drill rig. The borings were drilled to depths of about 16½ feet below existing site grades using six-inch diameter, solid-flight helical augers. At various intervals, relatively undisturbed soil samples were recovered with a 2½-inch O.D., 2-inch I.D., modified California sampler driven by an automatic 140-pound hammer freely falling 30 inches. The number of blows of the hammer required to drive the 18-inch long sampler each 6-inch interval was recorded. The sum of the blows required to drive the sampler the lower 12-inch interval, or portion thereof, is designated the penetration resistance or "blow count" for that particular drive.

The samples were retained in 2-inch diameter by 6-inch long thin-walled brass tubes contained within the sampler. Immediately after recovery, the soils in the tubes were visually classified by the field engineer and the ends of the tubes were sealed to preserve the natural moisture contents. All samples were taken to our laboratory for additional soil classification and selection of samples for testing.

The Boring Logs, Figures 3 through 6, contain descriptions of the soils encountered at each boring location. A Boring Legend explaining the Unified Soil Classification System and the symbols used on the logs is contained on Figure 7.

C. LABORATORY TESTING

Selected undisturbed samples of the soils were tested to determine dry unit weight (ASTM D2937) and natural moisture content (ASTM D2216). The results of these tests are included on the Logs of Borings.

A relatively undisturbed sample was tested for shear strength by triaxial strength testing (ASTM D4767). The results of the triaxial shear strength testing are presented in Figure A1.

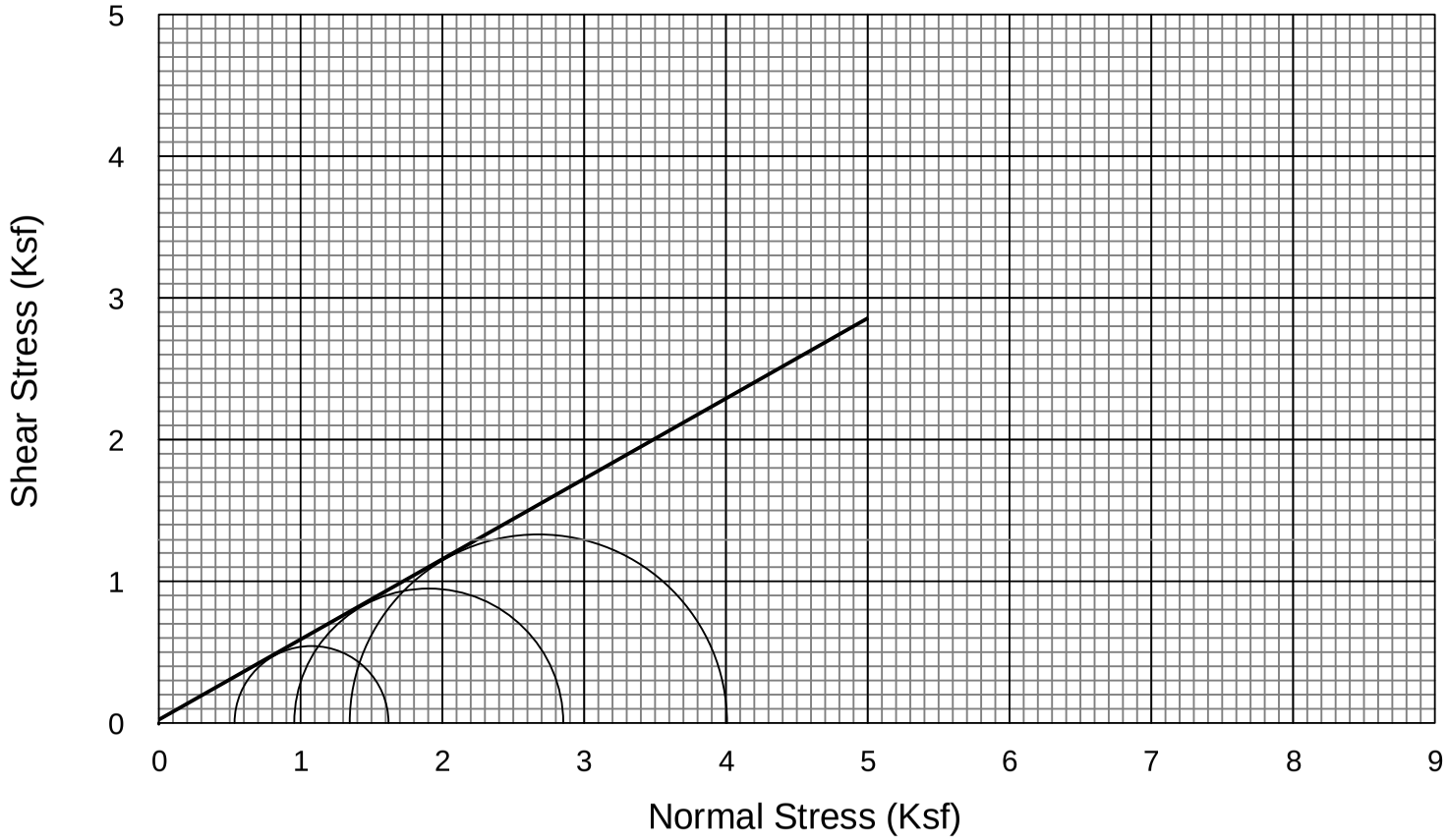
A representative sample of the near-surface soil was subjected to Expansion Index testing (ASTM D4829); the results of the test are presented on Figure A2.

One bulk sample of anticipated pavement subgrade soil was subjected to Resistance-value ("R-value") testing in accordance with California Test 301. The results of the R-value test, which were used in the pavement design, are presented in Figure A3.

One sample of near-surface soil was submitted to Sunland Analytical for corrosivity testing in accordance with California Test (CT) No. 643 (Modified Small Cell), CT 417, CT 422, and ASTM D516. Copies of the analytical results are presented in Figures A4 and A5.

TRIAXIAL COMPRESSION TEST

ASTM D4767



SAMPLE NO. : D1-1I

SAMPLE CONDITION : Undisturbed

SAMPLE DESCRIPTION : Light brown, clayey fine sand

DRY DENSITY (PCF) : 107
INITIAL MOISTURE (%) : 6.7
FINAL MOISTURE (%) : 16.4

ANGLE OF INTERNAL FRICTION (ø) : 29.5°
COHESION (PSF) : 17.3

WallaceKuhl & ASSOCIATES

TRIAXIAL COMPRESSION TEST RESULTS

DELANO DEPARTMENT OF MOTOR VEHICLES

Delano, California

FIGURE	A1
DRAWN BY	RWO
CHECKED BY	DMB
PROJECT MGR	MMW
DATE	01/18
WKA NO.	11743.01P

EXPANSION INDEX TEST RESULTS

ASTM D4829

MATERIAL DESCRIPTION: Light brown, clayey fine sand

LOCATION: D4

Sample Depth	Pre-Test Moisture (%)	Post-Test Moisture (%)	Dry Density (pcf)	Expansion Index
0' - 5'	8.0	14.3	118	**23**

CLASSIFICATION OF EXPANSIVE SOIL *

EXPANSION INDEX	POTENTIAL EXPANSION
0 - 20	Very Low
21 - 50	**Low**
51 - 90	Medium
91 - 130	High
Above 130	Very High

* From ASTM D4829, Table 1

Wallace Kuhl & ASSOCIATES

EXPANSION INDEX

DELANO DEPARTMENT OF MOTOR VEHICLES
Delano, California

FIGURE	A2
DRAWN BY	RWO
CHECKED BY	DMB
PROJECT MGR	MMW
DATE	01/18
WKA NO.	11743.01P

RESISTANCE VALUE TEST RESULTS

(California Test 301)

MATERIAL DESCRIPTION: Brown, clayey silty sand

LOCATION: D2 (0' - 5')

Specimen No.	Dry Unit Weight (pcf)	Moisture @ Compaction (%)	Exudation Pressure (psi)	Expansion (dial, inches x 1000)	Expansion (psf)	R Value
G	126	11.2	643	56	242	48
I	122	12.1	364	18	78	20
20	122	12.8	263	12	52	10

R-Value at 300 psi exudation pressure = **14**

WallaceKuhl & ASSOCIATES

RESISTANCE VALUE TEST RESULTS

DELANO DEPARTMENT OF MOTOR VEHICLES

Delano, California

FIGURE	A3
DRAWN BY	RWO
CHECKED BY	DMB
PROJECT MGR	MMW
DATE	01/18

WKA NO. 11743.01P

Sunland Analytical
11419 Sunrise Gold Circle, #10
Rancho Cordova, CA 95742
(916) 852-8557

Date Reported 12/20/2017
Date Submitted 12/15/2017

To: Derek Bays
Wallace-Kuhl & Assoc.
3050 Industrial Blvd
West Sacramento, CA 95691

From: Gene Oliphant, Ph.D. \ Randy Horney
General Manager \ Lab Manager

The reported analysis was requested for the following location:
Location : 11743.01P Site ID : BULK D2.
Thank you for your business.

* For future reference to this analysis please use SUN # 75831-158187.

EVALUATION FOR SOIL CORROSION

Soil pH	7.70		
Minimum Resistivity	1.88 ohm-cm (x1000)		
Chloride	28.7 ppm	00.00287	%
Sulfate	31.8 ppm	00.00318	%

METHODS
pH and Min.Resistivity CA DOT Test #643
Sulfate CA DOT Test #417, Chloride CA DOT Test #422

Wallace Kuhl & ASSOCIATES

CORROSION TEST RESULTS

DELANO DEPARTMENT OF MOTOR VEHICLES

Delano, California

FIGURE	A4
DRAWN BY	RWO
CHECKED BY	DMB
PROJECT MGR	MMW
DATE	01/18
WKA NO. 11743.01P	

Sunland Analytical

11419 Sunrise Gold Circle, #10
Rancho Cordova, CA 95742
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Date Reported 12/20/2017
Date Submitted 12/15/2017

To: Derek Bays
Wallace-Kuhl & Assoc.
3050 Industrial Blvd
West Sacramento, CA 95691

From: Gene Oliphant, Ph.D. \ Randy Horney
General Manager \ Lab Manager

The reported analysis was requested for the following:
Location : 11743.01P Site ID : BULK D2.
Thank you for your business.

* For future reference to this analysis please use SUN # 75831-158188.

Extractable Sulfate in Water

TYPE OF TEST	RESULTS	UNITS
Sulfate-SO4	31.51	mg/kg

ASTM D-516 from sat.paste extract-reported based on dry wt.

Wallace Kuhl & ASSOCIATES

CORROSION TEST RESULTS

DELANO DEPARTMENT OF MOTOR VEHICLES

Delano, California

FIGURE	A5
DRAWN BY	RWO
CHECKED BY	DMB
PROJECT MGR	MMW
DATE	01/18

WKA NO. 11743.01P

APPENDIX B
Guide Earthwork Specifications

APPENDIX B

GUIDE EARTHWORK SPECIFICATIONS

DELANO DEPARTMENT OF MOTOR VEHICLES

Dover Parkway

Delano, California

WKA No. 11743.01P

PART I: GENERAL

1.1 SCOPE

a. General Description

This item shall include all clearing of on-site rubble and debris; preparation of surfaces to be filled, filling, spreading, compaction, observation and testing of the fill; and all subsidiary work necessary to complete the grading of the site to conform with the lines, grades and slopes as shown on the accepted Drawings.

b. Related Work Specified Elsewhere

(1) Trenching and backfilling for sanitary sewer system: Section ___.

(2) Trenching and backfilling for storm drain system: Section ___.

(3) Trenching and backfilling for underground water, natural gas, and electric supplies: Section ___.

c. Geotechnical Engineer

Where specific reference is made to “Geotechnical Engineer” this designation shall be understood to include either the Geotechnical Engineer or a representative of the Geotechnical Engineer.

1.2 PROTECTION

a. Adequate protection measures shall be provided to protect workers and passers-by the site. Streets and adjacent property shall be fully protected throughout the operations.

b. In accordance with generally accepted construction practices, the Contractor shall be solely and completely responsible for working conditions at the job site, including safety of all persons and property during performance of the work. This requirement shall apply continuously and shall not be limited to normal working hours.

c. Any construction review of the Contractor’s performance conducted by the Geotechnical Engineer is not intended to include review of the adequacy of the Contractor’s safety measures, in, on or near the construction site.

d. Adjacent streets and sidewalks shall be kept free of mud, loose soil, or similar nuisances resulting from earthwork operations.

e. Surface drainage provisions shall be made during the period of construction in a manner to avoid creating a nuisance to adjacent areas.

f. The site and adjacent influenced areas shall be watered as required to suppress dust nuisance.

1.3 GEOTECHNICAL REPORT

a. A Geotechnical Engineering Report (WKA No. 11743.01P; dated January 10, 2018) has been prepared for this site by Wallace - Kuhl & Associates, Geotechnical Engineers of West Sacramento, California [(916) 372-1434]. A copy is available for review at the office of Wallace - Kuhl & Associates.

b. The information contained in this report was obtained for design purposes only. The Contractor is responsible for any conclusions the Contractor may draw from this report; should the Contractor prefer not to assume such risk, the Contractor should employ experts to analyze available information and/or to make additional explorations upon which to base conclusions, all at no cost to the Owner.

1.4 EXISTING SITE CONDITIONS

The Contractor shall become acquainted with all site conditions. If unshown active utilities are encountered during the work, the Architect shall be promptly notified for instructions. Failure to notify will make the Contractor liable for damage to these utilities arising from the Contractor's operations subsequent to the Contractor's discovery of such unshown utilities.

1.5 SEASONAL LIMITS

Fill material shall not be placed, spread or rolled during unfavorable weather conditions. When the work is interrupted by heavy rains, fill operations shall not be resumed until field tests indicate that the moisture contents of the subgrade and fill materials are satisfactory.

PART II: PRODUCTS

2.1 MATERIALS

a. On-site soils will be suitable for engineered fill construction in structural areas provided these materials do not contain rubbish, rubble greater than three inches (3"), and significant organic concentrations. Imported fill materials, if required, shall be similar to but less expansive than native soil and does not contain particles greater than three inches (3") in maximum dimension. Imported soils

should be approved by our office prior to being transported to the site. Also, if import fills are required (other than aggregate base), the contractor shall provide appropriate documentation that the import is clean of known contamination and within acceptable corrosion limits.

c. Capillary barrier material under floor slabs shall be provided to the thickness shown on the Drawings. This material shall be clean crushed rock of one-inch (1") maximum size, with no material passing a Number four (#4) sieve.

d. Asphalt concrete, aggregate base and other paving products shall comply with the appropriate provisions of the most recent edition of the State of California (Caltrans) Standard Specifications.

PART III: EXECUTION

3.1 LAYOUT AND PREPARATION

Layout all work, establish grades, locate existing underground utilities, set markers and stakes, set up and maintain barricades and protection of utilities--all prior to beginning actual earthwork operations.

3.2 CLEARING, GRUBBING AND PREPARING BUILDING PAD AND PAVEMENT AREAS

a. Initially, the site shall be cleared of any surface debris and rubble. Any existing underground utilities designated to be removed or relocated shall include all trench backfill. Depressions resulting from clearing operations, as well as any loose, saturated, or organically contaminated soils, as identified by our representative, shall be cleaned out to firm, undisturbed soils and widened, as necessary, to allow access with construction equipment. Depressions shall be backfilled with engineered fill in accordance with the recommendations in this report.

b. Following clearing operations, the remaining surface organics shall be removed by stripping. Strippings shall not be used in general fill construction, but may be used in landscape areas, provided they are kept at least five feet (5') from the building pad, moisture conditioned and compacted and do not exceed a depth of two feet (2'). Discing of organics may be a suitable alternative to stripping depending upon the quantity and condition of the surface vegetation at the time of grading. Discing will be allowed only with our prior approval and should be observed by our representative. Discing, if approved, must be continuous until organics are adequately mixed with the soil to provide a compactable mixture. Pockets or concentrations of organics shall not be allowed.

c. Areas designated to receive fill, remain at-grade or achieved by excavation, including an area at least five feet (5') horizontally beyond the exterior edge of the structure, shall be scarified to a depth of twelve inches (12"), thoroughly moisture conditioned to achieve at least the optimum moisture content, and uniformly compacted to at least ninety percent (90%) of the ASTM D1557 maximum dry density. Compaction shall be performed using a Caterpillar 815 (or equivalent-sized sheepsfoot compactor). Loose, soft or saturated soils encountered below the depth of scarification during compaction operations shall be removed to expose firm undisturbed soils as identified by our representative and backfilled with engineered fill.

d. When the moisture content of the subgrade is below that required to achieve adequate compaction, water shall be added until the proper moisture content is achieved.

e. When the moisture content of the subgrade is too high to permit adequate compaction to be achieved, the subgrade shall be allowed to dry until the moisture content is satisfactory for compaction.

f. Compaction operations shall be performed in the presence of the Geotechnical Engineer who will evaluate the performance of the materials under compactive load. Unstable soil deposits, as determined by the Geotechnical Engineer, shall be excavated to a firm base and grades restored with engineered fill in accordance with these specifications.

3.3 PLACING, SPREADING AND COMPACTING FILL MATERIAL

a. Engineered fill shall be placed in lifts not exceeding six inches (6") in compacted thickness with each lift being uniformly moisture conditioned to at least the optimum moisture content and compacted to not less than ninety percent (90%) of the ASTM D1557 maximum dry density.

b. When the moisture content of the fill material is below that required to achieve adequate compaction, water shall be added until the proper moisture content is achieved.

c. When the moisture content of the fill material is too high to permit adequate compaction to be achieved, the fill material shall be allowed to dry until the moisture content is satisfactory.

d. The filling operations shall be continued until the fills have been brought to the finished slopes and grades as shown on the accepted Drawings.

3.4 FINAL SUBGRADE PREPARATION

a. The upper twelve inches (12”) of final building pad subgrade shall be thoroughly moisture conditioned to at least the optimum moisture content and uniformly compacted to ninety percent (90%) of the maximum dry density regardless of whether final grade is left at the existing grade or is completed by excavation or filling.

b. The upper six inches (6”) of pavement subgrades shall be uniformly compacted to at least ninety-five percent (95%) of the ASTM D1557 maximum dry density at a moisture content of at least the optimum moisture content, regardless of whether final grade is completed by excavation, filling or left at existing grade. Final subgrade compaction shall be performed just prior to placement of aggregate base, after construction of underground utilities is complete. The compacted subgrade shall be kept in a moist condition until the placement of the aggregate base. If subgrade soils are disturbed or allowed to dry they must be re-moisture conditioned and compacted before the aggregate base is placed.

3.5 TESTING AND OBSERVATION

a. All grading operations, including lime-treatment of the subgrades, shall be tested and observed by the Geotechnical Engineer, serving as the representative of the Owner.

b. Field density test shall be made by the Geotechnical Engineer after compaction of each layer of fill. Additional layers of fill shall not be spread until the field density tests indicate that the minimum specified density has been obtained.

c. Earthwork shall not be performed without the notification or approval of the Geotechnical Engineer. The Contractor shall notify the Geotechnical Engineer at least two (2) working days prior to commencement of any aspect of the site earthwork.

d. If the Contractor should fail to meet the technical or design requirements embodied in this document and on the applicable plans, the Contractor shall make the necessary readjustments until all work is deemed satisfactory, as determined by the Geotechnical Engineer and the Architect/Engineer. No deviations from the specification shall be made except upon written approval of the Geotechnical Engineer or Architect/Engineer.

/

APPENDIX 3.8-1

Phase I Environmental Site Assessment and Limited Phase II Investigation

PHASE I ENVIRONMENTAL SITE ASSESSMENT AND LIMITED PHASE II INVESTIGATION

Southwest Corner of APN 521-030-06-00-5
Delano, California 93215

November 14, 2017

AVOCET
ENVIRONMENTAL, INC.

PHASE I ENVIRONMENTAL SITE ASSESSMENT AND LIMITED PHASE II INVESTIGATION

Southwest Corner of APN 521-030-06-00-5
Delano, California 93215

November 14, 2017

PREPARED FOR

Department of General Services,
Real Estate Services Division
707 Third Street, Suite 4-430
West Sacramento, California 95605

PREPARED BY

Avocet Environmental, Inc.
1 Technology Drive, Suite C515
Irvine, California 92618-2327

Project No. 1531.001

AVOCET ENVIRONMENTAL, INC.

November 14, 2017 Project No. 1531.001

Ms. Patricia Kelly
Senior Environmental Planner
DEPARTMENT OF GENERAL SERVICES,
REAL ESTATE SERVICES DIVISION
707 Third Street, Suite 4-430
West Sacramento, California 95605

Phase I Environmental Site Assessment and
Limited Phase II Investigation
Southwest Corner of APN 521-030-06-00-5
Delano, California 93215

Dear Ms. Kelly:

This report documents Phase I environmental site assessment and limited Phase II investigation for an approximately 3-acre property located in the southwest corner of accessor's parcel number 521030-06-00-5 in Delano, California. If you have any questions about the report or require additional information, please do not hesitate to contact the undersigned at (949) 296-0977 Ext. 111 or at dsiren@avocetenv.com. As always, Avocet Environmental, Inc. appreciates the opportunity to be of service to the Department of General Services.

Respectfully submitted,

AVOCET ENVIRONMENTAL, INC.

Deke Siren, P.G.
Senior Project Manager

DCS:sh
Attachments

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LIST OF ABBREVIATIONS AND ACRONYMS

ADL	aerially deposited lead
APN	Assessor's Parcel Number
AST	above ground storage tank
ASTM	ASTM International
bgs	below ground surface
CalEPA	California Environmental Protection Agency
CDPH	California Department of Public Health
CDWR	California Department of Water Resources
CPS	Crop Production Services
CREC	Controlled REC
CVRWQCB	Central Valley Regional Water Quality Control Board
DDE	4,4'-DDE
DGS	California Department of General Services
DOGGR	California Division of Oil, Gas, and Geothermal Resources
DPP	Delano PCE Plume
DTSC-SL	DTSC-modified screening level
DTSC	California Department of Toxic Substances Control
EDR	Environmental Data Resources, Inc.
EPA	U.S. Environmental Protection Agency
ESA	environmental site assessment
HREC	Historical REC
KCEHD	Kern County Environmental Health Division
KCPHSD	Kern County Public Health Services Department
KCPWD	Kern County Public Works Department
mg/kg	milligrams per kilogram
OEF	other environmental feature
OCH	organochlorine herbicide
OCP	organochlorine pesticide
OPP	organophosphorus pesticide
PCE	tetrachloroethylene
pCi/L	picocuries per liter
REC	Recognized Environmental Condition
RSL	Regional Screening Level
SJVAPCD	San Joaquin Valley Air Pollution Control District
µg/kg	microgram per kilogram
UST	underground storage tank
VEC	vapor encroachment condition
VIC	vapor intrusion condition
VOC	volatile organic compound

EXECUTIVE SUMMARY

This report documents a Phase I environmental site assessment (ESA) and limited Phase II investigation for approximately 3 acres[1] of former agricultural land (the site) located in the southwest corner of Assessor's Parcel Number 521-030-06-00-5, adjacent to Dover Parkway, in Delano, California. Avocet Environmental, Inc. (Avocet) conducted the Phase I ESA and Phase II investigation on behalf of the California Department of General Services (DGS), Real Estate Services Division, which may purchase the site for development as a Department of Motor Vehicles field office. Avocet conducted the Phase I ESA in general accordance with the scope and limitations of ASTM International (ASTM) Standard E1527-13. The primary objective of the Phase I ESA is to evaluate the history and current condition of the site in the context of the use, storage, handling, and disposal of potentially hazardous chemicals or wastes that could have adversely impacted the underlying vadose zone and groundwater. Based on the site's history and current condition, the possible existence of "Recognized Environmental Conditions" (RECs), "Controlled RECs" (CRECs), and "Historical RECs" (HRECs), as defined in ASTM Standard E1527-13 (ASTM, 2013), and "other environmental features" (OEFs) has been evaluated. For Phase I ESA purposes, OEFs are conditions or features with a potential environmental component that do not meet the definition of a REC, CREC, or HREC but which Avocet believes warrant mention for visibility purposes in the context of acquiring and redeveloping the site. Understanding that the site was formerly used for commercial agriculture, specifically during time periods that saw the use of environmentally persistent agricultural chemicals, the scope of work included a limited Phase II investigation to determine whether residual agricultural chemicals remain in shallow soil at the site. The site location is shown in Figure 1 and a plan of the site and vicinity is presented in Figure 2. A larger-scale plan of the site, which includes the limited Phase II sampling locations, is presented in Figure 3. It should be noted that while this report was being finalized, the property owner changed the orientation of the portion they were willing to sell to DGS. The new site boundary was rotated 90 degrees, with both the original and new site boundaries shown in Figure 3. Because of this realignment of the site, two of the soil samples collected for the limited Phase II investigation are outside the new site boundary. After conferring with DGS, it was decided that additional testing of the new site was not warranted since the site usage was the same. As such, the results of the limited Phase II assessment are believed to be representative of the new site configuration.

OVERVIEW

The former agricultural site is located approximately 1 mile south of downtown Delano in an area of encroaching residential and commercial development. The 3-acre site is located within a larger, roughly triangular-shaped property bordered by Dover Parkway on the west, California State Route 99 (aka Golden State Highway) on the east, Woollomes Avenue on the south, and Diaz Street on the north. A Home Depot and Chevron service station were constructed on the

[1] The acreages and measurements provided in this report are approximate only and have not been independently verified by Avocet unless specifically indicated otherwise.

southeast corner of the larger parcel (approximately 0.25 mile to the southeast of the site) in 2004 and 2015, respectively, and grading for future residential development was performed in 2005 to the west of Dover Parkway, although homes have not yet been constructed. According to the City of Delano General Plan, the site is zoned "Community Retail Commercial."

Historical aerial photographs show the site being utilized for agriculture as early as 1937. In the mid-1950s, an expansion and realignment of State Route 99 put the highway adjacent to the eastern border of the parcel that encompasses the site. Over time, as Delano grew and roads were improved, residential and commercial development extended outward from the city center, encompassing properties surrounding the site. The site and surrounding parcel were utilized for agricultural production until sometime in or around the mid-2000s, when the site was purchased by the current owner. The last known crop to be grown onsite was reportedly grapes. Avocet notes that the site is currently divided by an east-west fence into northern and southern portions of 0.4 acre and 2.6 acres, respectively, with each side appearing to be managed separately. The northern half of the property featured a thick covering of dead and dry vegetation, while the southern portion appeared to have been recently cleared/tilled for weed abatement. As of the date of this report, with the exception of the fence, the site remains undeveloped.

PRINCIPAL FINDINGS

- The site is located in the southern portion of California's Central Valley, a vast alluvial plain between the Coastal Ranges Province of California and the Sierra Nevada Province. Geographically, the Great Valley Province is divided at the Sacramento-San Joaquin River Delta into two major valleys, the Sacramento Valley to the north and the San Joaquin Valley to the south, with the subject site in the latter.

- The site is located in the Kern County Subbasin, within the much larger Central Valley Groundwater Basin. Recent groundwater data from nearby properties indicate the depth to groundwater below the site has been in decline and was recorded at 120 feet below ground surface in 2017. On a regional basis, groundwater flows to the west and southwest; however, the groundwater flow direction in the site vicinity is locally and temporally variable, and generally reported to be toward the east.

- California Department of Conservation, Division of Oil, Gas, and Geothermal Resources records available online show that the site is not located within the administrative boundary of an oil or gas field, and the nearest "wildcat" wells are located too far away to have impacted the subject site.

- Naturally occurring radon levels in the site vicinity are expected to be very low and within regulatory agency criteria.

RECOGNIZED ENVIRONMENTAL CONDITIONS (RECS)

ASTM (2013) defines RECs as:

> *". . . the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment. De minimis conditions are not recognized environmental conditions."*

Based on the subject Phase I ESA, Avocet has not identified any RECs in connection with the subject site.

CONTROLLED RECS (CRECS)

ASTM (2013) defines CRECs as:

> *". . . resulting from a past release of hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority (for example, as evidenced by the issuance of a no further action letter or equivalent, or meeting risk-based criteria established by regulatory authority), with hazardous substances or petroleum products allowed to remain in place subject to the implementation of required controls (for example, property use restrictions, activity and use limitations, institutional controls, or engineering controls)."*

Based on the subject Phase I ESA, Avocet has not identified any CRECs in connection with the subject site.

HISTORICAL RECS (HRECS)

ASTM (2013) defines HRECs as:

> *". . . a past release of any hazardous substances or petroleum products that has occurred in connection with the property and has been addressed to the satisfaction of the applicable regulatory authority or meeting unrestricted use criteria established by a regulatory authority, without subjecting the property to any required controls (for example, property use restrictions, activity and use limitations, institutional controls, or engineering controls)."*

Based on the subject Phase I ESA, Avocet has not identified any HRECs in connection with the subject site.

OTHER ENVIRONMENTAL FEATURES (OEFS)

OEFs are environmental conditions that do not meet the ASTM definition of a REC, CREC, or HREC, but which warrant mention in the context of acquiring and redeveloping all or a portion

of the subject site. Based on the subject Phase I ESA, Avocet has identified one OEFs at the subject site, as summarized below.

- **OEF 1 – Residual Pesticides in Surficial Soil.** The site was used for agricultural purposes from before 1937 until the mid-2000s, including periods in which pesticides and/or herbicides were widely used throughout the United States. Several of these pesticides, particularly organochlorine pesticides (OCPs), are resistant to degradation, and residuals are often present in near-surface soil many years after the last application. Understanding that the site's agricultural past would likely result in the identification of the potential for residual agricultural chemicals as an environmental condition, a limited Phase II investigation was conducted alongside the Phase I ESA. The limited Phase II investigation included the analysis of four discrete near-surface soil samples from the site for OCPs, organophosphorus pesticides, organochlorine herbicides, and arsenic. Although the orientation of the site was later adjusted, which excludes the two northernmost soil samples, the results of the limited Phase II investigation are still considered representative of the site since the use of the parcel was the same. Comparison of the pesticide/herbicide results to published risk-based concentrations indicates that residual concentrations are not a concern for future site use. Moreover, arsenic concentrations appear to be within background levels. Therefore, the minor impact from past agricultural use of the site, in terms of pesticides and herbicides, is considered an OEF for Phase I ESA purposes.

VAPOR INTRUSION/VAPOR ENCROACHMENT

As part of the Phase I ESA, Avocet evaluated the potential presence of vapor intrusion conditions (VICs) and/or vapor encroachment conditions (VECs) at the subject site. A VIC can occur if volatile organic compounds (VOCs) are present in the vadose zone or in groundwater beneath a property at concentrations such that vapor could intrude into, and accumulate in, an overlying structure at concentrations potentially hazardous to human health. However, there is no indication that VOCs have been used at the site, no indication there are VOC impacts to the underlying vadose zone or groundwater, and, hence, no reason to suspect a VIC exists at the subject site. A VEC can occur if VOCs from an offsite source migrate beneath a property. However, there have been no known VOC releases on the adjoining properties, and the intervening distance of documented VOC releases on nearby properties are such that there is no reason to suspect a VEC exists at the site.

1.0 INTRODUCTION

This report documents Phase I environmental site assessment (ESA) and limited Phase II investigation for approximately 3 acres[1] of former agricultural land (the site) located in the southwest corner of Assessor's Parcel Number (APN) 521-030-06-00-5, adjacent to Dover Parkway, in Delano, California. Avocet Environmental, Inc. (Avocet) conducted the Phase I ESA and limited Phase II investigation on behalf of the California Department of General Services (DGS), Real Estate Services Division, which may purchase the site for development as a Department of Motor Vehicles field office. Avocet conducted the Phase I ESA in general accordance with the scope and limitations of ASTM International (ASTM) Standard E1527-13. Understanding that the site was formerly used for commercial agriculture, specifically during time periods that saw the use of environmentally persistent agricultural chemicals, the scope of work included a limited Phase II investigation to determine whether residual agricultural chemicals remain in shallow soil at the site. The site location is shown in Figure 1 and a plan of the site and vicinity is presented in Figure 2. A larger-scale plan of the site, which includes the limited Phase II investigation sampling locations, is presented in Figure 3. It should be noted that while this report was being finalized, the property owner changed the orientation of the portion that they were willing to sell to DGS. The new site boundary was rotated 90 degrees, with both the original and new site boundaries shown in Figure 3. Because of this realignment of the site, two of the soil samples collected for the limited Phase II investigation are outside the new site boundary. After conferring with DGS, it was decided that additional testing of the new site was not warranted since the site has been managed collectively with the same crops. As such, the results of the limited Phase II investigation are believed to be representative of the new site configuration.

1.1 OVERVIEW

The former agricultural site is located approximately 1 mile south of downtown Delano in an area of encroaching residential and commercial development. The 3-acre site is located within a larger, roughly triangular-shaped parcel bordered by Dover Parkway on the west, California State Route 99 (aka Golden State Highway) on the east, Woollomes Avenue on the south, and Diaz Street on the north. A Home Depot and Chevron service station were constructed on the southeast corner of the larger parcel (approximately 0.25 mile to the southeast of the site) in 2004 and 2015, respectively, and grading for future residential development was performed in 2005 to the west of Dover Parkway, although homes have not yet been constructed. According to the City of Delano General Plan, the site and surround area are zoned "Community Retail Commercial."

Historical aerial photographs show the site being utilized for agriculture as early as 1937. In the mid-1950s, an expansion and re-alignment of State Route 99 put the highway adjacent to the east

[1] The acreages and measurements provided in this report are approximate only and have not been independently verified by Avocet unless specifically indicated otherwise.

boundary of the parcel that encompasses the site. Over time, as Delano grew and roads were improved, residential and commercial development extended outward from the city center, encompassing properties surrounding the site. The site and surrounding parcel were utilized for agricultural purposes until sometime in or around the mid-2000s, when the site was purchased by the current owner. The last crop to be grown onsite was reportedly grapes. The site is currently divided into northern and southern portions of approximately 0.4 acre and 2.6 acres, respectively, by an east-west fence, with each side appearing to be managed separately. The northern section of the site featured a thick covering of dead and dry vegetation, while the southern portion appeared to have been recently cleared/tilled for weed abatement. As of the date of our walkover survey (September 5, 2017), the only visible site improvement was the old wire fence separating the northern and southern portions of the property.

1.2 PHASE I ESA OBJECTIVES

The overall objective of the Phase I ESA documented herein is to assess the site in the context of the possible presence of hazardous substances in soil, soil vapor, and/or groundwater as a result of onsite operations or offsite releases. Specific objectives of the Phase I ESA are to:

- Document the history of the site in the context of the past use, storage, handling, and disposal of hazardous substances and/or related wastes.
- Review and evaluate available information related to the investigation and remediation of known or suspected subsurface impacts.
- Assess the possible presence of previously unidentified hazardous substances that could be present in the subsurface as a result of their past use, storage, handling, or disposal within or near the site.
- Identify "Recognized Environmental Conditions" (RECs), "Controlled" RECs (CRECs), and "Historical" RECs (HRECs), as defined in ASTM Standard E1527-13 (ASTM, 2013).
- Identify "other environmental features" (OEFs), defined for Phase I ESA purposes as existing or former site features or conditions that do not meet the ASTM definition of a REC, CREC, or HREC but which warrant mention for visibility purposes in the context of acquiring and/or redeveloping the site. Often relatively innocuous compared to RECs, OEFs include generic "building systems" or components thereof, such as hydraulic oil in elevators, equipment containing small quantities of potentially hazardous materials, such as fluorescent light ballasts, and/or offsite releases that are considered significant, but under current conditions are unlikely to adversely impact the subject site. OEFs do not necessarily warrant assessment or any follow-up action to address or resolve them.

1.3 LIMITED PHASE II ESA OBJECTIVES

The purpose of the limited Phase II investigation was to assess the near-surface soil at the site for residual organochlorine pesticides (OCPs), organochlorine herbicides (OCHs), organophosphorus pesticides (OPPs), and arsenic. The investigation was conducted in general accordance with the current version of the "Interim Guidance for Sampling Agricultural Properties," developed by the California Department of Toxic Substances Control (DTSC, August 7, 2008). It is noted that the DTSC guidance does not include sampling for OCHs and OPPs; however, considering the more recent agricultural history of the site, these analyses were included.

In an email dated October 16, 2017, DGS confirmed that the site owner realigned the site boundary. The rectangular site was effectively rotated 90 degrees with the shorter side along Dover Parkway. As a result, two of the four soil sample locations are no longer within the target property boundary. After conferring with DGS, it was decided that additional testing of the new eastern half of the target property was not warranted since the historical crops of the encompassing parcel was the same.

1.4 APPROACH

The subject Phase I ESA was conducted in general accordance with the scope and limitations of ASTM Standard E1527-13 (ASTM, 2013) and included:

- A review of relevant background information, including the history of the site and adjacent properties, past land use, and regional hydrogeological conditions.
- A review of aerial photographs, topographic maps, fire insurance maps, and environmental records pertaining to the site.
- A walkover survey of the site and vicinity on September 5, 2017, which included the collection of near-surface soil samples for analysis of residual pesticides, herbicides, and arsenic.
- A review of potential offsite sources of contamination that could adversely impact the subsurface environment beneath the site, including a search of regulatory agency databases and visual surveys of adjoining properties.
- A telephone interview on September 14, 2017 with Mr. Larry Morgan, current owner of the property.

The format of this Phase I ESA report deviates from that recommended by ASTM; however, all of the elements required by ASTM E1527-13 are included or otherwise addressed.

1.5 LIMITATIONS

This Phase I ESA was performed in general accordance with the scope and limitations of current ASTM practice (ASTM, 2013) and the standard of care customary in the environmental consulting industry as of the date of this report. The conclusions in this Phase I ESA report are based on the information available to Avocet from the sources cited; however, Avocet makes no warranty regarding the accuracy or completeness of this information. Moreover, this Phase I ESA specifically excludes any evaluation of geotechnical conditions, the stability of onsite or adjacent slopes or retaining walls, seismicity, flooding hazards, noise or vehicle exhaust emissions from the adjoining freeway, and the possible impact, if any, of electromagnetic fields associated with onsite or nearby electrical facilities. Also, this report cannot and does not include any evaluation of undocumented activities at the site or on adjacent or nearby properties. The exclusions noted above should not be interpreted to mean that all other potential hazards and/or land use restrictions have been considered in the subject Phase I ESA.

Avocet conducted this Phase I ESA on behalf of DGS to document environmental conditions at the site for decision making in the context of the potential purchase of the site or a portion thereof. DGS may rely upon the information provided in this Phase I ESA report for a period of one year from the date of issue. After one year, this Phase I ESA should be updated in accordance with ASTM guidance. Avocet will not be liable for any consequential damages arising from the use of this report for other than its intended purpose, for use of this report beyond one year of its issue date, or from unauthorized use by third parties.

1.6 REPORT ORGANIZATION

Including the introduction, this report is organized into seven sections. Section 2.0 describes the various sources of information utilized in the course of the Phase I ESA. Section 3.0 presents a summary of relevant background and regional information. Section 4.0 describes the history and current condition of the site with emphasis on past operations involving potentially hazardous substances. Section 5.0 presents a summary of information gathered from a review of environmental databases maintained by local, state, and federal government agencies and describes the properties nearby and adjoining the site. Section 6.0 presents the methods and findings of the limited Phase II ESA. Section 7.0 presents conclusions and recommendations in terms of identified RECs, CRECs, HRECs, and OEFs.

Supporting information is contained in figures and seven appendices, all of which follow the text of this report. Appendix A contains historical topographic maps, Appendix B contains historical aerial photographs, and Appendix C contains the Certified Sanborn Map report. Where available, the maps and photographs in Appendices A, B, and C are annotated with the site boundary. Appendix D is a City Directory report summarizing entries recorded in city, telephone, and other directories. Appendix E contains photographs of the site taken during Avocet's September 5, 2017 walkover survey. Appendix F is a report summarizing information available from a review of environmental databases maintained by local, state, and federal government agencies and Appendix G contains the laboratory analytical report for the limited Phase II investigation.

2.0 SOURCES OF INFORMATION

Sources of information utilized in preparing this Phase I ESA report included historical topographic maps; historical aerial photographs; historical fire insurance maps; a walkover survey of the site and adjoining properties; a review of records available at selected local and state regulatory agencies; a review of databases maintained by local, state, and federal government agencies; and a review of other records available from commercial and online sources.

2.1 TOPOGRAPHIC MAPS

To evaluate the history of the site and past land uses, copies of historical topographic maps published between 1927 and 2012 were obtained from Environmental Data Resources, Inc. (EDR), of Shelton, Connecticut. The maps, which are annotated with the site boundary, are included in chronological order in Appendix A.

2.2 AERIAL PHOTOGRAPHS

To further evaluate the site's history, a "Decade Package" of historical aerial photographs was obtained from EDR. EDR's Decade Package generally includes at least one aerial photograph from each decade from the 1930s through the present day. For the subject project, EDR provided aerial photographs taken between 1937 and 2012. The photographs, which are annotated with the site boundary, are included in chronological order in Appendix B.

2.3 FIRE INSURANCE MAPS

At Avocet's request, EDR conducted a search for historical fire insurance map coverage of the site; however, EDR reported that the site is an "unmapped property." A copy of EDR's "Certified Sanborn® Map Report" is included in Appendix C.

2.4 CITY DIRECTORIES

Telephone and business directories have been published for cities and counties across the United States since the 1700s and often contain potentially useful information on past land uses and the types of business that operated at individual street addresses. EDR extracts information from such directories and consolidates it in its "The EDR-City Directory Image Report." A copy of The EDR-City Directory report for the subject site is included as Appendix D to this report.

2.5 WALKOVER SURVEY

Avocet personnel conducted an unaccompanied walkover survey of the site and vicinity on September 5, 2017. Selected photographs taken during the walkover survey are included in Appendix E.

2.6 RECORDS AVAILABLE ONLINE

Avocet searched the GeoTracker and EnviroStor websites maintained by the California Environmental Protection Agency (CalEPA) for additional environmental records pertaining to the subject site as well as records pertaining to selected nearby properties, if any. Relevant information from this research is incorporated or referred to, as appropriate, throughout the remainder of this report.

2.7 GOVERNMENT DATABASES

To document potential sources of contamination at or near the site, a government records search was conducted by EDR. The search included local, state, and federal records for the site and for other properties within ASTM-standard distances of the site. The records search is summarized in Section 6.0 and a copy of "The EDR Radius Map™ Report with GeoCheck®" is included in its entirety as Appendix F. As recommended by ASTM, all but a few of the databases searched were "current," i.e., had been updated within 90 days prior to the search date.

2.8 INFORMATION FROM FEDERAL, STATE, AND LOCAL AGENCIES

Selected federal, state, and local regulatory agencies were contacted to determine whether they have potentially relevant environmental records pertaining to the site using the site's geographic location and APNs to identify the property and define its boundary. In particular, Avocet requested records relating to underground storage tanks (USTs), aboveground storage tanks (ASTs), environmental permits, and enforcement orders; reports and correspondence related to site investigation/assessment, soil sampling, monitoring, cleanup/remediation, removal actions, and closures; or any records related to conditions in air, soil, surface water, groundwater, or other environmental media. The agencies contacted and Avocet's interactions with them were as follows:

- An online records request form was submitted through the U.S. Environmental Protection Agency's (EPA) Freedom of Information Act website (FOIA online) to the EPA's Region 9 office on August 21, 2017. In a letter dated September 26, 2017, EPA responded that it has no records responsive to Avocet's request.

- Written records requests were faxed to the DTSC offices in Chatsworth, Sacramento, and Clovis on July 23, 24, and 27, 2017, respectively. In letters dated August 22, August 23, and August 25, 2017, the Chatsworth, Clovis, and Sacramento offices, respectively, responded that they have no records responsive to Avocet's requests.

- A written records request was faxed to the Central Valley Regional Water Quality Control Board (CVRWQCB) on August 21, 2017. In an email dated August 22, 2017, the CVRWQCB responded that it has no records responsive to Avocet's request.

- A records request was faxed to the San Joaquin Valley Air Pollution Control District (SJVAPCD) on August 21, 2017. In an email dated August 22, 2017, the SJVAPCD responded that it has no records responsive to Avocet's request.

- A written request was faxed to the Kern County Environmental Health Division (KCEHD), a branch of the Public Health Services Department (KCPHSD), on August 22, 2017. In an email dated August 22, 2017, KCEHD responded that a search of the Hazardous Materials Program database did not reveal any information regarding hazardous materials, USTs, or other environmental concerns for the property. In a second email dated August 30, 2017, KCEHD responded that there is no record of any wells or septic systems registered for the target property.

- A written records request was emailed to the Kern County Fire Department on August 21, 2017; however, no response had been received as of the date of this report.

- An online records request was submitted to the Delano City Clerk on August 21, 2017; however, no response had been received as of the date of this report.

2.9 Oil and Gas Records

To assess the possible presence of oil and/or natural gas wells at or in the vicinity of the site, Avocet reviewed information available online from the California Department of Conservation, Division of Oil, Gas, and Geothermal Resources (DOGGR). The findings of this review are summarized in Section 3.3.

2.10 Radon Gas Records

To assess the possible presence of naturally occurring radon gas in the subsurface in the site vicinity, Avocet reviewed data available through the EPA and the California Department of Public Health (CDPH). Radon gas data were also included in the EDR Radius Map Report (Appendix F). The available radon gas data are summarized in Section 3.4.

3.0 BACKGROUND AND REGIONAL INFORMATION

Background and regional information considered relevant to the subject Phase I ESA includes the site's physiographic setting and regional geologic and hydrogeologic conditions.

3.1 PHYSIOGRAPHIC SETTING AND DRAINAGE

The site is located in the southern portion of the Great Valley Province, a vast alluvial plain situated between the Sierra Nevada to the east and the Coastal Ranges to the west. The Great Valley Province is divided by the Sacramento-San Joaquin River Delta into the Sacramento Valley to the north and the San Joaquin Valley to the south. The San Joaquin Valley is a marine and continental sediment-filled basin approximately 200 miles long and 70 miles wide and is bounded by the Sierra Nevada to the east, the Diablo and Temblor Ranges to the west, and the Tehachapi Mountains to the south. The site is located in the southern half of the San Joaquin Valley, near the eastern edge and the foothills of the Sierra Nevada. On a more local basis, the site is located west of the Greenhorn Mountains and east of the Antelope Plain and Kettleman Hills. The ground surface of the site is located approximately 305 feet above mean sea level and slopes generally to the west towards the center of the San Joaquin Valley and Tulare Basin.

Major surface drainage features in the southern San Joaquin Valley are the Kings, Kawaeah, Tule, and Kern Rivers, all of which historically drained into the now dry Tulare Lake (California Department of Water Resource [CDWR], 2006). The Tule River is the closest of these major surface drainages, passing within 25 miles to the north at its closest approach. Other surface water features in the southern San Joaquin Valley include irrigation canals and reservoirs typically used for flow equalization, the closest of which to the subject site is the Friant-Kern Canal and Lake Woollomes, located approximately 4 miles to the east. None of the surface water bodies mentioned above are considered significant for Phase I ESA purposes.

3.2 REGIONAL HYDROGEOLOGY

The site is located in the Kern County Subbasin, within the larger San Joaquin Valley Groundwater Basin. The primary water bearing zones in the subbasin include the Olcese and Santa Margarita Formations, the Tulare and Kern River Formations, older alluvium/stream terrace deposits, and younger alluvium/flood basin deposits. Groundwater flow is restricted by the Edison, Pond Poso, and White Wolf faults to the south of the site, Elk Hills to the west, and the Buena Vista Hills to the southwest. Furthermore, vertical movement of groundwater is significantly impeded by the Corcoran Clay Member. Natural recharge of subbasin aquifers occurs by infiltration through the Kern River and smaller streams; however, the primary source of recharge is through applied irrigation water (CDWR, 2006). Groundwater extraction is relied upon heavily for both agricultural production and municipalities, and numerous groundwater wells are located within close proximity of the site.

The occurrence and movement of groundwater has been investigated at the Crop Production Services (CPS) facility located approximately 0.6 mile to the southeast of the site. The CPS

groundwater monitoring program has included the installation and semiannual sampling of 20 groundwater monitoring wells dating back to August 1997. Groundwater monitoring data from the CPS facility has documented the steady decline of unconfined groundwater levels between the years of 1997 and 2017, in total falling from about 70 feet below ground surface (bgs) to 120 feet bgs (Rubik, July 27, 2017). For Phase I ESA purposes, it is assumed that groundwater is present approximately 120 feet below the subject site.

Regional hydrologic maps have been published by the CDWR for the San Joaquin River and Tulare Lakes areas on an annual basis using data from as early as the late 1950s until 2011 (CDWR, January 24, 2017). In brief, groundwater in the Delano area is often subject to temporal variations in flow direction, attributed to groundwater extraction or recharge. However, in a regional context, groundwater in the Delano area is generally considered to flow in a west-to-southwesterly direction toward the center of the San Joaquin Valley (CDWR, January 24, 2017). In contrast, detailed groundwater investigations at the CPS facility (0.6 mile southeast of the site) and former Kern County Landfill (0.75 mile south-southwest of the site) indicate that groundwater flow in the site vicinity is predominately toward the east (Rubik, July 27, 2017; Kern County Public Works Department [KCPWD], November 2015). Based on this detailed information, for Phase I ESA purposes, groundwater beneath the site is interpreted to flow predominately toward the east.

3.3 Oil and Gas Wells

According to DOGGR records available online, the site is not located within the administrative boundary of an oil or gas field (DOGGR, August 30, 2017), with the nearest being the Trico Gas Field located approximately 8.5 miles to the west-northwest. Although the site is not within a recognized oil or gas field, DOGGR records indicate 20 capped oil/gas wells and 2 idle oil/gas wells within a 5-mile radius of the site, the nearest of which are the two idle wells located approximately 3 miles northwest of the site on the Sunrise-Mayel lease. The newer of the two wells was constructed in 2005 to a depth of 9,229 feet bgs. There is no indication that either of the two wells located nearest to the subject site have been in production, and the intervening distance is such that they could not have impacted the subsurface environment beneath the subject site.

3.4 Radon Gas

EPA recommends avoiding long-term exposure to radon levels greater than 4 picocuries per liter (pCi/L). To assess the possible presence of unhealthful levels of naturally occurring radon gas in the vicinity of the site, Avocet checked information available from the CDPH and other government agencies. CDPH maintains a radon database for California sorted by zip code (CDPH, February 2016). In brief, indoor radon measurements were performed throughout the state, and the percentage of buildings with reported radon levels greater than 4 pCi/L within each zip code was reported, along with the number of buildings tested. None of the three buildings tested for radon within the 93215 zip code area contained radon at levels greater than or equal to 4 pCi/L. In addition to the above, EPA (1993) and the U.S. Geological Survey developed a Map of Radon Zones for the United States, organized by county. According to the map, Kern County

is in Radon Zone 2, indicating that radon levels in buildings are expected to be between 2 and 4 pCi/L. EDR's Radius Map Report (Appendix F) indicates that the average radon activity on the ground floor of the 94 single-story residential structures tested within Kern County was 1.422 pCi/L, well below EPA's recommended maximum exposure level of 4 pCi/L. Based on the above, naturally occurring radon is unlikely to be of concern in the vicinity of the site.

4.0 SITE HISTORY AND CURRENT CONDITION

This section documents the history of the site and describes current site conditions, with emphasis on existing and former environmental features.

4.1 SITE HISTORY

The history of the site and vicinity has been compiled based on information from the sources outlined in Section 2.0, particularly the historical topographic maps, historical aerial photographs, and historical Sanborn® maps. Photographs and maps from the following years were reviewed:

- Topographic maps from 1927, 1930, 1941, 1942/1943, 1947, 1953/1954, 1969, 1973, 2012 (Appendix A).
- Aerial photographs from 1937, 1942, 1956, 1958, 1969, 1973, 1984, 1994, 2005, 2006, 2009, 2010, 2012 (Appendix B).

Photographs and maps that show significant changes to the subject site and/or changes to the surrounding land use are referenced, where appropriate, throughout this section. It is noteworthy that the historical topographic maps are composites of up to four separate topographic quadrangles. For some early maps, notably the 1927, 1930, and 1941 maps, not all of the quadrangles were available, so for these dates the maps depict areas to the south of the site but do not cover the site itself.

Discounting the 1927 and 1930 topographic maps, which do not cover the site area, the earliest document reviewed for Phase I ESA purposes is an aerial photograph from 1937 (Appendix B). The photograph shows the majority of the 3-acre site, along with most of the surrounding properties, as being utilized for agricultural production. In both the 1937 and subsequent 1942 aerial photographs, the southern part of the site as well as a portion of the property immediately to the south appear fallow. Small buildings are distributed sparsely throughout the area shown, which are likely residential dwellings or equipment storage structures, two of which can be seen northwest of the site, on the west side of what is currently Dover Parkway. To the east of the site, the 1937 and 1942 photographs show what is currently High Street, but prior to the 1950s was the original route of Highway 99. As it does today, the highway forms an extended S as it curves to pass beneath the Tulare/Bakersfield line of the Union Pacific Railroad.

The first topographic map provided that includes the target site was published in 1942/1943 and shows much of what is described above. The map shows a high density of development in downtown Delano, which quickly changes to sparsely populated rural areas on the outskirts of town, typical of farming communities. The 1942 topographic map and an aerial photograph taken that same year show the beginnings of a subdivision north of what is currently 1st Street, and west of the old Highway 99 (High Street), however, subsequent photographs show that much of the property and buildings were relinquished for the construction of the existing Highway 99.

The map shows that by 1942/1943, the majority of the city street grid for Delano had been constructed as either paved or dirt roads, including the streets near the target site such as Dover Parkway to the east and Woollomes Avenue to the south, both of which are shown to be unpaved.

The 1953/1954 topographic map of the area shows the newly constructed Delano Airport, as well as what appears to be a racetrack named Memorial Park, to the east and northeast of the site. The 1956 aerial photograph shows the site as being completely covered in row crops, as well as the relocation of Highway 99 to its current alignment, adjacent to the eastern boundary of the site's encompassing parcel. Aerial photographs dated 1958 and 1969 show that the site and surrounding parcels were still completely under agricultural use, although the 1969 and subsequent 1973 photographs suggest that different types of crops were being cultivated on the northern and southern parts of the site. Subsequent aerial photographs and topographic maps, through the 1990s, show the progressive southward encroachment of urban development along the Highway 99 corridor as agricultural fields were developed for residential and commercial uses. A 2005 aerial photograph shows that the site is still under active cultivation, but that surrounding properties to the north (Self Storage), south (Home Depot), and west (residential) have been or are in the process of being developed for commercial or residential purposes. Aerial photographs dated 2006, 2009, 2010, 2012, and 2016 (the base map for Figure 2) indicate that after 2005, the site was no longer subject to agricultural use. In addition, for reasons likely related to the local real estate market, the graded residential tract to the west of the site was not built out.

In summary, the historical documentation indicates that the site has not been used for anything other than agriculture from as early as 1937 until about 2005. From 2005 and onward, the site has largely been fallow, with occasional tilling for weed abatement. Due to its long agricultural history, it is likely that the site was subject to the application of various pesticides and/or herbicides. As such, Avocet conducted a limited Phase II investigation in tandem with the Phase I ESA, the results of which are discussed in Section 6.0.

4.2 CURRENT CONDITION

Avocet conducted a walkover survey of the site on September 5, 2017 to visually assess current site conditions. The initial site boundary was staked by a surveyor for DGS with lath and flagging prior to Avocet's inspection of the site (Photograph E-1). Selected photographs taken during the survey are included in Appendix E and referenced, as appropriate, below.

In brief, the site is fallow, former agricultural land, as seen in the historical aerial photographs. The site is divided by a wire fence into northern and southern portions of 0.4 acre and 2.6 acres, respectively (Photograph E-2). The southern half appeared to have been tilled recently, presumably for weed abatement (Photograph E-3). In contrast, the northern half of the property was covered in a dense layer of dry vegetation and tall grass, under which was loosely compacted soil (Photograph E-4). Some windblown trash was noted along the Dover Parkway site boundary; however, very little trash was observed within the site, with no indication of

illegal dumping. Furthermore, information provided by the site's current owner suggests that unauthorized dumping has not been an issue at the site and encompassing parcel. No man-made structures or remnants from past agricultural use (i.e. water conveyance systems) were noted at the site, which was confirmed in the interview with Mr. Larry Morgan, who indicated that he was not aware of any subsurface piping.

4.3 PREVIOUS ENVIRONMENTAL INVESTIGATIONS

So far as Avocet is aware, there have been no previous Phase I ESAs and/or intrusive "Phase II" investigations performed for the site. Environmental investigations and remediation on nearby properties are discussed in Section 5.0.

5.0 ADJOINING AND NEARBY PROPERTIES

This section summarizes a search by EDR of environmental databases and describes properties adjoining the subject site and selected nearby properties. The descriptions of adjoining and selected nearby properties are based on Avocet's observations from public rights-of-way, information included in EDR's report (Appendix F), and information available from the GeoTracker and EnviroStor websites maintained by CalEPA.

5.1 DATABASE LISTINGS

EDR's search encompassed over 90 databases maintained by local, state, and federal government agencies, including the databases specified in ASTM E1527-13, Section 8.2.1. The "target property" address used by EDR for records search purposes was 1692 Dover Parkway. EDR's August 28, 2017 Radius Map Report with GeoCheck®, which includes index maps, update dates, and descriptions of the databases searched, is included in Appendix F, and a tabular summary of EDR's database search is presented in Table 1. The following summaries focus on those database listings considered potentially relevant to the objectives of the subject Phase I ESA, specifically those pertaining to the subject site and to nearby properties with documented hazardous substance releases with the potential to have impacted the site. In the interest of brevity and making relevant information more accessible, database listings not considered indicative of hazardous substance releases, database listings for hydraulically downgradient properties, and database listings with "Closed – Case Completed" or "soil-only" status have been screened out.

Site Name	Address	Database	Distance (miles)	Direction	Hydraulic Relation	Discussed Further
Delano Rock Co., Inc.	103 S High St	UST, HIST UST	0.245	ENE	Downgradient	No
Central Cal Equipment Inc.	1300 Garzoli Ave	LUST, HIST CORTESE	0.495	SSE	Crossgradient	No
Pioneer Truckstop	1000 Garzoli Ave	LUST,HIST, CORTESE	0.495	SSE	Crossgradient	No
Crop Production Services (CPS) Delano	930 Woollomes Ave	SLIC, ENVIROSTOR	0.496	SE	Crossgradient	Yes
Kern County Dump	11249 Stradley Ave	ENVIROSTOR	0.576	SW	Crossgradient	Yes

Notes: Blue shading indicates database listing that does not necessarily indicate a release or contamination.
Gray shading indicates database listing is hydraulically downgradient or crossgradient and/or is a closed case.

5.2 TARGET PROPERTY LISTINGS

The subject site is not listed in any of the databases searched by EDR, nor is the site featured on the GeoTracker or EnviroStor websites. Furthermore, none of the regulatory agencies that responded to our requests for information had any potentially relevant environmental records pertaining to the site.

5.3 ADJOINING PROPERTIES TO THE NORTH

The site is bordered to the north by fallow agricultural land, beyond which is a self-storage facility and outpatient medical center. This former agricultural land, like the subject site, is zoned for commercial development (City of Delano Zoning Map, August 2011). The adjoining former agricultural property featured a large cylindrical concrete standpipe, which is likely connected via subsurface conduit to other irrigation infrastructure in the area. That said, it should be noted that to the best of Avocet's and the current site owner's knowledge, no subsurface piping exists below the target site. None of the closest properties to the north are listed in any of the databases searched by EDR, nor are they featured on the GeoTracker or EnviroStor websites. Avocet personnel did not observe the use or storage of hazardous materials from the public right-of-way. Absent additional information to the contrary, it appears unlikely that activities at the adjoining properties to the north have impacted the subsurface beneath the site.

5.4 ADJOINING PROPERTIES TO THE WEST

The site is bordered to the west by Dover Parkway, beyond which is fallow former agricultural land that includes the remnants of what appears to be an abandoned former irrigation well (Figure 3). The strip of land immediately bordering Dover Parkway on the west, like the subject site, is zoned for commercial development, but immediately to the west is a partially developed property that had previously been rough graded for residential development. None of the immediate properties to the west of the site are listed in any of the databases searched by EDR, nor are they featured on the GeoTracker or EnviroStor websites. Avocet personnel did not observe the use or storage of hazardous materials from the public right-of-way. Absent additional information to the contrary, it appears unlikely that activities at the adjoining properties to the west have impacted the subsurface beneath the site.

5.5 ADJOINING PROPERTIES TO THE SOUTH

The target property is bordered to the south by fallow agricultural farmland of the same nature as the site itself, beyond which is a cluster of commercial buildings including a Home Depot and a recently (i.e., circa 2015) constructed Chevron service station. None of these properties are listed in any of the databases searched by EDR, nor are they featured on the GeoTracker or EnviroStor websites. With the exception of the service station and small quantities of home maintenance products sold in the Home Depot, Avocet personnel did not observe the use or storage of hazardous materials on any of the adjoining properties to the south from the public right-of-way. Avocet notes that leak prevention for the new installation of USTs includes the use of double-walled fiberglass tanks, secondary containment with leak detection for all USTs and

underground piping, and regular inspections with oversight from the KCPHSD. That said, due to the leak prevention and early warning systems in place for new USTs, and considering the intervening distance from the site and crossgradient groundwater flow, it is unlikely that an unauthorized release of petroleum to the subsurface environment at the service station has or would impact the target property. Absent additional information to the contrary, it appears unlikely that activities at the adjoining properties to the south have impacted the subsurface beneath the site.

5.6 ADJOINING PROPERTY TO THE EAST

The site is bordered to the east by fallow agricultural farmland of the parcel that encompasses the target property, beyond which is Highway 99. Historical documentation indicates that the adjoining property has been used only for agricultural production. The property is not listed in any of the databases searched by EDR, nor is it featured on the GeoTracker or EnviroStor websites, and Avocet personnel did not observe the use or storage of hazardous materials from the public right-of-way. Avocet notes that the subject site is not likely to have been impacted by aerially deposited lead (ADL) from the highway, as DTSC and the California Department of Transportation have identified the primary area of contamination for ADL to be up to 20 feet from the edge of the pavement (DTSC, March 2016). The eastern boundary of the site is over 600 feet from the edge of the highway. Absent additional information to the contrary, it appears unlikely that activities at the adjoining properties to the east have impacted the subsurface beneath the site.

5.7 POTENTIAL OFFSITE SOURCES

After reviewing the information provided in EDR's Radius Map Report (Appendix F) and additional information available from Cal/EPA's GeoTracker and EnviroStor websites, two potential offsite sources of contamination are considered relevant for Phase I ESA purposes. In addition, Avocet has included information about a third site (the Delano PCE Plume) based on a prior Phase I ESA completed for DGS (Avocet, December 29, 2017). While the Delano PCE Plume (DPP) is not believed to be a significant concern at the site, given the ongoing investigation, DTSC interest, and proximity (about 1.2 miles to the northeast of the site), a discussion is included. Selected information on these three offsite sources is summarized below and their locations are shown in Figures 1, 2 and 3.

5.7.1 Crop Production Services, Inc.

The CPS facility is located approximately 0.6 mile southeast and hydraulically crossgradient of the target site (Figure 2). The facility has changed ownership several times since the 1960s and has historically been used for the storage, blending, and sale of fertilizers and pesticides/ herbicides (ATC Associates, Inc. [ATC], December 23, 2009). The CPS facility currently features a tank farm, including three 500,000-gallon ASTs, and is currently used primarily for the storage and distribution of bulk liquid fertilizers.

Contamination was first reported in 1983 when "yellowish" surficial soil staining was found in two areas of the property, which was attributed to the herbicide dinoseb (Rubik, September 2012). Following the discovery, approximately 220 cubic yards of soil were excavated from the two stained areas. Subsequent investigation of both soil and groundwater onsite indicated that the facility had been impacted by a number of pesticides and/or herbicides, such as 1,2-dichloropropane, 1,2,3-trichloropropane, dinoseb, and 1,2-dibromo-3-chloropropane, as well as having high concentrations of nitrate and/or nitrite from the various fertilizers stored onsite (Rubik, September 2012). Other remedial activities onsite have included a number of source area excavations, installation of engineered caps, and a 2015 bioremediation pilot study, which involved the introduction of 1,200 pounds of Wilclear© (a 60% sodium or potassium lactate electron donor solution) to the saturated zone through a groundwater injection well (ATC, December 23, 2009; CVRWQCB, April 22, 2015).

Since 1997, groundwater beneath the site has been monitored on a semiannual basis using up to 20 groundwater monitoring wells; however, many of the wells have since gone dry. Historical groundwater flow beneath CPS has been variously reported as being generally toward the east (i.e., southeast to northeast), which is contrary to CDWR's characterization of regional flow toward the west or southwest (CDWR, January 24, 2017). The most recent groundwater monitoring event was completed in March 2017 and involved the gauging of eight wells and the sampling of two wells since six of the wells were dry. Depth to water ranged from 118 to 121 feet bgs and both wells contained detectable concentrations of one or more of the above-described contaminants (Rubik, July 27, 2017). Further assessment of the site will reportedly include continued semiannual groundwater monitoring, installation of the additional deeper groundwater monitoring wells, and submittal of a remedial action plan (Rubik, February 7, 2017).

Assuming that local groundwater flow is toward the east, the CPS facility is located hydraulically crossgradient of the site. Moreover, the characteristics of the pesticide/herbicide contaminants detected in groundwater at the facility render them relatively immobile in the environment. Therefore, even if groundwater flow is periodically toward the site, it is unlikely that significant concentrations of dissolved contaminants could reach the site. Finally, the depth to groundwater (greater than 100 feet bgs) provides no reasonable exposure pathway to site occupants from a groundwater source. Due to the distance, site and contaminant characteristics, and active regulatory oversight, subsurface impacts at the CPS facility are unlikely to impact soil and/or groundwater at the subject site and will not be discussed further

5.7.2 Kern County Dump

The former Kern County Dump, aka McFarland-Delano Sanitary Landfill, is located approximately 0.75 mile south-southwest of the site (Figure 2) and was operated by Kern County Public Works as a "burn dump" and then as a Class III sanitary landfill between the years of 1972 and 1992. The landfill was granted formal closure by the CVRWQCB in 1996 and has since been under post-closure maintenance requirements, including active landfill gas collection

and treatment, semiannual groundwater monitoring, and stormwater runoff containment (KCPWD, November 2015).

Several volatile organic compounds (VOCs) are consistently detected in shallow groundwater underlying the landfill at depths ranging from 71 to 114 fe3et bgs (KCPWD, November 2015). Groundwater flow beneath the landfill is generally toward the east, and downgradient compliance monitoring indicates that these VOCs attenuate to trace or nondetect levels within approximately 600 feet of the landfill. The lateral extent of the dissolved VOC plume has reportedly remained relatively stable for several years. Due to the distance, crossgradient direction, active remediation, and regulatory oversight, it is unlikely that the former dump has or will impact the subsurface beneath the target site.

5.7.3 Delano PCE Plume

Tetrachloroethylene (PCE) was discovered in groundwater underlying downtown Delano during investigations of underground fuel storage tanks at active and former service stations. Subsequent studies initiated by DTSC have identified three dry cleaners as possible PCE sources (URS Corporation [URS], October 14, 2013). Investigations involving active and passive soil vapor sampling and the installation of five groundwater monitoring wells indicate that PCE is present in soil vapor and groundwater beneath a large area of downtown Delano (URS, June 5, 2017; URS, October 21, 2016). These sources and the DPP investigation area are located approximately 1.2 miles northeast of the subject site (Figure 1).

Information compiled by DTSC's contractor indicate that groundwater flow directions in the downtown area have been variable, but that the prevailing groundwater flow direction has been toward the southwest (i.e., toward the subject site). Investigation of the DPP is ongoing. Though the site is potentially situated downgradient of the PCE plume, the intervening distance (greater than 1 mile) and depth to groundwater (greater than 100 feet) make it unlikely that the PCE plume has or will significantly impact soil, soil vapor, or groundwater beneath the target site. .

6.0 LIMITED PHASE II INVESTIGATION

Based on the historical agricultural use of the site, Avocet conducted a limited Phase II investigation as part of the Phase I ESA to assess whether and to what extent the near-surface soils might have been impacted by past agricultural use. The investigation included the collection of four discrete near-surface (0 to 6 inches) soil matrix samples (SS_1 through SS_4) at the approximate locations shown in Figure 3. The soil matrix samples were collected and analyzed in general accordance with DTSC's "Interim Guidance for Sampling Agricultural Properties" (DTSC, August 7, 2008). As mentioned previously, the site boundary was adjusted by the property owner after the soil samples were collected, which rendered Soil Samples SS_1 and SS_2 outside the investigation site boundary. The rectangular site was rotated 90 degrees, aligning the shorter edge along Dover Parkway (Figure 3). Avocet notes that although two of the four samples are no longer within the boundary of the target property, the results are likely still representative since the parcel that encompasses both sites (current and previous) has historically been managed collectively with the same crops.

6.1 SAMPLE COLLECTION AND ANALYSIS

On September 5, 2017, Avocet collected surficial soil samples in accordance with DTSC guidance for pesticide screening on agricultural properties up to 3 acres in size (DTSC, August 7, 2008). Avocet collected four discrete surface soil samples at locations equally spaced throughout the 3-acre site. At each of the four discrete sample locations, soil from the ground surface to approximately 6 inches bgs was collected and packed into one 8-ounce glass sample jar and sealed with a Teflon-lined lid. The soil-filled jars were labeled, sealed in freezer bags, and placed on ice in a cooler. The four discrete soil samples were hand delivered, following chain-of-custody procedures, to Eurofins Calscience, Inc. (Eurofins), a State-certified analytical laboratory based in Garden Grove, California. Eurofins analyzed each discrete soil sample for the following:

- OCPs using EPA Method 8081A,
- OCHs using EPA Method 8151A,
- OPPs using EPA Method 8141B, and
- Arsenic using EPA Method 6010B

The results of the OCP, OPP, OCH, and arsenic analyses are summarized in Tables 1 through 4, respectively, and are presented in full in the Eurofins laboratory report in Appendix B.

6.2 FINDINGS

This section presents the findings of the limited Phase II investigation. For context, the soil matrix analytical results are compared to DTSC-modified screening levels (DTSC-SLs) and EPA Regional Screening Levels (RSLs) (DTSC, June 2017; EPA, June 2017). DTSC-SLs and RSLs are concentrations of the respective analytes in residential or commercial/industrial soil that are protective of human health, including sensitive groups, over a lifetime.

6.2.1 OCPs, OCHs, and OPPs in Soil Matrix

Review of the analytical report from Eurofins indicates the following:

- All four soil matrix samples contained low but detectable concentrations of one OCP, 4,4'-DDE (DDE; Table 1). Specifically, the sample concentrations ranged from 59 to 120 micrograms per kilogram (µg/kg), which are well below the EPA RSLs for DDE of 2,000 and 9,300 µg/kg for residential and commercial/industrial soil, respectively. Since the maximum detected concentration of DDE is more than an order of magnitude below the more stringent residential RSL for soil, residual OCPs are unlikely to pose a concern at the site. That said, for Phase I ESA purposes, the presence of residual pesticides is considered an OEF.

- As shown in Tables 2 and 3, none of the four discrete soil matrix samples analyzed contained detectable concentrations of OPPs or OCHs.

6.2.2 Arsenic in Soil Matrix

Arsenic was detected in all four soil samples at concentrations ranging from 1.47 to 3.26 milligrams per kilogram (mg/kg), exceeding both the DTSC-SLs and EPA RSLs (Table 4). However, this is a common situation, as arsenic frequently occurs naturally in California soils at concentrations in excess of screening levels. In recognition of this, DTSC guidance recommends that arsenic concentrations be evaluated in terms of regional background concentrations. The DTSC's Schools Program evaluated data from a large number of school sites across California. The results of this evaluation established a conservative upper bound estimate of 12 mg/kg for background arsenic. For properties where all of the arsenic data are equal to or less than 12 mg/kg, arsenic is not considered a contaminant of concern (DTSC, August 7, 2008). Since arsenic concentrations at the subject site are significantly less than 12 mg/kg, they are considered to be within the naturally occurring range and are not a concern to future site development.

7.0 CONCLUSIONS

This section presents the conclusions of the subject Phase I ESA in terms of identified and consecutively numbered RECs, CRECs, HRECs, and OEFs.

7.1 RECOGNIZED ENVIRONMENTAL CONDITIONS (RECS)

ASTM (2013) defines RECs as:

> *". . . the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment. De minimis conditions are not recognized environmental conditions."*

Based on the subject Phase I ESA, Avocet has not identified any RECs in connection with the subject site.

7.2 CONTROLLED RECS (CRECS)

ASTM (2013) defines CRECs as:

> *". . . resulting from a past release of hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority (for example, as evidenced by the issuance of a no further action letter or equivalent, or meeting risk-based criteria established by regulatory authority), with hazardous substances or petroleum products allowed to remain in place subject to the implementation of required controls (for example, property use restrictions, activity and use limitations, institutional controls, or engineering controls)."*

Based on the subject Phase I ESA, Avocet has not identified any CRECs in connection with the subject site.

7.3 HISTORICAL RECS (HRECS)

ASTM (2013) defines HRECs as:

> *". . . a past release of any hazardous substances or petroleum products that has occurred in connection with the property and has been addressed to the satisfaction of the applicable regulatory authority or meeting unrestricted use criteria established by a regulatory authority, without subjecting the property to any required controls (for example, property use restrictions, activity and use limitations, institutional controls, or engineering controls)."*

Based on the subject Phase I ESA, Avocet has not identified any HRECs in connection with the subject site.

7.4 OTHER ENVIRONMENTAL FEATURES (OEFS)

OEFs are environmental conditions that do not meet the ASTM definition of a REC, CREC, or HREC but which warrant mention in the context of acquiring and redeveloping all or a portion of the subject site. Based on the subject Phase I ESA, Avocet has identified four OEFs at the subject site, as summarized below.

- **OEF 1 – Residual Pesticides in Surficial Soil.** The site was used for agricultural purposes from before 1937 until the mid-2000s, including periods in which pesticides and/or herbicides were widely used throughout the United States. Several of these pesticides, particularly OCPs, are resistant to degradation, and residuals are often present in near-surface soil many years after the last application. Understanding that the site's agricultural past would likely result in the identification of the potential for residual agricultural chemicals as an environmental condition, a limited Phase II ESA was completed alongside the Phase I ESA. The limited Phase II investigation analyzed four discrete near-surface soil samples from the site for OCPs, OPPs, OCHs, and arsenic. Although the orientation of the site was later adjusted, excluding the two northernmost soil samples, the results of the Phase II investigation are still considered representative of the site since the parcel which encompasses both site boundaries has historically been managed collectively with the same crops. Comparison of the pesticide/herbicide results to published risk-based concentrations indicates that residual concentrations are not a concern for future site use. Moreover, arsenic concentrations appear to be within background levels. Therefore, the minor impact from past agricultural use of the site, in terms of pesticides and herbicides, is considered an OEF for Phase I ESA purposes.

7.5 VAPOR INTRUSION/VAPOR ENCROACHMENT

As part of the Phase I ESA, Avocet evaluated the potential presence of vapor intrusion conditions (VICs) and/or vapor encroachment conditions (VECs) at the subject site. A VIC can occur if VOCs are present in the vadose zone or in groundwater beneath a property at concentrations such that vapor could intrude into, and accumulate in, an overlying structure at concentrations hazardous to human health. However, there is no indication that VOCs have been used at the site, no indication there are VOC impacts to the underlying vadose zone or groundwater, and, hence, no reason to suspect a VIC exists at the subject site. A VEC can occur if VOCs from an offsite source migrate beneath a property. However, there have been no known VOC releases on the adjoining properties, and the intervening distance of documented VOC releases on nearby properties are such that there is no reason to suspect a VEC exists at the site.

Respectfully submitted,

AVOCET ENVIRONMENTAL, INC.

Deke Siren, P.G.
Project Manager
(PG No. 8180)

Signed and sealed November 14, 2017

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Tables

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Table 1
Organochlorine Pesticides in Soil Samples
SW Corner of APN 521-030-06-00-5
Delano, California

Sample ID	Sample Date	4,4'-DDD	4,4'-DDE	4,4'-DDT	Aldrin	Alpha-BHC	Beta-BHC	Chlordane	Delta-BHC	Dieldrin	Endosulfan I	Endosulfan II	Endosulfan Sulfate	Endrin	Endrin Aldehyde	Endrin Ketone	Gamma-BHC	Heptachlor	Heptachlor Epoxide	Methoxychlor	Toxaphene
SS_1	09/05/17	<5	**59**	<5	<5	<10	<5	<50	<10	<5	<5	<5	<5	<5	<5	<5	<5	<5	<10	<5	<100
SS_2	09/05/17	<4.9	**71**	<4.9	<4.9	<9.8	<4.9	<49	<9.8	<4.9	<4.9	<4.9	<4.9	<4.9	<4.9	<4.9	<4.9	<4.9	<9.8	<4.9	<98
SS_3	09/05/17	<5	**120**	<5	<5	<9.9	<5	<50	<9.9	<5	<5	<5	<5	<5	<5	<5	<5	<5	<9.9	<5	<99
SS_4	09/05/17	<4.9	**120**	<4.9	<4.9	<9.8	<4.9	<49	<9.8	<4.9	<4.9	<4.9	<4.9	<4.9	<4.9	<4.9	<4.9	<4.9	<9.8	<4.9	<98
Screening Criteria																					
RSLs (Residential)		2,300	2,000	1,900	39	86	300	--	--	34	--	--	--	19,000	--	--	570	130	70	320,000	490
RSLs (Industrial)		9,600	9,300	8,500	180	360	1,300	--	--	140	--	--	--	250,000	--	--	2,500	630	330	4,100,000	2,100

Notes:
Analysis conducted by Eurofins Calscience using Method EPA 8081A
Units are micrograms per kilogram (µg/kg)
< Denotes nondetected at the Reporting Limit (RL) indicated
Bold type indicates reported at detectable concentration
-- Denotes not available
Regional Screening Level (RSLs) after EPA, June 2017

AVOCET ENVIRONMENTAL, INC.

Table 2
Organophosphorus Pesticides in Soil Samples
SW Corner of APN 521-030-06-00-5
Delano, California

Sample ID	Sample Date	Azinphos Methyl	Bolstar	Chlorpyrifos	Coumaphos	Demeton-o/s	Diazinon	Dichlorvos	Disulfoton	Ethoprop	Fensulfothion	Fenthion	Merphos	Methyl Parathion	Mevinphos	Naled	Phorate	Ronnel	Stirophos	Tokuthion	Trichloronate
SS_1	09/05/17	<0.49	<0.49	<0.49	<0.49	<0.49	<0.49	<0.49	<0.49	<0.49	<0.49	<0.49	<0.49	<0.49	<0.49	<3.9	<0.49	<0.49	<2	<0.49	<0.49
SS_2	09/05/17	<0.48	<0.48	<0.48	<0.48	<0.48	<0.48	<0.48	<0.48	<0.48	<0.48	<0.48	<0.48	<0.48	<0.48	<3.8	<0.48	<0.48	<1.9	<0.48	<0.48
SS_3	09/05/17	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<4	<0.5	<0.5	<2	<0.5	<0.5
SS_4	09/05/17	<0.48	<0.48	<0.48	<0.48	<0.48	<0.48	<0.48	<0.48	<0.48	<0.48	<0.48	<0.48	<0.48	<0.48	<3.8	<0.48	<0.48	<1.9	<0.48	<0.48
Screening Criteria																					
RSLs (Residential)		190	--	63	--	2.5	44	1.9	2.5	--	--	--	2.3	16	--	160	13	3,900	23	--	--
RSLs (Industrial)		2,500	--	820	--	33	570	7.9	33	--	--	--	35	210	--	2,300	160	58,000	96	--	--

Notes:
Analysis conducted by Eurofins Calscience using Method EPA 8141A
Units are milligrams per kilogram (mg/kg)
< Denotes nondetected at the Reporting Limit (RL) indicated
-- Denotes not available
RSLs = Regional Screening Levels after EPA, June 2017

AVOCET ENVIRONMENTAL, INC.

Table 3
Chlorinated Herbicides in Soil Samples
SW Corner of APN 521-030-06-00-5
Delano, California

Sample ID	Sample Date	2,4,5-T	2,4,5-TP (Silvex)	2,4-D	2,4-DB	Dalapon	Dicamba	Dichlorprop	Dinoseb	MCPA	MCPP
SS_1	09/05/17	<9.9	<9.9	<99	<99	<250	<9.9	<99	<50	<9,900	<9,900
SS_2	09/05/17	<9.9	<9.9	<99	<99	<250	<9.9	<99	<50	<9,900	<9,900
SS_3	09/05/17	<9.9	<9.9	<99	<99	<250	<9.9	<99	<50	<9,900	<9,900
SS_4	09/05/17	<9.9	<9.9	<99	<99	<250	<9.9	<99	<50	<9,900	<9,900
Screening Criteria											
RSLs (Residential)		630,000	510,000	700,000	1,900,000	1,900,000	1,900,000	--	63,000	32,000	63,000
RSLs (Industrial)		8,200,000	6,600,000	9,600,000	25,000,000	25,000,000	25,000,000	--	820,000	410,000	820,000

Notes:

Analysis conducted by Eurofins Calscience using Method EPA 8151A
Units are micrograms per kilogram (µg/kg)
< Denotes nondetected at the Reporting Limit (RL) indicated
-- Denotes not available
RSLs = Regional Screening Levels after EPA, June 2017

AVOCET ENVIRONMENTAL, INC.

Table 4
Arsenic in Soil Samples
SW Corner of APN 521-030-06-00-5
Delano, California

Sample ID	Sample Date	Arsenic
SS_1	09/05/17	**1.47**
SS_2	09/05/17	**1.87**
SS_3	09/05/17	**3.26**
SS_4	09/05/17	**1.61**
Screening Criteria		
DTSC-SLs (Residential)		0.11
DTSC-SLs (Industrial)		0.36
RSLs (Residential)		0.68
RSLs (Industrial)		3

Notes:
Analysis conducted by Eurofins Calscience using Method 6010B.
Units are milligrams per kilogram (mg/kg).
Bold type indicates reported at detectable concentration.
DTSC-SLs = DTSC-modified Screening Levels after HERO HHRA Note Number 3, June 2017
RSLs = Regional Screening Levels after EPA, June 2017

Figures

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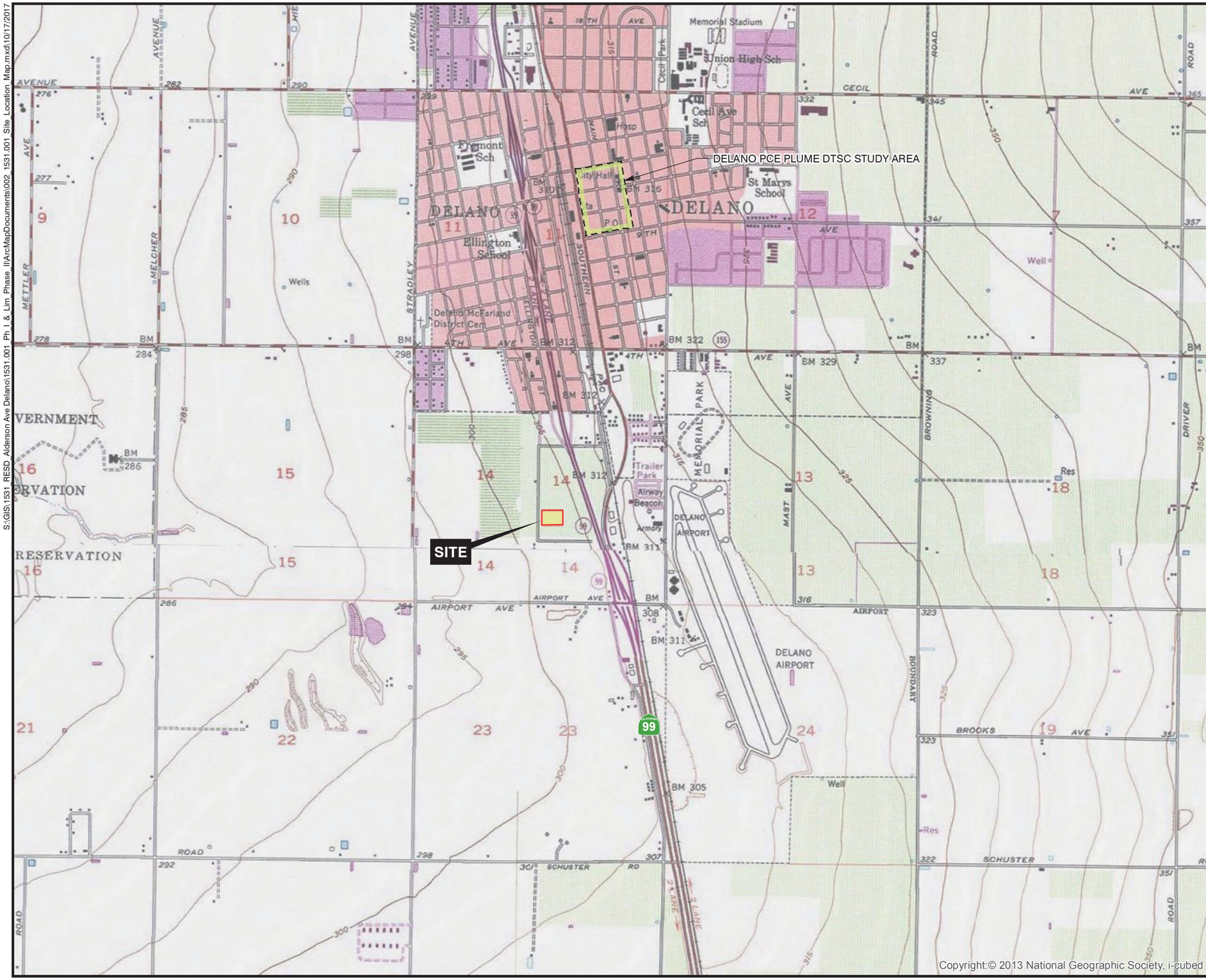

0 2,000 4,000 FEET

FIGURE 1

SITE LOCATION MAP

SW CORNER OF APN 521-030-06-00-5
DELANO, CALIFORNIA

PREPARED FOR

STATE OF CALIFORNIA
REAL ESTATE SERVICES DIVISION

AVOCET ENVIRONMENTAL, INC.

S:\GIS\1531_RESD_Alderson Ave Delano\1531.001_Ph_I_&_Lim_Phase_II\ArcMapDocuments\002_1531.001_Site_Location_Map.mxd\10/17/2017

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N

EXPLANATION

SITE BOUNDARY

PARCEL BOUNDARY

REFERENCE:
AERIAL IMAGE FROM USDA FSA
DATED: 6/15/2016

0 600 1,200 FEET

FIGURE 2

SITE AND VICNITY

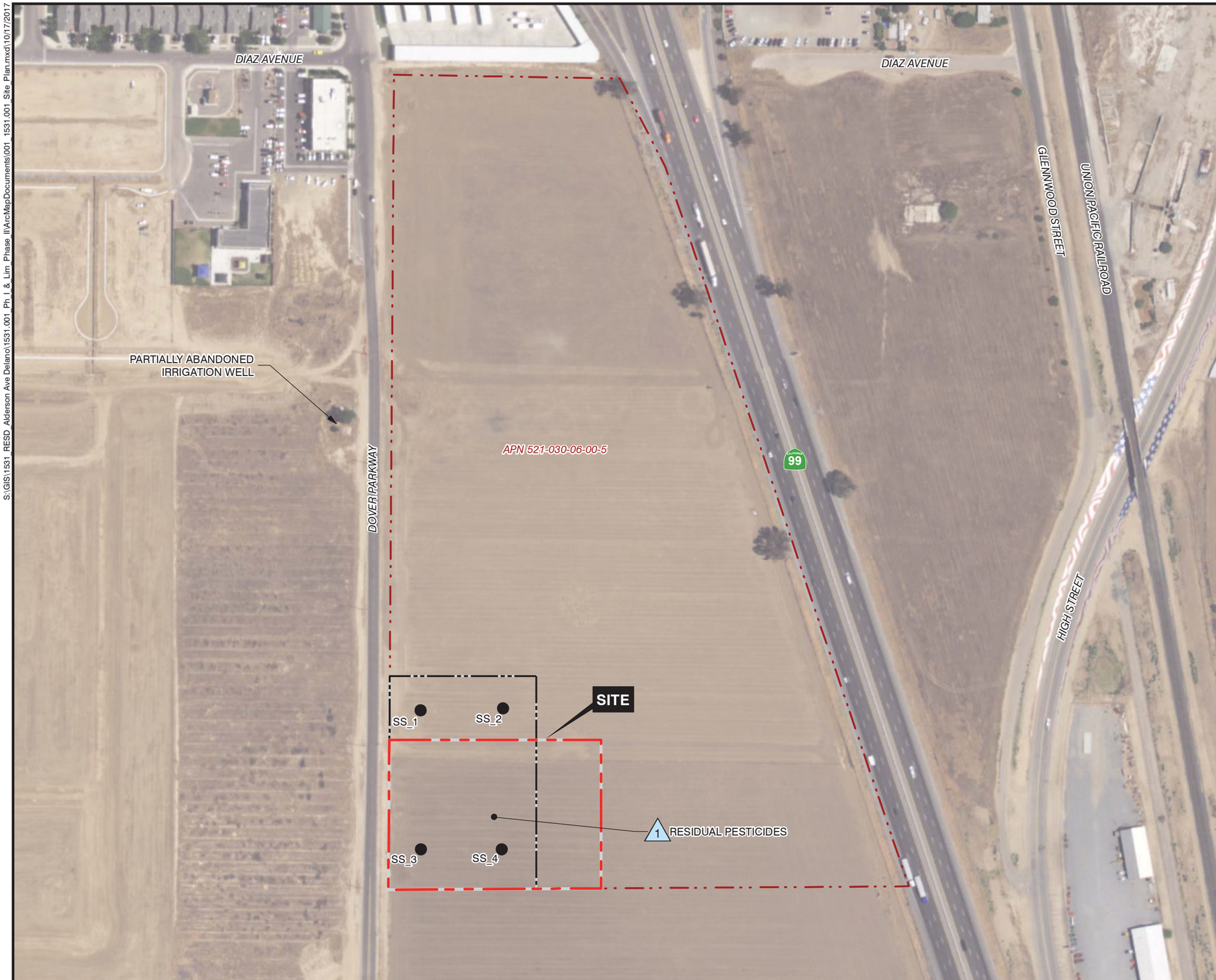
SW CORNER OF APN 521-030-06-00-5
DELANO, CALIFORNIA

PREPARED FOR

STATE OF CALIFORNIA
REAL ESTATE SERVICES DIVISION

AVOCET ENVIRONMENTAL, INC.

S:\GIS\1531_RESD_Alderson Ave Delano\1531.001_Ph_I_&_Lim_Phase_II\ArcMapDocuments\001_1531.001_Site_Plan.mxd\10/17/2017



N

EXPLANATION

- NEAR SURFACE SOIL SAMPLE LOCATION
- SITE BOUNDARY
- PREVIOUS SITE ORIENTATION
- PARCEL BOUNDARY
- 1 OTHER ENVIRONMENTAL FEATURE

REFERENCE:
AERIAL IMAGE FROM USDA FSA
DATED: 6/15/2016

0 200 400 FEET

FIGURE 3

SITE PLAN AND INVESTIGATION LOCATIONS

SW CORNER OF APN 521-030-06-00-5
DELANO, CALIFORNIA

PREPARED FOR

STATE OF CALIFORNIA
REAL ESTATE SERVICES DIVISION

AVOCET ENVIRONMENTAL, INC.

Appendix A

EDR Historical Topo Map Report

AVOCET
ENVIRONMENTAL, INC.

Former Agricultural Property

1692 Dover Pkwy

Delano, CA 93215

Inquiry Number: 5027362.4

August 18, 2017

EDR Historical Topo Map Report

with QuadMatch™

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

EDR Historical Topo Map Report

08/18/17

Site Name:	Client Name:
Former Agricultural Property	Avocet Environmental, Inc.
1692 Dover Pkwy	1 Technology Drive Suite C515
Delano, CA 93215	Irvine, CA 92618-0000
EDR Inquiry # 5027362.4	Contact: Scott Ruud

EDR Topographic Map Library has been searched by EDR and maps covering the target property location as provided by Avocet Environmental, Inc. were identified for the years listed below. EDR's Historical Topo Map Report is designed to assist professionals in evaluating potential liability on a target property resulting from past activities. EDRs Historical Topo Map Report includes a search of a collection of public and private color historical topographic maps, dating back to the late 1800s.

Search Results:		*Coordinates:*	
P.O.#	1531.001	**Latitude:**	35.753265 35° 45' 12" North
Project:	Former Agricultural Property	**Longitude:**	-119.248144 -119° 14' 53" West
		UTM Zone:	Zone 11 North
		UTM X Meters:	296734.16
		UTM Y Meters:	3958913.27
		Elevation:	307.04' above sea level

Maps Provided:

1927
1930
1941
1942, 1943
1947
1953, 1954
1969
1973
2012

Topo Sheet Key

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

1927 Source Sheets

McFarland

7.5-minute, 31680

1930 Source Sheets

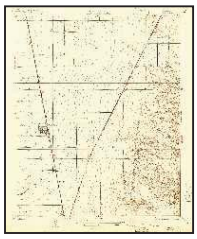
Pond

7.5-minute, 31680

McFarland

7.5-minute, 31680

1941 Source Sheets



MCFARLAND

7.5-minute, 31680

1942, 1943 Source Sheets

Earlimart

15-minute, 62500

Slater

15-minute, 62500
Aerial Photo Revised 1937

Terra Bella

15-minute, 62500
Aerial Photo Revised 1937

Wasco

15-minute, 62500
Aerial Photo Revised 1937

Topo Sheet Key

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

1947 Source Sheets

SLATER

15-minute, 50000

WASCO

15-minute, 50000

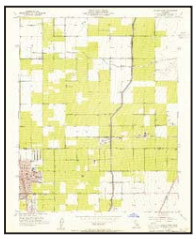
TERRA BELLA

15-minute, 50000

1953, 1954 Source Sheets

Pond

7.5-minute, 24000
Aerial Photo Revised 1946



Delano East

7.5-minute, 24000
Aerial Photo Revised 1946

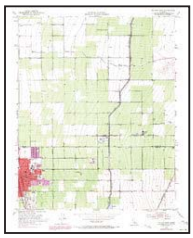
Delano West

7.5-minute, 24000
Aerial Photo Revised 1946

Mc Farland

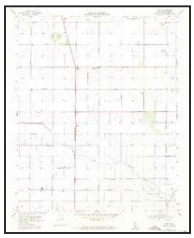
7.5-minute, 24000
Aerial Photo Revised 1946

1969 Source Sheets



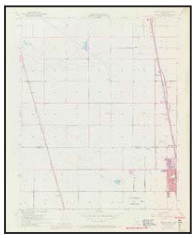
Delano East

7.5-minute, 24000
Aerial Photo Revised 1969



Pond

7.5-minute, 24000
Aerial Photo Revised 1969



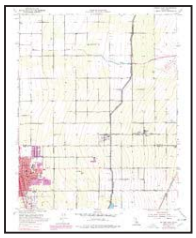
Delano West

7.5-minute, 24000
Aerial Photo Revised 1969

Mc Farland

7.5-minute, 24000
Aerial Photo Revised 1969

1973 Source Sheets



Delano East

7.5-minute, 24000
Aerial Photo Revised 1969

Pond

7.5-minute, 24000
Aerial Photo Revised 1969

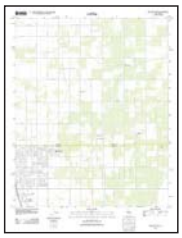
Topo Sheet Key

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

2012 Source Sheets

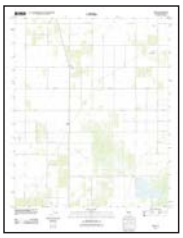
McFarland

7.5-minute, 24000



Delano East

7.5-minute, 24000



Pond

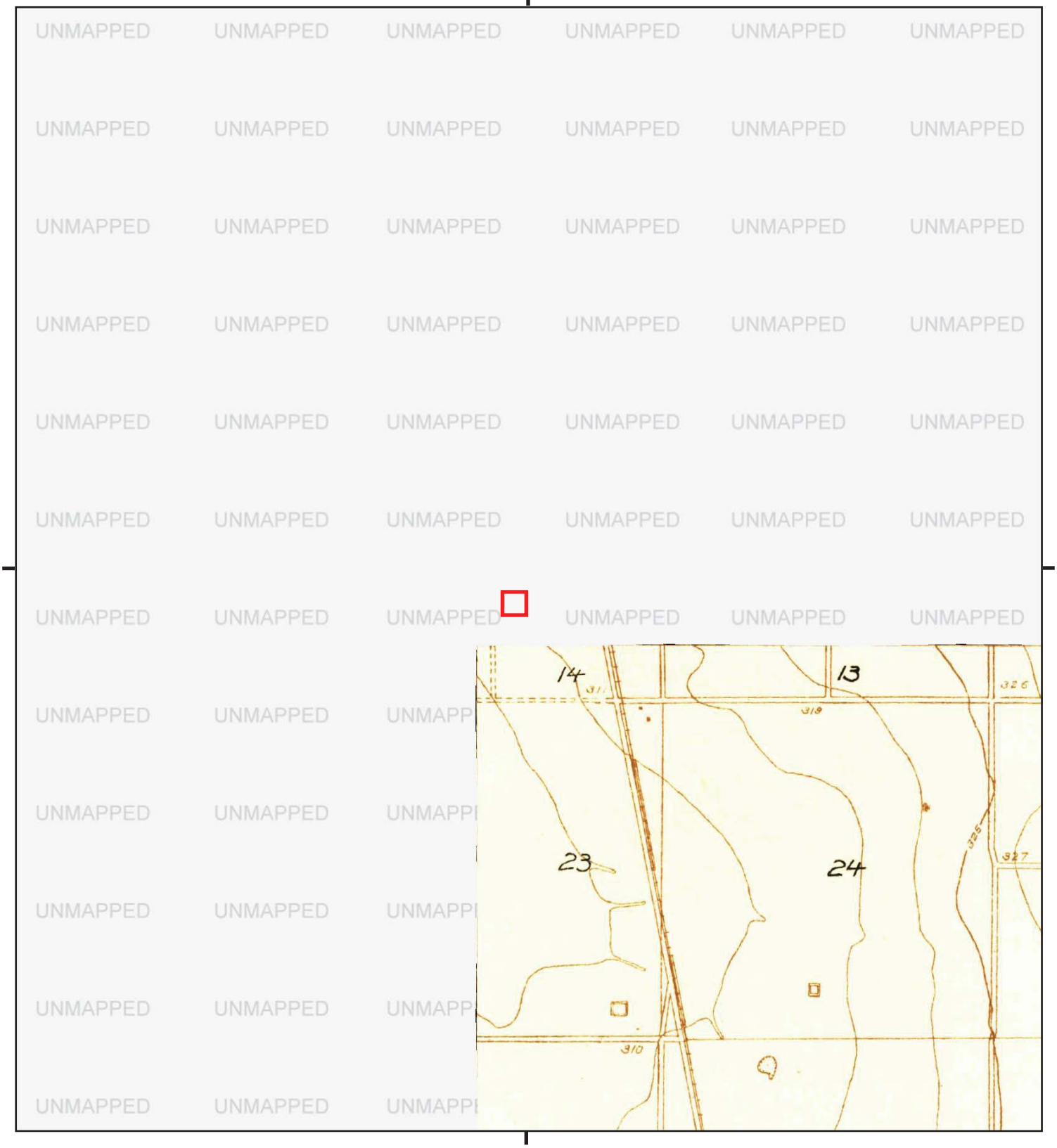
7.5-minute, 24000

Delano West

7.5-minute, 24000

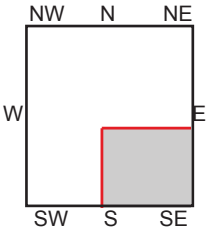
Historical Topo Map

1927



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5



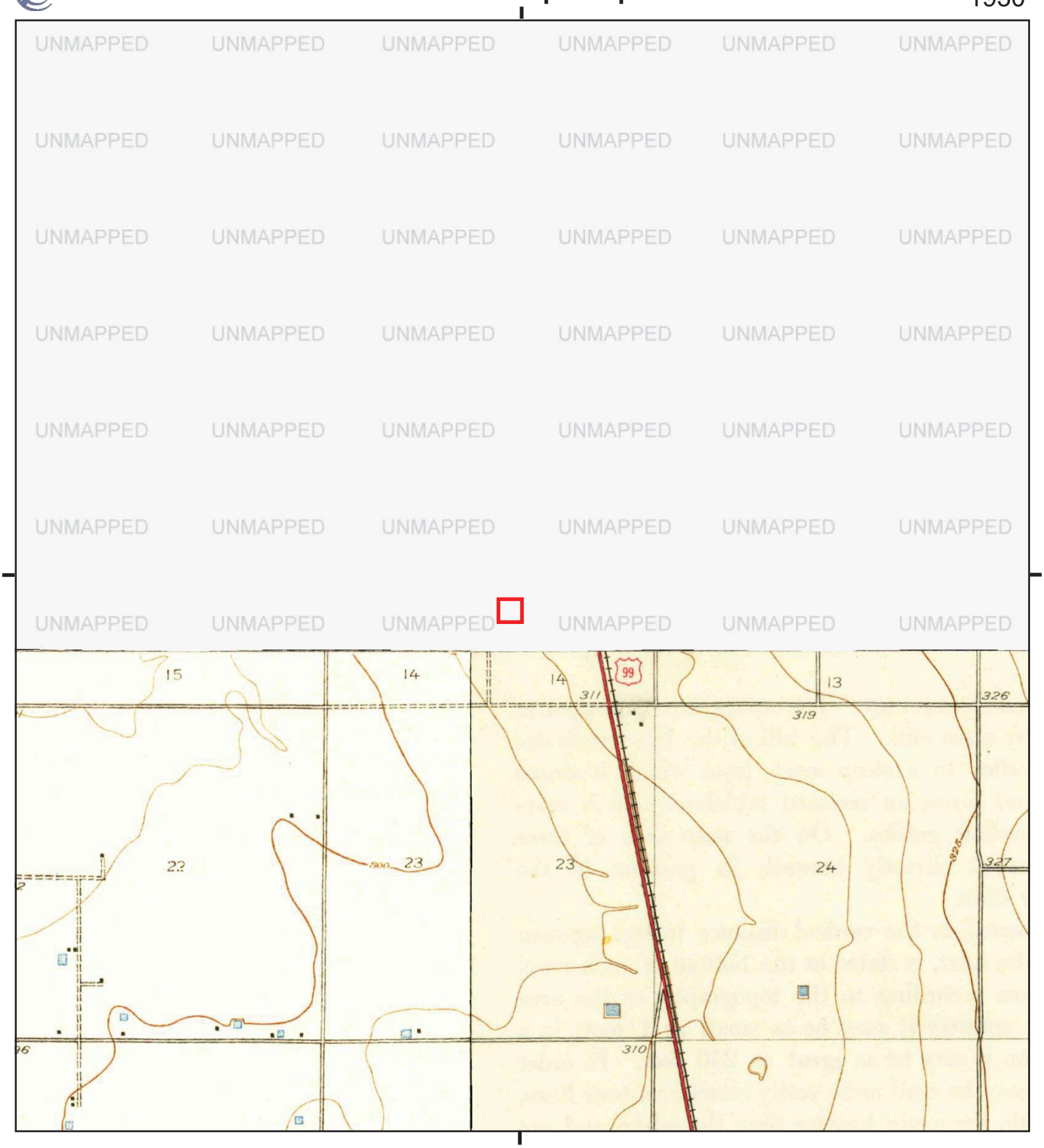
SE, McFarland, 1927, 7.5-minute

SITE NAME: Former Agricultural Property
ADDRESS: 1692 Dover Pkwy
Delano, CA 93215
CLIENT: Avocet Environmental, Inc.

N

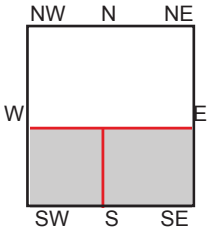
Historical Topo Map

1930



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5



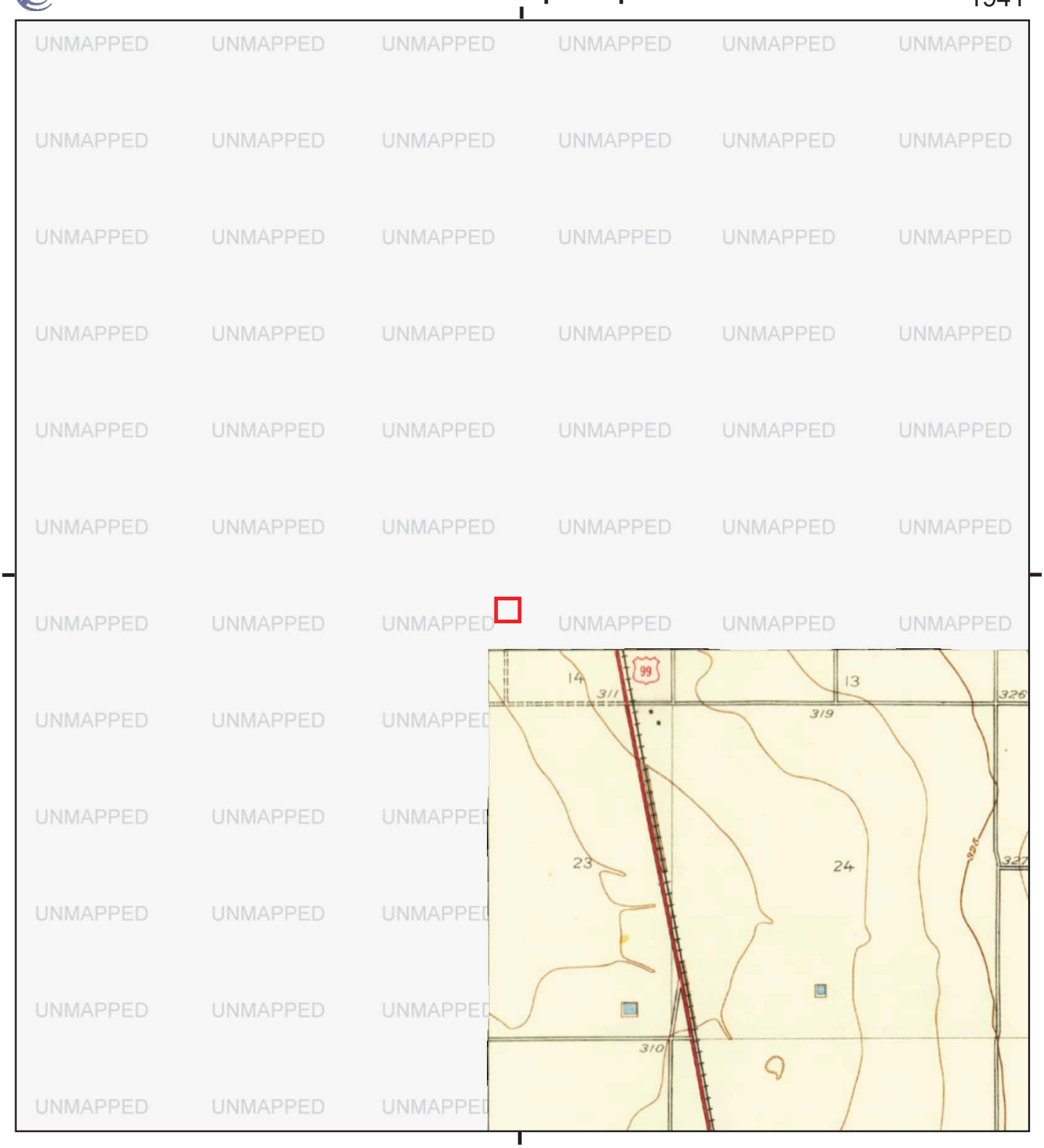
SE, McFarland, 1930, 7.5-minute
SW, Pond, 1930, 7.5-minute

SITE NAME: Former Agricultural Property
ADDRESS: 1692 Dover Pkwy
Delano, CA 93215
CLIENT: Avocet Environmental, Inc.

N

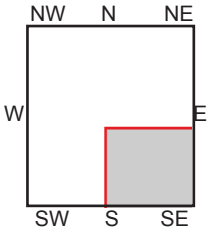
Historical Topo Map

1941



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5



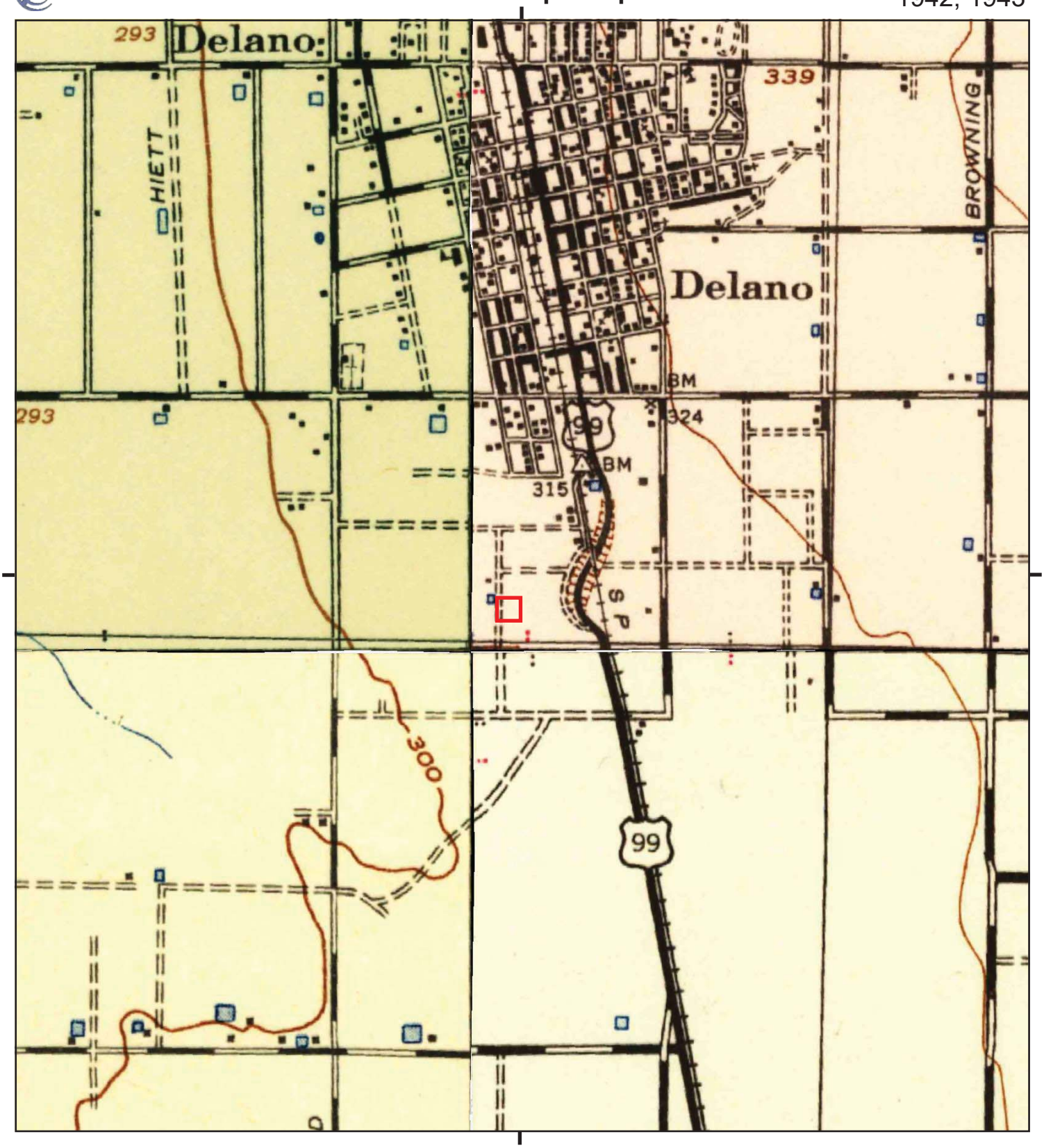
SE, MCFARLAND, 1941, 7.5-minute

SITE NAME: Former Agricultural Property
ADDRESS: 1692 Dover Pkwy
Delano, CA 93215
CLIENT: Avocet Environmental, Inc.

N

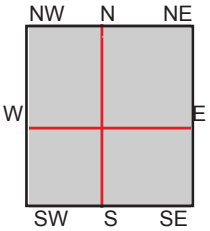
Historical Topo Map

1942, 1943



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5



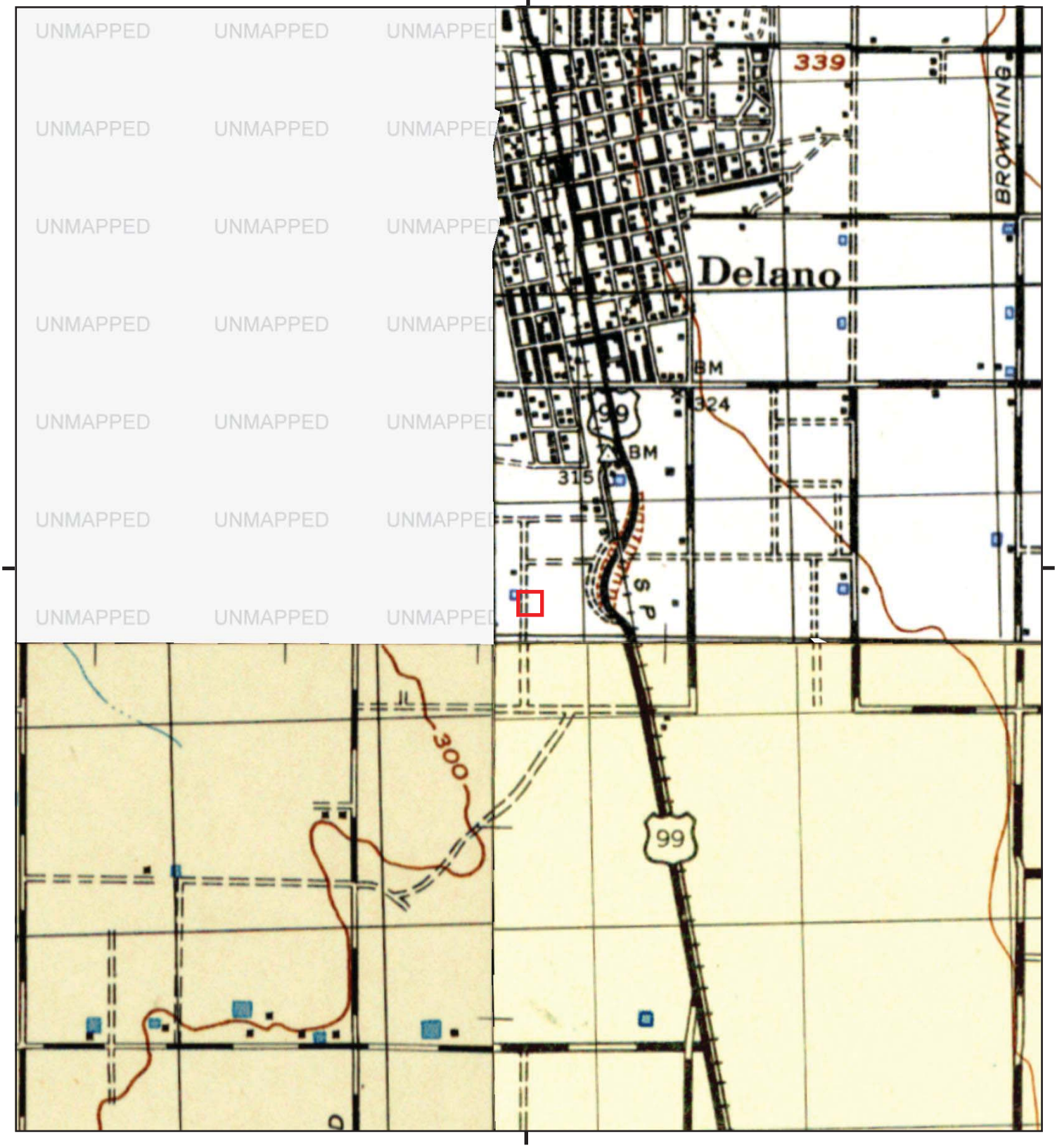
TP, Terra Bella, 1942, 15-minute
SE, Slater, 1942, 15-minute
SW, Wasco, 1943, 15-minute
NW, Earlimart, 1942, 15-minute

SITE NAME: Former Agricultural Property
ADDRESS: 1692 Dover Pkwy
Delano, CA 93215
CLIENT: Avocet Environmental, Inc.

N

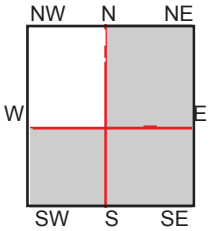
Historical Topo Map

1947



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5



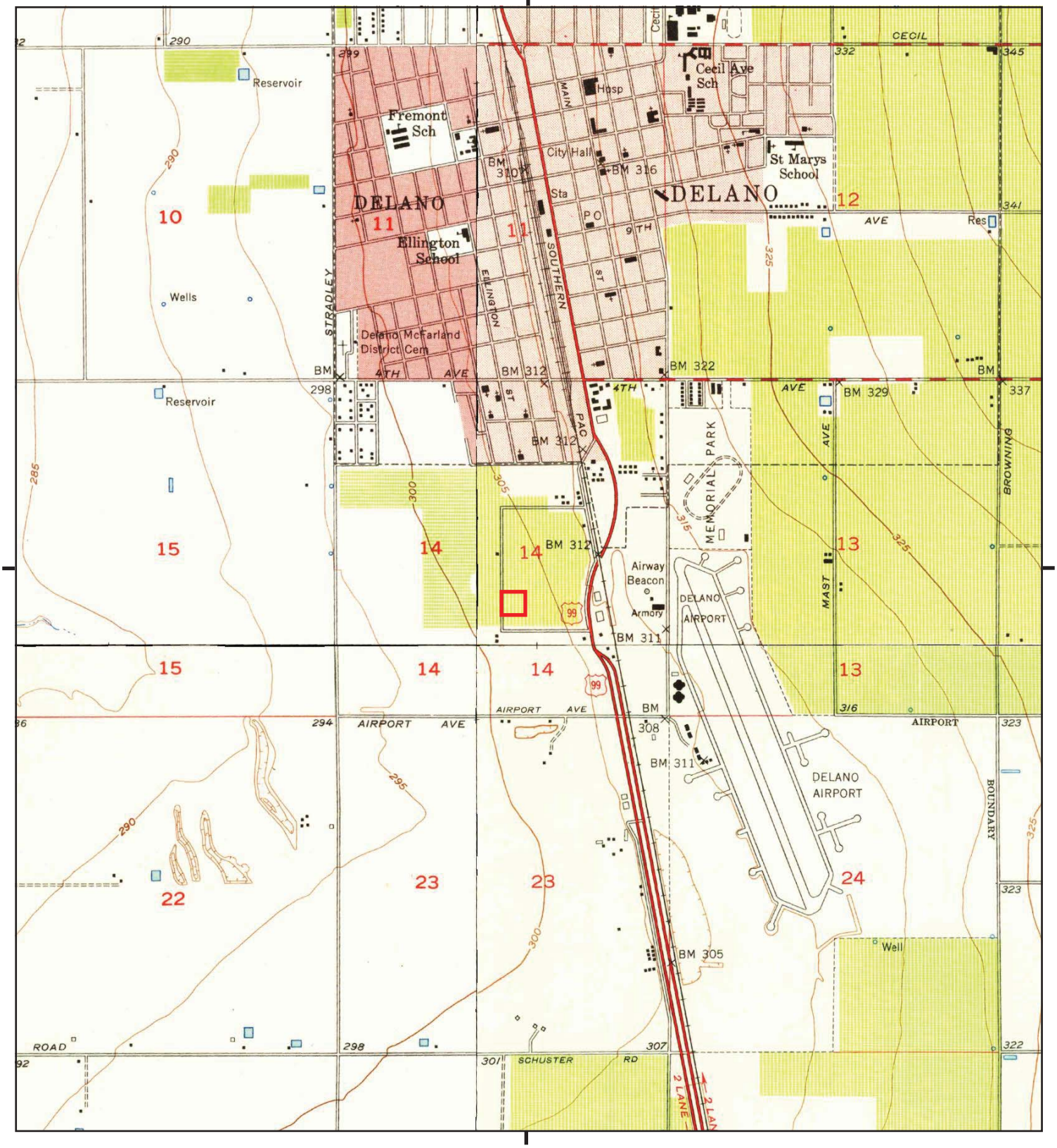
TP, TERRA BELLA, 1947, 15-minute
SE, SLATER, 1947, 15-minute
SW, WASCO, 1947, 15-minute

SITE NAME: Former Agricultural Property
ADDRESS: 1692 Dover Pkwy
Delano, CA 93215
CLIENT: Avocet Environmental, Inc.

N

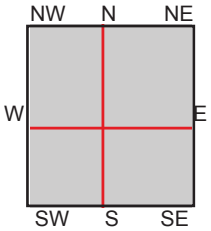
Historical Topo Map

1953, 1954



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5



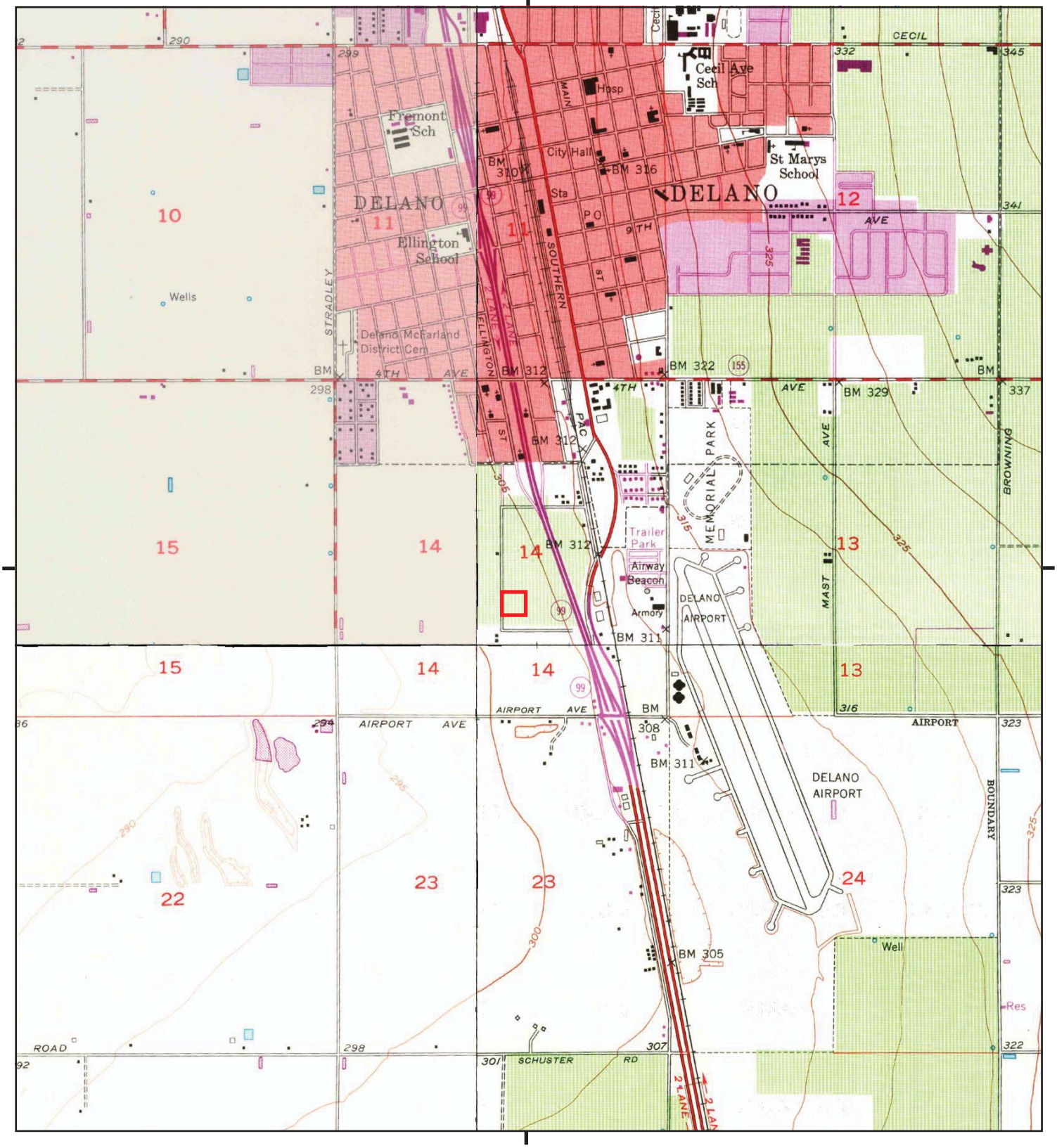
TP, Delano East, 1953, 7.5-minute
SE, Mc Farland, 1954, 7.5-minute
SW, Pond, 1953, 7.5-minute
NW, Delano West, 1954, 7.5-minute

SITE NAME: Former Agricultural Property
ADDRESS: 1692 Dover Pkwy
Delano, CA 93215
CLIENT: Avocet Environmental, Inc.

N

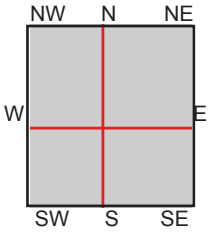
Historical Topo Map

1969



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5



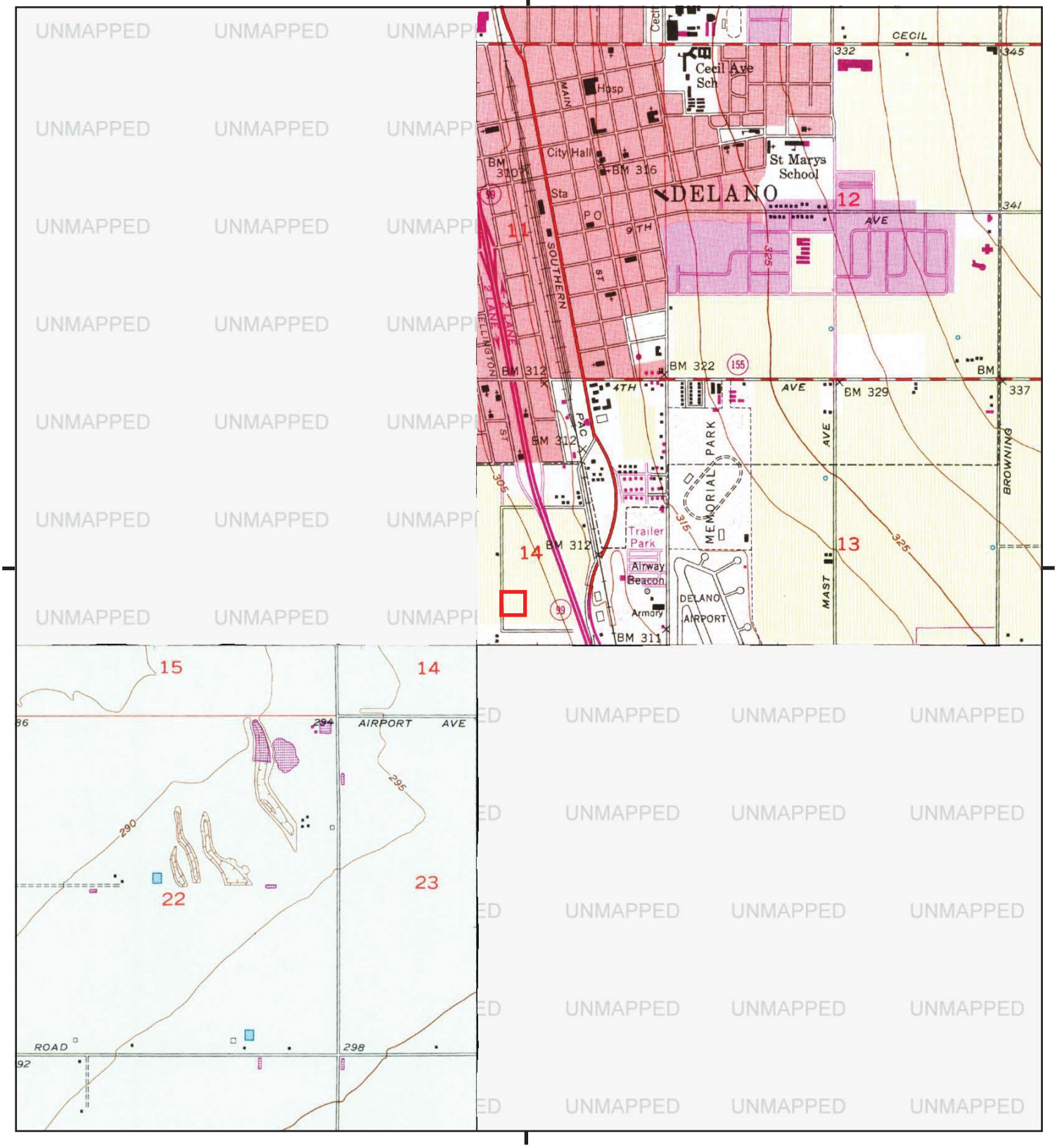
TP, Delano East, 1969, 7.5-minute
SE, Mc Farland, 1969, 7.5-minute
SW, Pond, 1969, 7.5-minute
NW, Delano West, 1969, 7.5-minute

SITE NAME: Former Agricultural Property
ADDRESS: 1692 Dover Pkwy
Delano, CA 93215
CLIENT: Avocet Environmental, Inc.

N

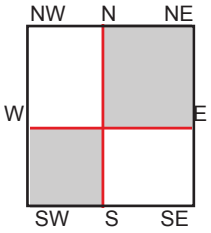
Historical Topo Map

1973



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5



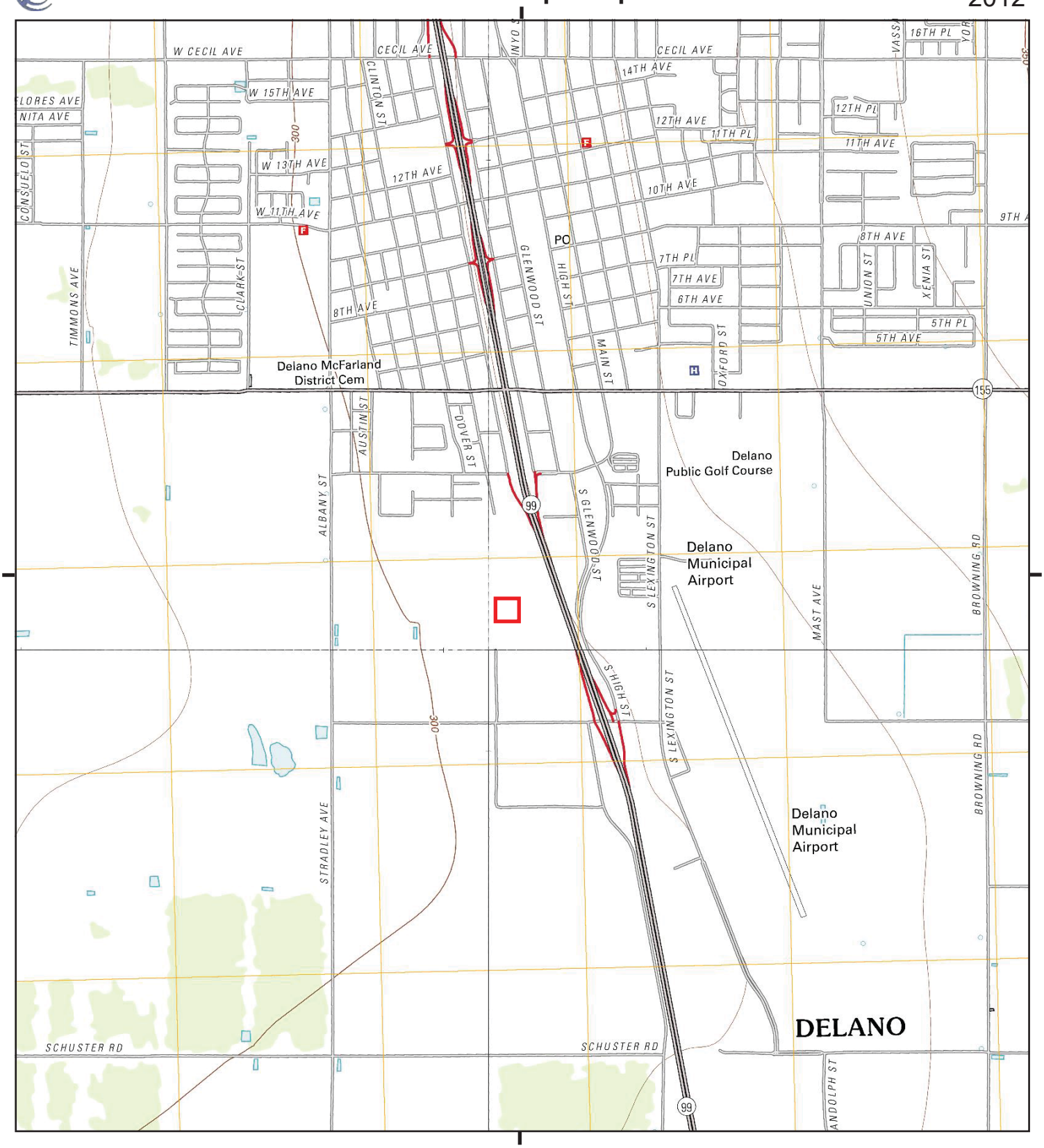
TP, Delano East, 1973, 7.5-minute
SW, Pond, 1973, 7.5-minute

SITE NAME: Former Agricultural Property
ADDRESS: 1692 Dover Pkwy
Delano, CA 93215
CLIENT: Avocet Environmental, Inc.

N

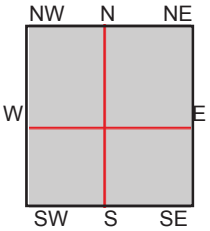
Historical Topo Map

2012



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5



TP, Delano East, 2012, 7.5-minute
SE, McFarland, 2012, 7.5-minute
SW, Pond, 2012, 7.5-minute
NW, Delano West, 2012, 7.5-minute

SITE NAME: Former Agricultural Property
ADDRESS: 1692 Dover Pkwy
Delano, CA 93215
CLIENT: Avocet Environmental, Inc.

N

Appendix B

EDR Historical Aerial Photo Decade Package

AVOCET
ENVIRONMENTAL, INC.

Former Agricultural Property

1692 Dover Pkwy

Delano, CA 93215

Inquiry Number: 5027362.9

August 23, 2017

The EDR Aerial Photo Decade Package

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

EDR Aerial Photo Decade Package

08/23/17

Site Name:

Former Agricultural Property
1692 Dover Pkwy
Delano, CA 93215
EDR Inquiry # 5027362.9

Client Name:

Avocet Environmental, Inc.
1 Technology Drive Suite C515
Irvine, CA 92618-0000
Contact: Scott Ruud

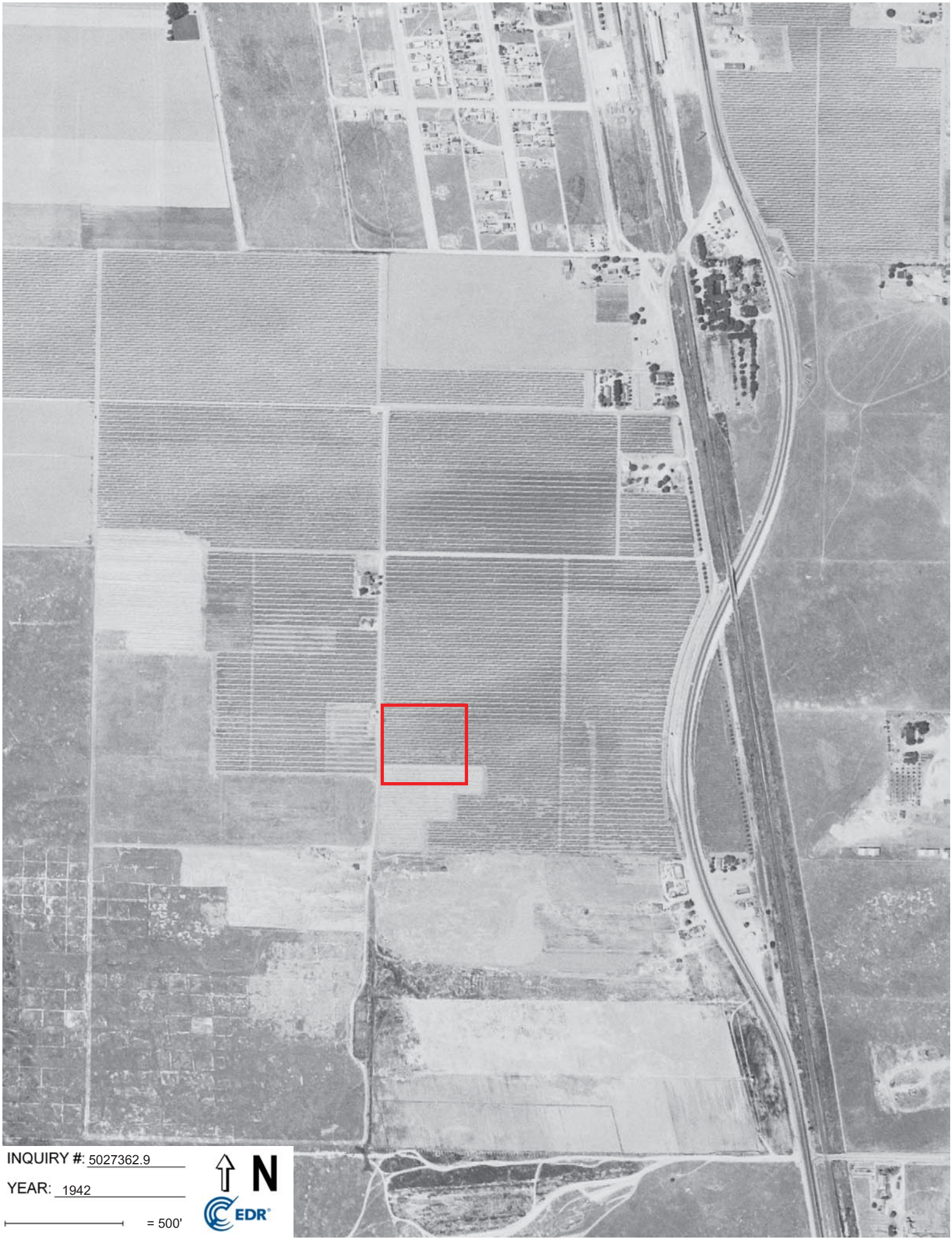
Environmental Data Resources, Inc. (EDR) Aerial Photo Decade Package is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's professional researchers provide digitally reproduced historical aerial photographs, and when available, provide one photo per decade.

Search Results:

Year	Scale	Details	Source
1937	1"=500'	Flight Date: August 24, 1937	USDA
1942	1"=500'	Flight Date: May 22, 1942	USDA
1956	1"=500'	Flight Date: May 18, 1956	USDA
1958	1"=500'	Flight Date: March 05, 1958	USDA
1969	1"=500'	Flight Date: January 01, 1969	USGS
1973	1"=500'	Flight Date: May 01, 1973	USDA
1984	1"=500'	Flight Date: September 01, 1984	USGS
1994	1"=500'	Acquisition Date: September 04, 1994	USGS/DOQQ
2005	1"=500'	Flight Year: 2005	USDA/NAIP
2006	1"=500'	Flight Year: 2006	USDA/NAIP
2009	1"=500'	Flight Year: 2009	USDA/NAIP
2010	1"=500'	Flight Year: 2010	USDA/NAIP
2012	1"=500'	Flight Year: 2012	USDA/NAIP

When delivered electronically by EDR, the aerial photo images included with this report are for ONE TIME USE ONLY. Further reproduction of these aerial photo images is prohibited without permission from EDR. For more information contact your EDR Account Executive.


INQUIRY #: 5027362.9
YEAR: 1937
= 500'
N
EDR



INQUIRY #: 5027362.9

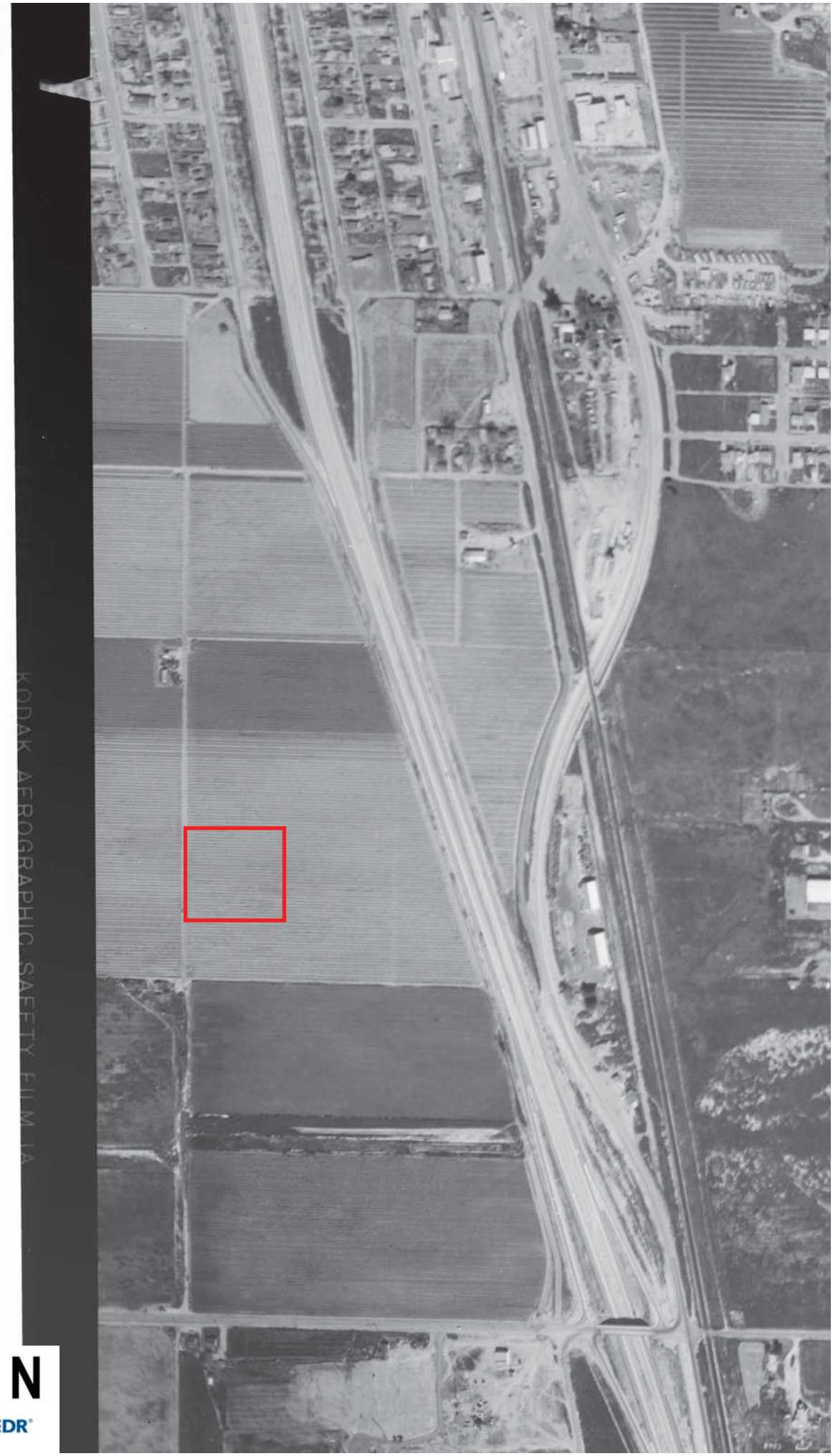
YEAR: 1942

= 500'

N

EDR


INQUIRY #: 5027362.9
YEAR: 1956
= 500'
N
EDR



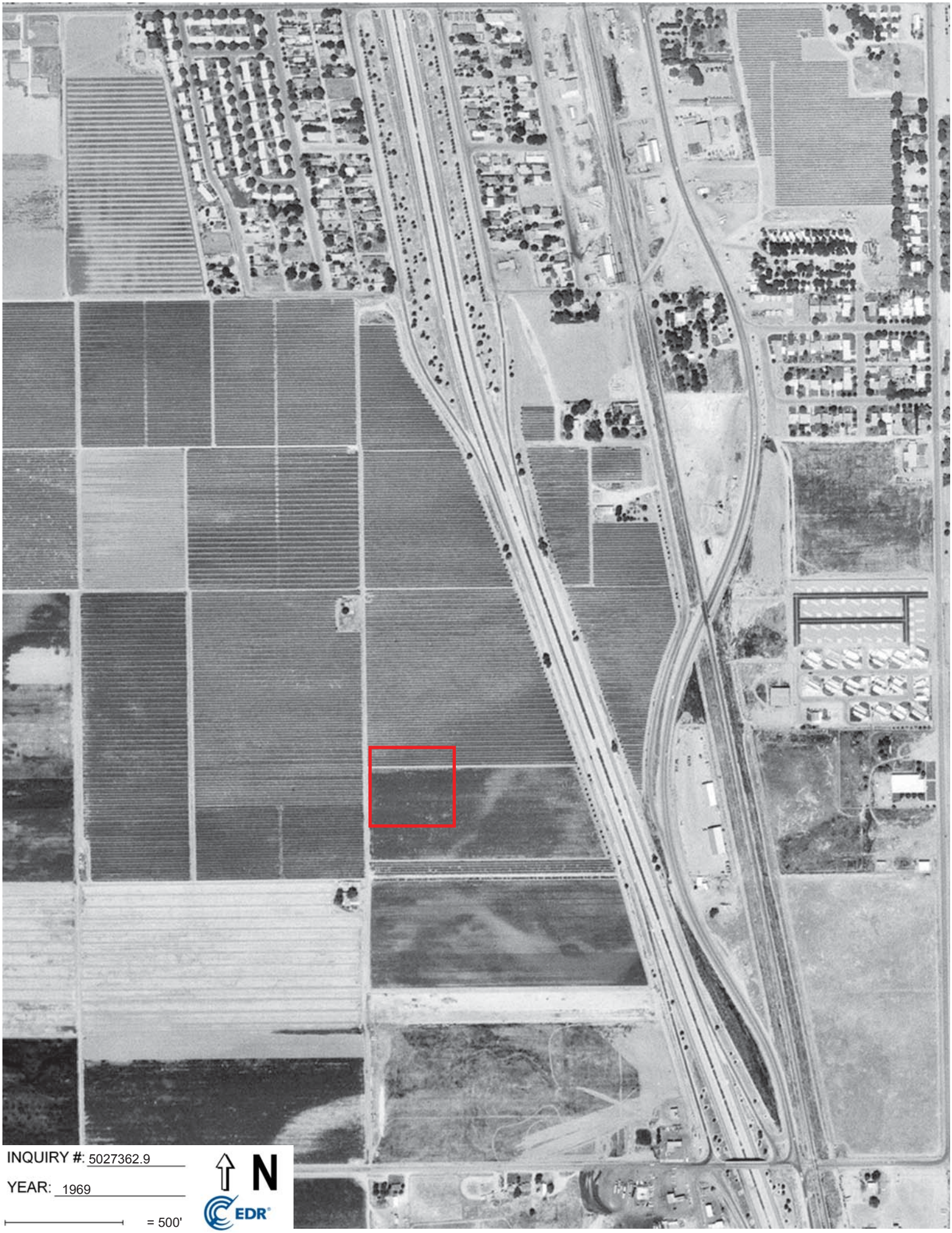
INQUIRY #: 5027362.9

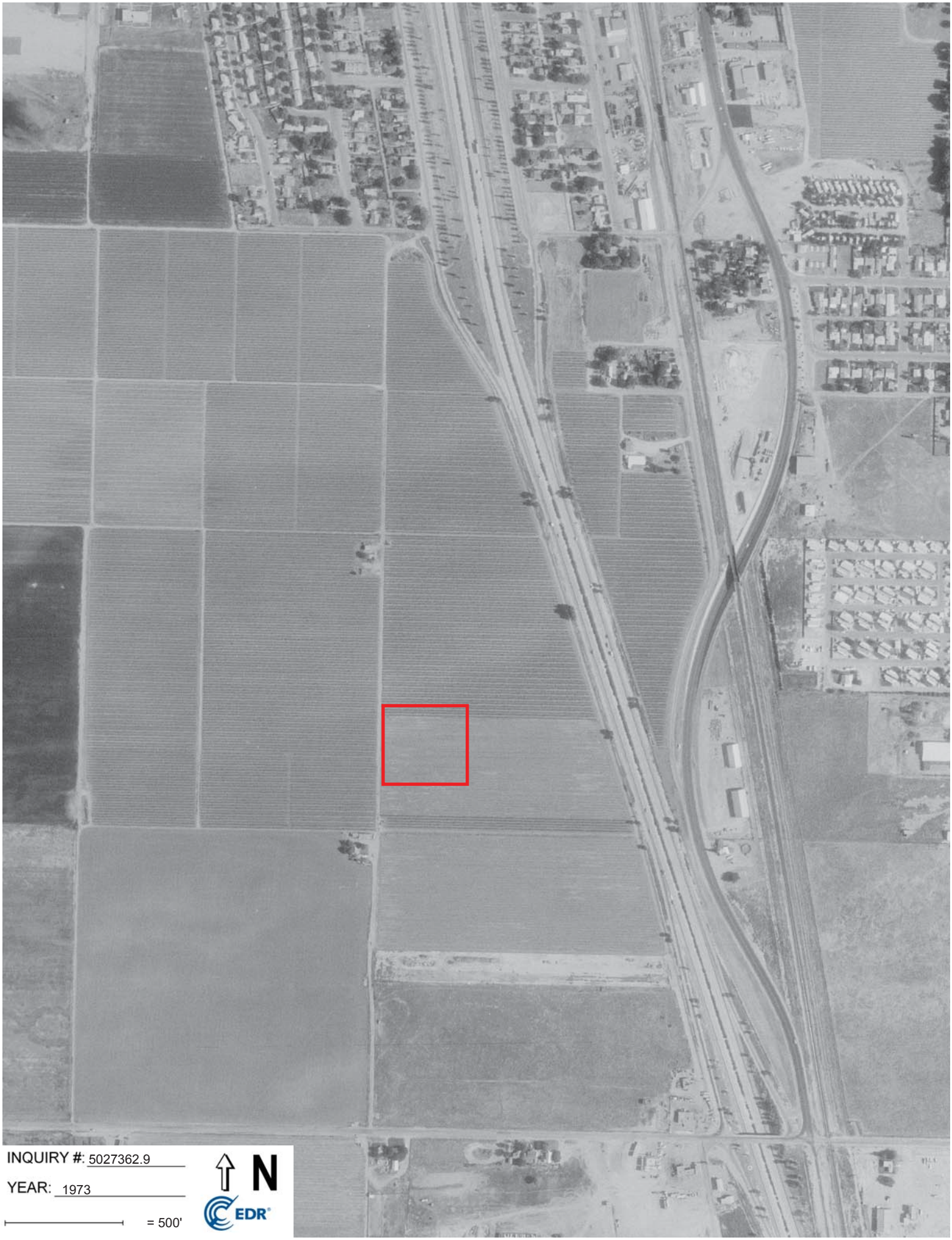
YEAR: 1958

= 500'

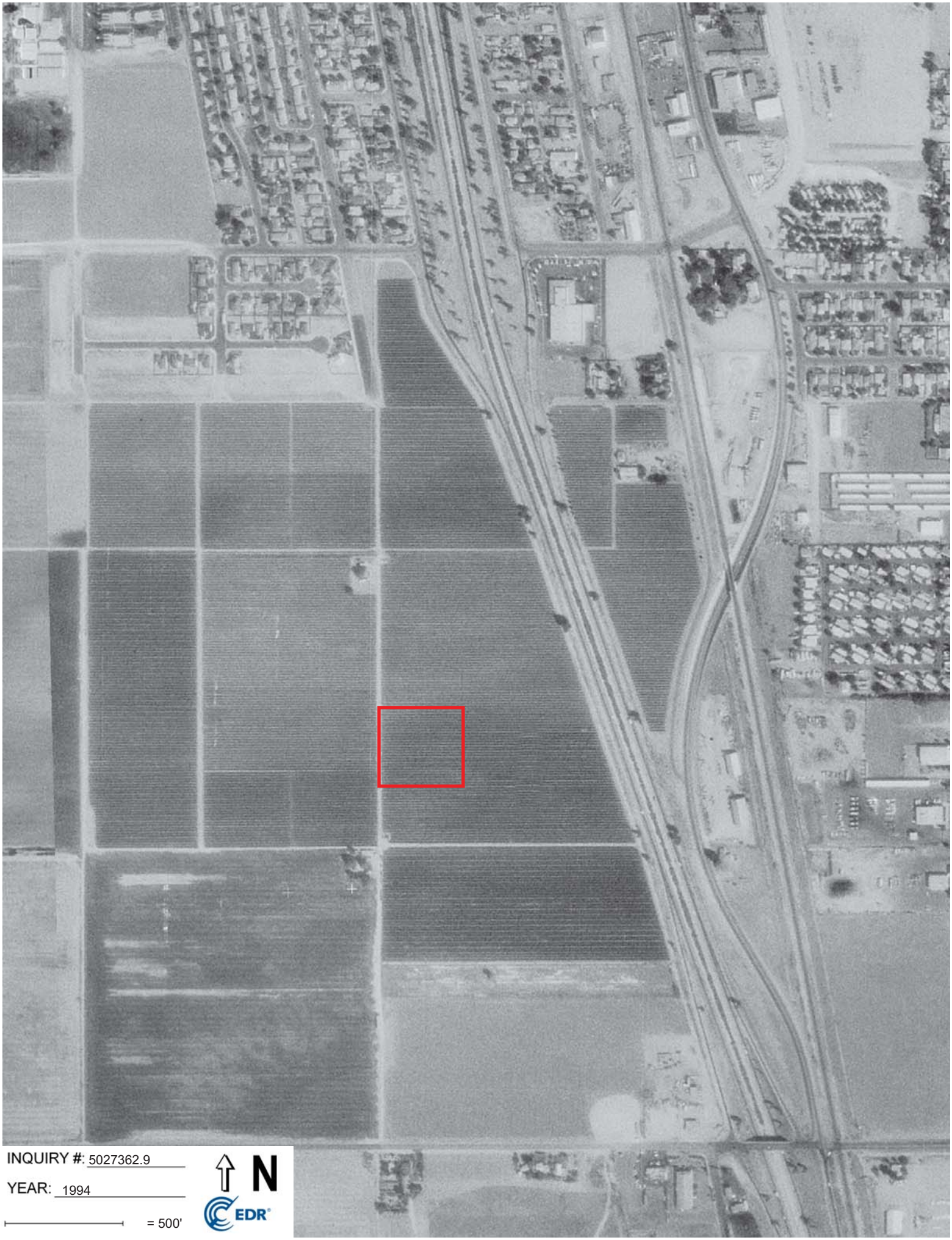
N

EDR


INQUIRY #: 5027362.9
YEAR: 1969
= 500'
N
EDR


INQUIRY #: 5027362.9
YEAR: 1973
= 500'
N
EDR


INQUIRY #: 5027362.9
YEAR: 1984
= 500'
N
EDR


INQUIRY #: 5027362.9
YEAR: 1994
= 500'
N
EDR

INQUIRY #: 5027362.9

YEAR: 2005

= 500'

N

EDR


INQUIRY #: 5027362.9
YEAR: 2006
= 500'
N
EDR


INQUIRY #: 5027362.9
YEAR: 2009
= 500'
N
EDR

INQUIRY #: 5027362.9

YEAR: 2010

= 500'

N

EDR

INQUIRY #: 5027362.9

YEAR: 2012

= 500'

N

EDR

Appendix C

Certified Sanborn® Map Report

AVOCET
ENVIRONMENTAL, INC.

Former Agricultural Property

1692 Dover Pkwy

Delano, CA 93215

Inquiry Number: 5027362.3

August 18, 2017

Certified Sanborn® Map Report

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

Certified Sanborn® Map Report

08/18/17

Site Name:	Client Name:
Former Agricultural Property	Avocet Environmental, Inc.
1692 Dover Pkwy	1 Technology Drive Suite C515
Delano, CA 93215	Irvine, CA 92618-0000
EDR Inquiry # 5027362.3	Contact: Scott Ruud

The Sanborn Library has been searched by EDR and maps covering the target property location as provided by Avocet Environmental, Inc. 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 # 9022-4D7E-B4C2

PO # 1531.001

Project Former Agricultural Property

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.

Sanborn® Library search results

Certification #: 9022-4D7E-B4C2

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™

Limited Permission To Make Copies

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Appendix D

The EDR-City Directory Image Report

AVOCET
ENVIRONMENTAL, INC.

Former Agricultural Property
1692 Dover Pkwy
Delano, CA 93215

Inquiry Number: 5027362.5
August 22, 2017

The EDR-City Directory Image Report

Environmental Data Resources Inc

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.

EXECUTIVE SUMMARY

DESCRIPTION

Environmental Data Resources, Inc.'s (EDR) City Directory Report 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 Report includes a search of available city directory data at 5 year intervals.

RESEARCH SUMMARY

The following research sources were consulted in the preparation of this report. A check mark indicates where information was identified in the source and provided in this report.

Year	*Target Street*	*Cross Street*	*Source*
2013	☐	☑	Cole Information Services
2008	☐	☑	Cole Information Services
2003	☐	☑	Cole Information Services
1999	☐	☑	Cole Information Services
1995	☐	☑	Cole Information Services
1992	☐	☑	Cole Information Services
1986	☐	☑	Polk's City Directory
1981	☐	☑	Polk's City Directory
1976	☐	☑	Polk's City Directory
1971	☐	☑	Polk's City Directory
1967	☐	☑	Polk's City Directory
1963	☐	☑	Polk's City Directory
1958	☐	☑	Polk's City Directory

RECORD SOURCES

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FINDINGS

TARGET PROPERTY STREET

1692 Dover Pkwy
Delano, CA 93215

Year	CD Image	Source	
DOVER PKWY			
2013	-	Cole Information Services	Street not listed in Source
2008	-	Cole Information Services	Street not listed in Source
2003	-	Cole Information Services	Street not listed in Source
1999	-	Cole Information Services	Street not listed in Source
1995	-	Cole Information Services	Street not listed in Source
1992	-	Cole Information Services	Street not listed in Source
1986	-	Polk's City Directory	Street not listed in Source
1981	-	Polk's City Directory	Street not listed in Source
1976	-	Polk's City Directory	Street not listed in Source
1971	-	Polk's City Directory	Street not listed in Source
1967	-	Polk's City Directory	Street not listed in Source
1963	-	Polk's City Directory	Street not listed in Source
1958	-	Polk's City Directory	Street not listed in Source

FINDINGS

CROSS STREETS

Year	*CD Image*	*Source*

DOVER PL

2013	pg. A2	Cole Information Services
2008	pg. A3	Cole Information Services
2003	pg. A5	Cole Information Services
1999	pg. A6	Cole Information Services
1995	pg. A8	Cole Information Services
1992	pg. A9	Cole Information Services
1986	pg. A11	Polk's City Directory
1986	pg. A12	Polk's City Directory
1981	pg. A13	Polk's City Directory
1981	pg. A14	Polk's City Directory
1976	pg. A15	Polk's City Directory
1976	pg. A16	Polk's City Directory
1971	pg. A17	Polk's City Directory
1971	pg. A18	Polk's City Directory
1967	pg. A19	Polk's City Directory
1967	pg. A20	Polk's City Directory
1963	pg. A21	Polk's City Directory
1963	pg. A22	Polk's City Directory
1958	pg. A23	Polk's City Directory

City Directory Images

Target Street	Cross Street	Source
-	✓	Cole Information Services

DOVER PL 2013

101	MANUEL MENDEZ
102	FRANKLIN PICKERING
106	RAFAEL SANCHEZ
109	ANGELICA SANCHEZ
	DAVID ORTIZ
	FERNANDO RUIZ
	MYRNA SAHAGUN
112	MIKE MONTIEL
114	RICHARD MIRANDA
115	ARNULFO HERRERA
	CLAUDIA NUNEZ
	TRANSITO HERNANDEZ
116	ELISEO MIRANDA
119	RUTHI JIMENEZ
121	RAFAEL ALVAREZ
122	L RUIZ
	OCCUPANT UNKNOWN
127	JUAN SILVESTRE
	MIGUEL RAMOS
132	DUENAS JOAQUIN
134	DANIEL MADRIAGA
140	RUDY SANDOVAL
144	GABRIELA BLANCO
145	TONYA GIVINS
146	OSCAR RODRIGUEZ
147	JESSICA ESPINOZA
149	OCCUPANT UNKNOWN
151	OCCUPANT UNKNOWN
301	A RAMOS
302	ESTHER MIRAMONTES
303	HERMINIA CAMACHO
305	ARASELI RODRIGUEZ
307	LILIAN URIOSTE
309	ROGER OSEGUERA
310	ANTONIO PIMENTEL
311	MARIO GUZMAN
312	JOSE ARIAS
314	GLADYS HERRERA
	JOSE GUTIERREZ
315	CELINA SERVIN
318	BEATRICE DELVALLE
324	ADAM NAVA
326	STELLA AVILA
327	HOUSING AUTHORITY
328	AMBER FRANCO
330	F MONTALVO
336	PEDRO LEDESMA
338	ALFREDO MIRANDA
342	RAMON VILLA
401	MARIA LARRANAGA

Target Street	Cross Street	Source
-	✓	Cole Information Services

DOVER PL 2008

101	MANUEL MENDEZ
102	A PICKERING
105	VERONICA HERNANDEZ
	VIRGINIA REYES
106	OCCUPANT UNKNOWN
109	JUAN ORTIZ
	LUIS SANDOVAL
111	PRISCILLA BRAVO
112	MIKE MONTIEL
114	RICHARD MIRANDA
115	TRANSITO HERNANDEZ
116	ANNA LANDEROS
119	RUTHI JIMENEZ
121	ALFRED WESIR
122	JESUS AVILA
	MARCIAL GALVAN
	OCCUPANT UNKNOWN
	TERESA NUNEZ
127	MIGUEL RAMOS
128	OCCUPANT UNKNOWN
132	DEBRA BARNES
134	DANIEL MADRIAGA
144	LETICIA MARTINEZ
145	JOSE JIMENEZ
146	OSCAR RODRIGUEZ
147	LETICIA RIVERA
149	MARIA QUINTERO
151	OCCUPANT UNKNOWN
301	YOLANDA FERNANDEZ
302	ESTHER MIRAMONTES
303	ERICKA CAMACHO
305	OCCUPANT UNKNOWN
307	LILIAN URIOSTE
309	MARIA MAGANA
310	ANTONIO PIMENTEL
311	OCCUPANT UNKNOWN
312	JOSE ARIAS
313	OCCUPANT UNKNOWN
314	BRENDA CABRERA
	JOSE GUTIERREZ
315	JANET GUZMAN
318	JOSE DELVALLE
324	ADAM NAVA
	BEAMA ENTERPRISES
326	STELLA AVILA
327	HOUSING AUTHORITY OF THE COUNTY OF K
328	JOSE ARREDONDO
330	ALEX MONTALVO
334	KENIA VILLAREAL
336	PEDRO LEDESMA

Target Street	Cross Street	Source
-	✓	Cole Information Services

DOVER PL 2008 (Cont'd)

338	ALFREDO MIRANDA
342	RAMON VILLA
401	FERNANDO CERVANTES

Target Street	Cross Street	Source
-	✓	Cole Information Services

DOVER PL 2003

101	MANUEL MENDEZ
102	A PICKERING
105	G SAMANO
106	JOSE RAMIREZ
109	JUAN ORTIZ
112	MIKE MONTIEL
114	RICHARD MIRANDA
115	CLAUDIA NUNEZ
	RAFAEL BERBER
116	ANTONIO BARAJAS
119	BASILIO CANTUTAY
121	OCCUPANT UNKNOWN
122	OCCUPANT UNKNOWN
127	ESTHER SALINAS
128	FROYLAN CANTU
132	STELLA BAEZA
134	DANIEL MADRIAGA
144	CELSO MEDINA
145	OCCUPANT UNKNOWN
146	G CORNELIO CATALINA
147	OCCUPANT UNKNOWN
149	MARIA QUINTERO
151	OCCUPANT UNKNOWN
301	ANNA ORTIZ
303	MANUEL CASTILLO
305	DOROTHY JOHNSON
307	LILIAN URIOSTE
309	CANDELARIO AMAYA
310	RAMON HERRERA
311	JEFFREY MARURE
312	FRANCISCO GOMEZ
313	MARI CAMACHO
314	ANDRES NAVA
	FILIBERTO CORTEZ
315	JANET GUZMAN
318	JESUS CASARES
324	JOSE JIMENEZ
326	STELLA AVILA
327	HSNG ATHRTY OF THE CNTY OF KER
328	RAMON MARTINEZ
330	ALEX MONTALVO
334	ANGIE JIMENEZ
336	PEDRO LEDEZMA
338	ALFREDO MIRANDA
342	ROSA CARRILLO
405	LUIS HERRERA

Target Street	Cross Street	Source
-	✓	Cole Information Services

DOVER PL 1999

101	MANUEL MENDEZ
102	A PICKERING
105	LUZ GUTIERREZ
	NORBERTO MUNOZ
106	JOSE RAMIREZ
109	LUIS SANDOVAL
111	PRISCILLA BRAVO
112	MIKE MONTIEL
115	CLAUDIA NUNEZ
	TRANSITO HERNANDEZ
116	ESTELA MIRANDA
119	RUTHI JIMENEZ
121	ALFRED WESIR
122	OCCUPANT UNKNOWN
127	FEDERICO FLORES
	MIGUEL RAMOS
128	OCCUPANT UNKNOWN
132	ELIA MONTOYA
134	DAN MADRIAGA
140	OCCUPANT UNKNOWN
	RONNIE SANDOVAL
145	JOSE JIMENEZ
	OCCUPANT UNKNOWN
146	OCCUPANT UNKNOWN
147	LETICIA RIVERA
	OCCUPANT UNKNOWN
149	OCCUPANT UNKNOWN
301	YOLANDA FERNANDEZ
302	ESTHER MIRAMONTES
305	CORINA SALAZAR
307	LILIAN URIOSTE
	OCCUPANT UNKNOWN
309	OCCUPANT UNKNOWN
310	ANTONIO PIMENTEL
312	JOSE ARIAS
313	OCCUPANT UNKNOWN
314	CESAR DIAZ
	GLADYS HERRERA
315	JANET GUZMAN
318	JOSE DELVALLE
324	ADAM NAVA
	OCCUPANT UNKNOWN
326	STELLA AVILA
327	HOUSING AUTHORITY OF THE COUNTY OF KERN
328	OCCUPANT UNKNOWN
330	ALEX MONTALVO
	OCCUPANT UNKNOWN
334	KENIA VILLAREAL
	OCCUPANT UNKNOWN
336	OCCUPANT UNKNOWN

Target Street	Cross Street	Source
-	✓	Cole Information Services

DOVER PL 1999 (Cont'd)

336	PEDRO LEDESMA
338	ALFREDO MIRANDA
	OCCUPANT UNKNOWN
342	RAMON VILLA
401	FERNANDO CERVANTES

Target Street	Cross Street	Source
-	✓	Cole Information Services

DOVER PL 1995

101	MELENDEZ, ROXANA E
	MENDEZ, MANUEL
102	PICKERING, A C
105	OCCUPANT UNKNOWNN
106	OCCUPANT UNKNOWNN
112	MONTIEL, MIKE
116	MIRANDA, ALEX M
119	CANTUTAY, B L
121	DAVILA, DEANA
122	GARCIA, ROY
127	TORRES, JOEL
132	BAEZA, G
134	MADRIAGA, DAN
140	SANDOVAL, ERLINDA
144	MEDINA, CELSO
145	OCCUPANT UNKNOWNN
146	OCCUPANT UNKNOWNN
147	CASTRO, C
151	OCCUPANT UNKNOWNN
310	OCCUPANT UNKNOWNN
312	ALMANZA, MARIA M
324	OCCUPANT UNKNOWNN
326	AVILA, ESTHER N
328	RODRIQUEZ, SAN
330	OCCUPANT UNKNOWNN
334	CARRILLO, F G
336	LEDEZMA, PEDRO
342	ESCALANTE, JOSE L
405	HERRERA, LUIS

Target Street	Cross Street	Source
-	✓	Cole Information Services

DOVER PL 1992

101	MENDEZ, MANUEL
122	SERRANO, CARLOS
127	GONZALEZ, JUAN A
134	MADRIAGA, DAN
144	MEDINA, ARMANDO
146	LOPEZ, CARLOTA M
314	ORTIZ, M
318	MONTALBO, A F
327	HOUSING AUTHORITY
405	CANDELARIO, TERESA
	HERRERA, RAMON M
412	RIVERA, CECILIA
416	ESPINOZA, RAFAEL
419	PIMENTEL, M
421	RIVERA, ALBERTO
429	SERVIN, A
432	COLLINS, DAISY
436	LARA, A
601	SALAZAR, S
618	SANTIAGO, WILSON
702	REYES, JULIAN
706	CASTILLO, A
717	PENA, MARY
721	MARIN, RAMON
	MONTIEL, G
722	CASAREZ, OTILIA
725	AGUINAGA, PETRA
726	GARCIA, PABLO
732	ESPITIA, LUZ
814	MACIAS, JIMMY
817	GUTIERREZ, ERNEST
825	ELIZARRARAS, MARIO
1012	JOHNNYS BARBER SLN
1027	BANUELOS, TONY
	SALGADO EMMA
	SALGADO, EMMA
1029	RAVELOS FASHIONS
1107	FOOD CENTER
1110	JIMENEZ MARKET
1122	GARZELLI, LEO F
1413	ARGEL, H
1421	LUJAN, CRUZ
1424	ARROYO, F L
1429	JIMENEZ, EDWARD
1505	GABUTIRO, V G
1509	LIBADISOS, M C
1510	MARTINEZ, FRANK
1513	RUIZ, ELBERT
1517	DELRIO, JOHN
1518	DEJILLO, TIM

Target Street	Cross Street	Source
-	✓	Cole Information Services

DOVER PL 1992 (Cont'd)

1521 ORTIZ, MARCELO E
1525 SERDA, MANUEL

Target Street	Cross Street	Source
-	✓	Polk's City Directory

DOVER PL 1986

DOVER PL (DELANO)—FROM 1ST AV NORTH 2 WEST OF DELANO FREEWAY

ZIP CODE 93215
101 Mendez Manuel ◎ 725-8371
102 Pickering Frank 725-2495
105★Landin Rigoberto
106 No Return
112 Montiel Mike 725-7384
116 Miranda Eliseo R trucking ◎ 725-6778
119 No Return
121★Ames Richard
122 Gonzalez Nichols B 725-3197
128 Cantu Froylan ◎
132 Baeza Francisco 725-9387
134 Madriaga Ciriaco P 725-6650
DOVER DR BEGINS
140 Sandoval Rudy ◎ 725-2071
144 Miranda Concepcion ◎
145 Gonzales Rafael 725-1338
146 Lopez Augistine ◎ 725-8130
147 Vacant
149★Hall Meluina 725-8883
151 Medreno Vicente 725-5912
3D AV INTERSECTS
301 No Return
302 Vacant
303 Vacant
305★Mareles Orlando
307 Markham Beulah M 725-3953
309★Nava Melesio
310 Terrones Alfred
311 Mendoza Alex ◎
313★Ayon Mary 725-4817
314 No Return
314a Vacant
314b Vacant
315★Triangle Josie
318★Peralta Flora ◎ 725-7149

Target Street	Cross Street	Source
-	✓	Polk's City Directory

DOVER PL 1986

DOVER PL—Contd

324★Madrihen Alice 725-4959
326★Avila J
327 Housing Authority Of Kern County 725-9676
328 Picon Florinda
330★Escobedo Jose L 725-0746
334★Mendez Lucinda

3D PL INTERSECTS

336★Ledazam Pat
338 Salazar Emilio ◎ 725-3783
342 Escalante Jose L ◎ 725-3529

9

GARCES HWY INTERSECTS

401★Cevates Manuel

Target Street	Cross Street	Source
-	✓	Polk's City Directory

DOVER PL 1981

8

DOVER PL (DELANO)—FROM 1ST AV NORTH 2 WEST OF DELANO FREEWAY

ZIP CODE 93215
102 Vacant
105 Valencia Jose 725-4661

Target Street	Cross Street	Source
-	✓	Polk's City Directory

DOVER PL 1981

106 Morrow Don L 725-5488
112 Montiel Mike
116 Miranda Eliseo R trucking ◎ 725-1966
119 No Return
121 Vacant
128 Cantu Froylan ◎ 725-0810
132 Baeza Francisco
134 Madriaga Ciriaco P 725-8440
DOVER DR BEGINS
140 Sandoval Rudy ◎
144 Miranda Vincent R ◎
145★Correa De Guia M 725-4514
146 Lopez Charlotte Mrs ◎ 725-8130
147 Mellena Irene Mrs 725-9748
149 Flores Miguel 725-5348
151 Quintana Manuel F 725-2907
3D AV INTERSECTS
301 Sanchez Pedro
302 Apostolic Assembly Of The Faith In Christ Jesus 725-9416
302½ Vacant
303 Regalado Alfredo
305 Garza Lamberto 725-8407
307 Markham Beulah M 725-3953
309 Torres Leonard 725-6547
310 Terronez Alfred O
311 Mendoza Alex
313 Vacant
314 Vacant
314a Perez Roberto
314b Moreno Emiliano
315 Gonzales Ruben
318★Medina Lupe C 725-3097
324★Azua Andres ◎ 725-5502
326★Avila Juan 725-9348
327 Housing Authority Of Kern County 725-9676
328★Picon Florinda 725-3280
330 Cruz Manuel ◎ 725-3192
334 Barrios Maria Mrs ◎ 725-9770
3D PL INTERSECTS
336 Vacant
338 Salazar Emilio ◎ 725-3783
342 Escalante Estefana Mrs ◎ 725-3529

Target Street	Cross Street	Source
-	✓	Polk's City Directory

DOVER PL 1976

DOVER PL (DELANO)—FROM 1ST AV NORTH 2 WEST OF DELANO FREEWAY

ZIP CODE 93215
102 Pickering A C ◎ 725-1709
105 Nunez Oriola 725-9078
106★Trigo Domingo 725-4142
112★Montiel Mike
116 Miranda Eliseo R trucking ◎ 725-1966
119 Cantutay Basilio ◎ 725-8145
121 No Return
128 Cantu Froylan ◎ 725-0810
132 Baeza Francisco 725-3040
134 Madriaga Ciriaco P 725-8440
137 Vacant
DOVER DR BEGINS
140 Sandoval Rudy ◎ 725-2826
144 Miranda Vincent R ◎ 725-2025
145★Miramontes Armparo 725-4924
146 Lopez Augustine ◎ 725-8130
147 Mellena Danl 725-9748
149★Flores Mike
151 Quintana Manuel 725-2907
3D AV INTERSECTS
301 Chapa Sinplicio

Target Street	Cross Street	Source
-	✓	Polk's City Directory

DOVER PL 1976

DOVER PL—Contd

302 Apostolic Assembly Of The Faith In Christ Jesus 725-9416
302½ Vacant
303 Regalado Alfredo 725-0817
305 Garza Lamberto 725-8407
307★Villalobos Juan 725-2357
309★Puente Linda 725-5688
310 Terronez Alfred O
311★Mendoza Alex
312★Rodriguez Gregoria 725-5781
313★Candolita Delia 725-1518
314 Arayo Reyna
314a★Turner Phil 725-8765
314b Nava Tony T
315★Mendoza Alex 725-0962
318 Vacant
324 Nava Adam ◎ 725-1195
326 Avila Juan 725-9348
327 Housing Authority Of Kern County 725-9676
328 No Return
330 Cruz Gerardo ◎ 725-3192
334 Barrios Maria Mrs ◎ 725-9770

3D PL INTERSECTS

336★Eledesma Pedro
338 Salazar Petra ◎ 725-3783
342 Escalante Stefana Mrs ◎ 725-3529

9

GARCES HWY INTERSECTS

401 Sedano Eulalia Mrs ◎

Target Street	Cross Street	Source
-	✓	Polk's City Directory

DOVER PL 1971

DOVER PL (DELANO)—FROM 1ST AV NORTH, 2 WEST OF DELANO FREEWAY

ZIP CODE 93215
102 Pickering A C ◎ 725-1709
105 Rodriquez Fidel ◎
106 Trigo Domingo ◎
112 Kemp James R 725-4285
116 Miranda Eliseo R trucking ◎ 725-1966
119 Cantutay Basilio ◎ 725-8145
121 Parker Tulis 725-2014
128 Cantu Froilan ◎ 725-0810
132 Baeza Francisco 725-3040
134 Madriaga Ciriaco P 725-8440
137 Beltran Bernard F
DOVER DR INTERSECTS
140 Sandoval Rudy ◎ 725-2826
144 Miranda Vincent R ◎ 725-3128
145 Padilla Jose
146 Lopez Augustine ◎ 725-8130
147 Mellena Danl 725-9748
149 Candillo Frances 725-3554
151 Alcantar Paul D
3D AV INTERSECTS
301 Medina Arth
302 Apostolic Assembly Of The Faith In Christ Jesus 725-9416
302½ Vacant
303 Garza Josephine Mrs 725-1389
305 Bravo Joseph C 725-1968
307 Villalobos Juan A 725-1539
309 Puente Arth 725-3340
310 Nava Fortino T ◎ 725-0782
311 Beltran Rafeal
312 De Leon Santanio
313 Oviacoro Raymond
314 Pipo Arnold
314a Ortiz Humberto 725-9005
314b Nava Tony T

Target Street	Cross Street	Source
-	✓	Polk's City Directory

DOVER PL 1971

315 Martinez Elva Mrs 725-3609
318 Vacant
324 Nava Ben P ◎ 725-9348
326 Avila Juan A
327 Housing Authority Of Kern County 725-9676
328 Martinez Ramon ◎ 725-2471
330 Cruz Gerardo ◎ 725-3192
334 Barrios Maria Mrs ◎ 725-9770
3D PL INTERSECTS
336 Regalado Alfredo
338 Salazar Emilio ◎ 725-3783
342 Escalante Stefana Mrs ◎ 725-3529

9

GARCES HWY INTERSECTS
401 Sedano Eulalia Mrs ◎ 725-3329
405 Apartments
A Molin Josepha
B Vacant
C Anzaldua Mary L Mrs
D Pimentel Aurelia Mrs
STREET CONTINUED
409 Pimental Fidel

Target Street	Cross Street	Source
-	✓	Polk's City Directory

DOVER PL 1967

8

DOVER — From 1st av north,
3 west of Delano Freeway
Zip Code 93215
101 Macias Maximidano
105 Duran Joe T © 725-0775
108 Azua Abr ©
109 Vacant
118 Hernandez Isabel Mrs
122 Vacant
123 Guajardo Baldormardo
725-3495

Target Street	Cross Street	Source
-	✓	Polk's City Directory

DOVER PL 1967

Dover—Contd
127 Jimenez Magdalena Mrs © 725-4311
131 Meltran Marcelino
133 Harris Jennie F Mrs 725-0718
135 Medina Joe M
136 Scott Melvin
137 Gomez Julio 725-1889
301 Hall Clyde
302 Hernanden Octavio 725-3130
304 No return
305 Addna Alex D 725-9711
306 Garza Luis F
307 Orzana John
308 Hernandez Javier G
310 Green Gladys Mrs
311 Espinosa Alf C
312 Marcus Rosales
313 Dominguez Louie
315 Markham John
316 Guillen Mariano 725-2916
317 Sanchez Cruz
318 Mesa Ramon 725-8632
319 Angulo Maria Mrs
321 No return
323 Kushing Eug
325 Quinones Neri

9

Garces hwy intersects
402 Cavazos Rodolfo © 725-2812
403 Vacant
407 Hughes Jestener Mrs 725-8165
408 Gabaldon Lupe © 725-9084
410 Ventura Vincent © 725-8747

Target Street	Cross Street	Source
-	✓	Polk's City Directory

DOVER PL 1963

DOVER — From 1st av north, 3 west of Delano Freeway

101 No return
105 No return
108 Azua Abr ⓪
109 No return
118 Hernandez Isabel Mrs
122 Baeza Francisco
123 No return
127 Jimenez Magdelena Mrs ⓪
4311
315 Markham John
316 Penera Alfonso
317 Sanchez Cruz
318 Rosales Marcos
319 Angulo Maria Mrs
321 Feliscian Chas C

Target Street	Cross Street	Source
-	✓	Polk's City Directory

DOVER PL 1963

323 Dominquez Louie
325 Hernandez Willie G

9

Garces hwy intersects
403 Virgie's Mkt gro 9954
407 Randle Lucy Mrs 3360
408 Gabaldon Lupe ⓞ 9084
410 Ventura Vincent ⓞ 8747

Target Street	Cross Street	Source
-	✓	Polk's City Directory

DOVER PL 1958

8

DOVER — From 1st av north, 3
west of Delano Freeway

101 Morales Julio C ◎ 3706
105 Duran Pete H ◎
109 Morina Cecilio
111 Trujillo Juan N
122 Laguna Apolinio ◎
123 Madriaga Ciriaco P ◎ 8440
127 Jimenez Valentine ◎ lab contr
4311
315 Markham John
316 Lopez Willie S
317 Sierra Reynaldo D
318 Caraveo Gilbert
319 Martinez Guillermo
321 Jacobs Sylvester
323 Sanchez Cruz
325 Singleterry David R

9

Garces hwy intersects

403 Gil's Mkt gro
407 Vacant
408 Gabaldon Lupe ◎
410 Ventura Vincent ◎ 8747

Appendix E

Site Photographs

AVOCET
ENVIRONMENTAL, INC.

E-1. Looking southeast at the southwest corner of the site as marked by lath and flagging. (9/5/2017).

E-2 Looking southeast at the wire fence that bisects the site. Home Depot and California Route 99 in the background (9/5/2017).

E-3 Looking northwest at the cleared southern portion of target property. The vehicles and utility poles are along Dover Parkway (9/5/2017).

E-4. Looking southwest at the northern portion of the site. The fence in the upper mid-ground is the wire fence that bisects the site. The vehicles are parked along Dover Parkway (9/5/2017).

Appendix F

The EDR Radius Map™ Report with GeoCheck®

AVOCET ENVIRONMENTAL, INC.

Former Agricultural Property
1692 Dover Parkway
Delano, CA 93215

Inquiry Number: 5034705.2s
August 28, 2017

The EDR Radius Map™ Report with GeoCheck®

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

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Overview Map	2
Detail Map	3
Map Findings Summary	4
Map Findings	8
Orphan Summary	19
Government Records Searched/Data Currency Tracking	GR-1

GEOCHECK ADDENDUM

Physical Setting Source Addendum	A-1
Physical Setting Source Summary	A-2
Physical Setting SSURGO Soil Map	A-5
Physical Setting Source Map	A-8
Physical Setting Source Map Findings	A-10
Physical Setting Source Records Searched	PSGR-1

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

EXECUTIVE SUMMARY

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

1692 DOVER PARKWAY
DELANO, CA 93215

COORDINATES

Latitude (North):	35.7517950 - 35˚ 45' 6.46''
Longitude (West):	119.2490260 - 119˚ 14' 56.49''
Universal Tranverse Mercator:	Zone 11
UTM X (Meters):	296645.9
UTM Y (Meters):	3958552.2
Elevation:	307 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map:	5639473 DELANO EAST, CA
Version Date:	2012
Southeast Map:	5639499 MCFARLAND, CA
Version Date:	2012
Southwest Map:	5639507 POND, CA
Version Date:	2012
Northwest Map:	5639072 DELANO WEST, CA
Version Date:	2012

AERIAL PHOTOGRAPHY IN THIS REPORT

Portions of Photo from:	20140618, 20140617
Source:	USDA

MAPPED SITES SUMMARY

Target Property Address:
1692 DOVER PARKWAY
DELANO, CA 93215

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
A1	THE ARTESIA COMPANIE	103 S HIGH	AST	Higher	1294, 0.245, ENE
A2	DELANO ROCK CO., INC	103 S HIGH ST	HIST UST	Higher	1294, 0.245, ENE
A3	DELANO ROCK CO, INC	103 S HIGH ST	UST	Higher	1294, 0.245, ENE
B4	CENTRAL CAL EQUIPMEN	1300 GARZOLI	LUST, HIST CORTESE	Higher	2616, 0.495, SSE
B5	PIONEER TRUCKSTOP	1000 GARZOLI	LUST, HIST CORTESE	Higher	2616, 0.495, SSE
6	CROP PRODUCTION SERV	930 WOOLOMES AVE	ENVIROSTOR, SLIC	Higher	2618, 0.496, SE
7	KERN COUNTY DUMP	SE OF XING OF STRADL	ENVIROSTOR	Lower	3042, 0.576, SW

EXECUTIVE SUMMARY

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 landfill and/or solid waste disposal site lists

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

State and tribal leaking storage tank lists

INDIAN LUST..... Leaking Underground Storage Tanks on Indian Land

State and tribal registered storage tank lists

FEMA UST..... Underground Storage Tank Listing
INDIAN UST..... Underground Storage Tanks on Indian Land

State and tribal voluntary cleanup sites

INDIAN VCP..... Voluntary Cleanup Priority Listing
VCP..... Voluntary Cleanup Program Properties

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
ODI..... Open Dump Inventory
DEBRIS REGION 9..... Torres Martinez Reservation Illegal Dump Site Locations
IHS OPEN DUMPS..... Open Dumps on Indian Land

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL..... Delisted National Clandestine Laboratory Register
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
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
SPILLS 90	SPILLS 90 data from FirstSearch

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
DOT OPS	Incident and Accident Data
CONSENT	Superfund (CERCLA) Consent Decrees
INDIAN RESERV	Indian Reservations
FUSRAP	Formerly Utilized Sites Remedial Action Program
UMTRA	Uranium Mill Tailings Sites
LEAD SMELTERS	Lead Smelter Sites
US AIRS	Aerometric Information Retrieval System Facility Subsystem

EXECUTIVE SUMMARY

US MINES	Mines Master Index File
ABANDONED MINES	Abandoned Mines
FINDS	Facility Index System/Facility Registry System
UXO	Unexploded Ordnance Sites
ECHO	Enforcement & Compliance History Information
DOCKET HWC	Hazardous Waste Compliance Docket Listing
FUELS PROGRAM	EPA Fuels Program Registered Listing
CA BOND EXP. PLAN	Bond Expenditure Plan
Cortese	"Cortese" Hazardous Waste & Substances Sites List
CUPA Listings	CUPA Resources List
DRYCLEANERS	Cleaner Facilities
EMI	Emissions Inventory Data
ENF	Enforcement Action Listing
Financial Assurance	Financial Assurance Information Listing
HAZNET	Facility and Manifest Data
ICE	ICE
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

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP	EDR Proprietary Manufactured Gas Plants
EDR Hist Auto	EDR Exclusive Historic Gas Stations
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.

EXECUTIVE SUMMARY

STANDARD ENVIRONMENTAL RECORDS

State- and tribal - equivalent CERCLIS

ENVIROSTOR: 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.

A review of the ENVIROSTOR list, as provided by EDR, and dated 07/31/2017 has revealed that there are 2 ENVIROSTOR sites within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
CROP PRODUCTION SERV Facility Id: 15070002 Status: Refer: Other Agency	***930 WOOLOMES AVE***	***SE 1/4 - 1/2 (0.496 mi.)***	***6***	***14***

Lower Elevation	Address	Direction / Distance	Map ID	Page
KERN COUNTY DUMP Facility Id: 15490017 Status: Refer: RWQCB	SE OF XING OF STRADL	SW 1/2 - 1 (0.576 mi.)	7	16

State and tribal leaking storage tank lists

LUST: Leaking Underground Storage Tank (LUST) Sites included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

A review of the LUST list, as provided by EDR, has revealed that there are 2 LUST sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
CENTRAL CAL EQUIPMEN Database: LUST REG 5, Date of Government Version: 07/01/2008 Database: LUST, Date of Government Version: 06/12/2017 Status: Completed - Case Closed Status: Case Closed Global Id: T0602900356	***1300 GARZOLI***	***SSE 1/4 - 1/2 (0.495 mi.)***	***B4***	***9***
PIONEER TRUCKSTOP Database: LUST REG 5, Date of Government Version: 07/01/2008 Database: LUST, Date of Government Version: 06/12/2017 Status: Completed - Case Closed Status: Case Closed	***1000 GARZOLI***	***SSE 1/4 - 1/2 (0.495 mi.)***	***B5***	***11***

Status: Preliminary site assessment workplan submitted
Global Id: T0602900207
Global Id: T0602906189

SLIC: Cleanup Program Sites (CPS; also known as Site Cleanups [SC] and formerly known as Spills, Leaks, Investigations, and Cleanups [SLIC] sites) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

A review of the SLIC list, as provided by EDR, has revealed that there is 1 SLIC site within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
CROP PRODUCTION SERV	***930 WOOLOMES AVE***	***SE 1/4 - 1/2 (0.496 mi.)***	***6***	***14***
Database: SLIC, Date of Government Version: 06/12/2017 Facility Status: Open - Remediation Global Id: SL185724257				

State and tribal registered storage tank lists

UST: The Underground Storage Tank database contains registered USTs. USTs are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA). The data come from the State Water Resources Control Board's Hazardous Substance Storage Container Database.

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

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
DELANO ROCK CO, INC	103 S HIGH ST	ENE 1/8 - 1/4 (0.245 mi.)	A3	9
Database: KERN CO. UST, Date of Government Version: 02/07/2017				

AST: A listing of aboveground storage tank petroleum storage tank locations.

A review of the AST list, as provided by EDR, and dated 07/06/2016 has revealed that there is 1 AST site within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
THE ARTESIA COMPANIE	103 S HIGH	ENE 1/8 - 1/4 (0.245 mi.)	A1	8

ADDITIONAL ENVIRONMENTAL RECORDS

Local Lists of Registered Storage Tanks

HIST UST: Historical UST Registered Database.

A review of the HIST UST list, as provided by EDR, and dated 10/15/1990 has revealed that there is 1

EXECUTIVE SUMMARY

HIST UST site within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
DELANO ROCK CO., INC Facility Id: 00000036018	103 S HIGH ST	ENE 1/8 - 1/4 (0.245 mi.)	A2	8

Other Ascertainable Records

HIST CORTESE: 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.

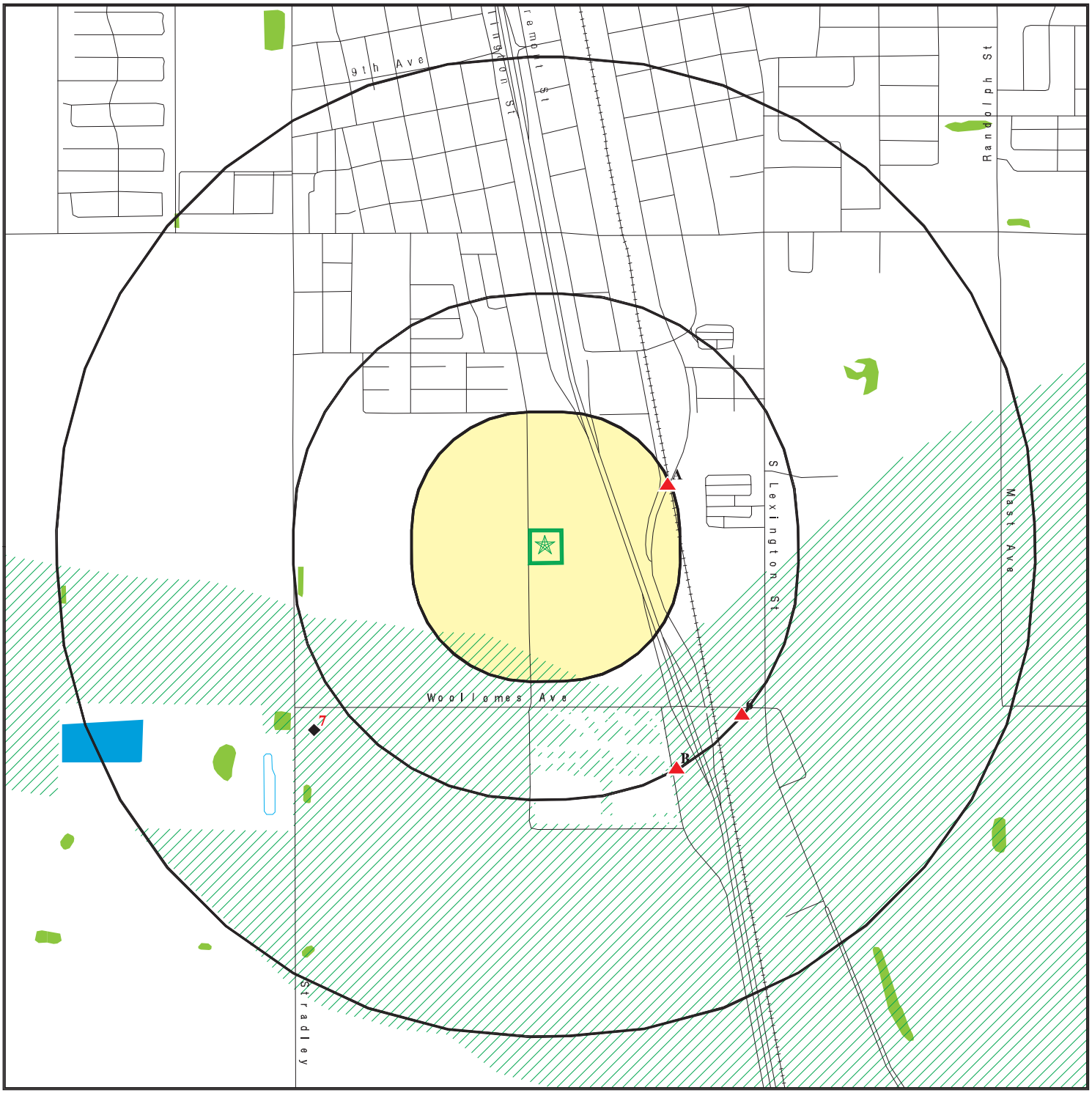
A review of the HIST CORTESE list, as provided by EDR, and dated 04/01/2001 has revealed that there are 2 HIST CORTESE sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
CENTRAL CAL EQUIPMEN Reg Id: 5T15000363	***1300 GARZOLI***	***SSE 1/4 - 1/2 (0.495 mi.)***	***B4***	***9***
PIONEER TRUCKSTOP Reg Id: 5T15000208	***1000 GARZOLI***	***SSE 1/4 - 1/2 (0.495 mi.)***	***B5***	***11***

EXECUTIVE SUMMARY

There were no unmapped sites in this report.

OVERVIEW MAP - 5034705.2S



Target Property

Sites at elevations higher than or equal to the target property

Sites at elevations lower than the target property

Manufactured Gas Plants

National Priority List Sites

Dept. Defense Sites

0 1/4 1/2 1 Miles

Indian Reservations BIA

100-year flood zone

500-year flood zone

National Wetland Inventory

State Wetlands

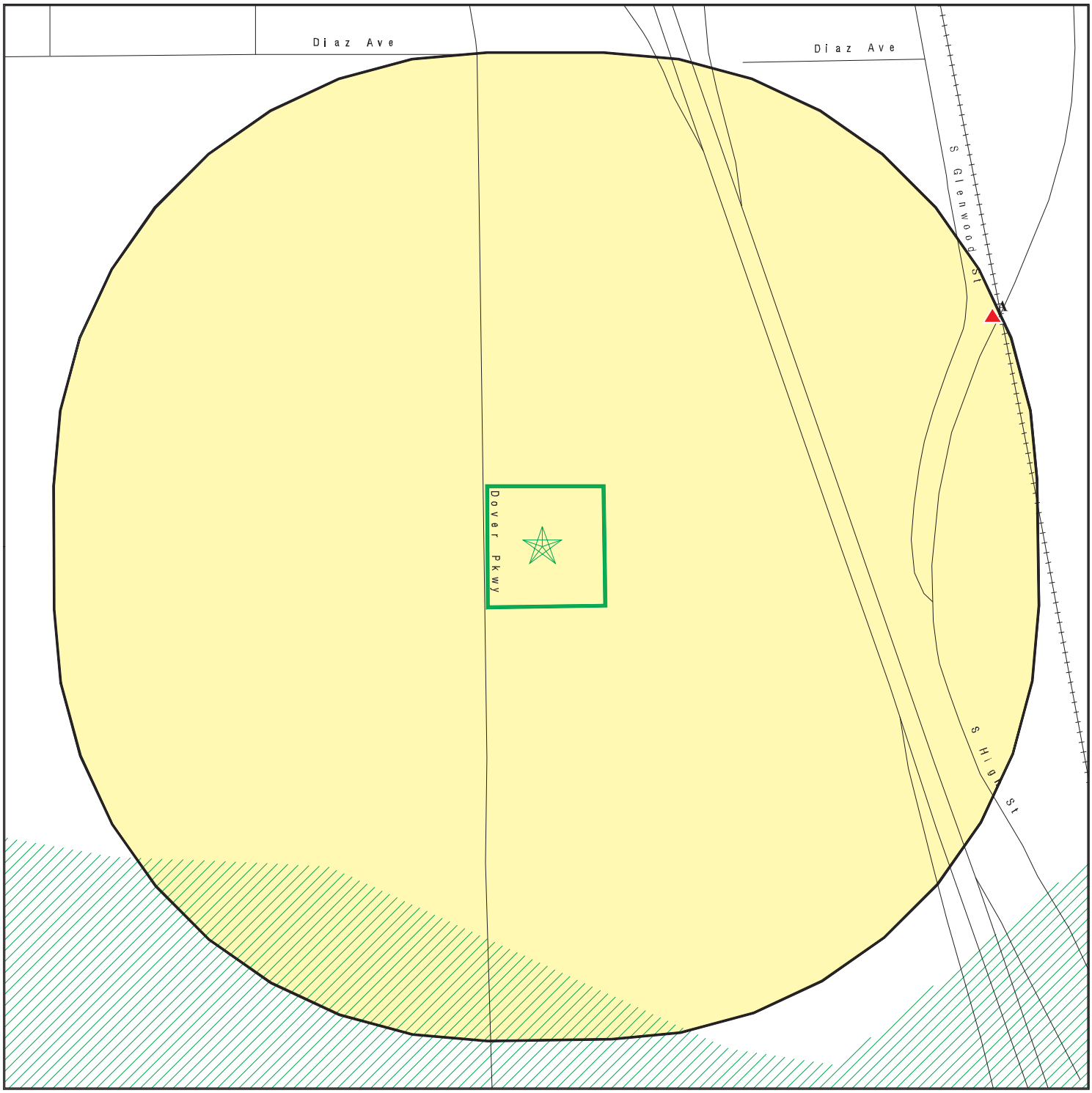
Upgradient Area

Areas of Concern

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Former Agricultural Property	CLIENT: Avocet Environmental, Inc.
ADDRESS: 1692 Dover Parkway Delano CA 93215	CONTACT: Scott Ruud INQUIRY #: 5034705.2s
LAT/LONG: 35.751795 / 119.249026	DATE: August 28, 2017 7:12 pm

DETAIL MAP - 5034705.2S



Target Property

Sites at elevations higher than or equal to the target property

Sites at elevations lower than the target property

Manufactured Gas Plants

Sensitive Receptors

National Priority List Sites

Dept. Defense Sites

0 1/16 1/8 1/4 Miles

Indian Reservations BIA

100-year flood zone

500-year flood zone

Areas of Concern

N

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Former Agricultural Property ADDRESS: 1692 Dover Parkway Delano CA 93215 LAT/LONG: 35.751795 / 119.249026	CLIENT: Avocet Environmental, Inc. CONTACT: Scott Ruud INQUIRY #: 5034705.2s DATE: August 28, 2017 7:14 pm

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONMENTAL RECORDS								
Federal NPL site list								
NPL	1.000		0	0	0	0	NR	0
Proposed NPL	1.000		0	0	0	0	NR	0
NPL LIENS	0.001		0	NR	NR	NR	NR	0
Federal Delisted NPL site list								
Delisted NPL	1.000		0	0	0	0	NR	0
Federal CERCLIS list								
FEDERAL FACILITY	0.500		0	0	0	NR	NR	0
SEMS	0.500		0	0	0	NR	NR	0
Federal CERCLIS NFRAP site list								
SEMS-ARCHIVE	0.500		0	0	0	NR	NR	0
Federal RCRA CORRACTS facilities list								
CORRACTS	1.000		0	0	0	0	NR	0
Federal RCRA non-CORRACTS TSD facilities list								
RCRA-TSDF	0.500		0	0	0	NR	NR	0
Federal RCRA generators list								
RCRA-LQG	0.250		0	0	NR	NR	NR	0
RCRA-SQG	0.250		0	0	NR	NR	NR	0
RCRA-CESQG	0.250		0	0	NR	NR	NR	0
Federal institutional controls / engineering controls registries								
LUCIS	0.500		0	0	0	NR	NR	0
US ENG CONTROLS	0.500		0	0	0	NR	NR	0
US INST CONTROL	0.500		0	0	0	NR	NR	0
Federal ERNS list								
ERNS	0.001		0	NR	NR	NR	NR	0
State- and tribal - equivalent NPL								
RESPONSE	1.000		0	0	0	0	NR	0
State- and tribal - equivalent CERCLIS								
ENVIROSTOR	1.000		0	0	1	1	NR	2
State and tribal landfill and/or solid waste disposal site lists								
SWF/LF	0.500		0	0	0	NR	NR	0
State and tribal leaking storage tank lists								
LUST	0.500		0	0	2	NR	NR	2

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
INDIAN LUST	0.500		0	0	0	NR	NR	0
SLIC	0.500		0	0	1	NR	NR	1
State and tribal registered storage tank lists								
FEMA UST	0.250		0	0	NR	NR	NR	0
UST	0.250		0	1	NR	NR	NR	1
AST	0.250		0	1	NR	NR	NR	1
INDIAN UST	0.250		0	0	NR	NR	NR	0
State and tribal voluntary cleanup sites								
INDIAN VCP	0.500		0	0	0	NR	NR	0
VCP	0.500		0	0	0	NR	NR	0
State and tribal Brownfields sites								
BROWNFIELDS	0.500		0	0	0	NR	NR	0
ADDITIONAL ENVIRONMENTAL RECORDS								
Local Brownfield lists								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
Local Lists of Landfill / Solid Waste Disposal Sites								
WMUDS/SWAT	0.500		0	0	0	NR	NR	0
SWRCY	0.500		0	0	0	NR	NR	0
HAULERS	0.001		0	NR	NR	NR	NR	0
INDIAN ODI	0.500		0	0	0	NR	NR	0
ODI	0.500		0	0	0	NR	NR	0
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
IHS OPEN DUMPS	0.500		0	0	0	NR	NR	0
Local Lists of Hazardous waste / Contaminated Sites								
US HIST CDL	0.001		0	NR	NR	NR	NR	0
HIST Cal-Sites	1.000		0	0	0	0	NR	0
SCH	0.250		0	0	NR	NR	NR	0
CDL	0.001		0	NR	NR	NR	NR	0
Toxic Pits	1.000		0	0	0	0	NR	0
US CDL	0.001		0	NR	NR	NR	NR	0
Local Lists of Registered Storage Tanks								
SWEEPS UST	0.250		0	0	NR	NR	NR	0
HIST UST	0.250		0	1	NR	NR	NR	1
CA FID UST	0.250		0	0	NR	NR	NR	0
Local Land Records								
LIENS	0.001		0	NR	NR	NR	NR	0
LIENS 2	0.001		0	NR	NR	NR	NR	0
DEED	0.500		0	0	0	NR	NR	0
Records of Emergency Release Reports								
HMIRS	0.001		0	NR	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
CHMIRS	0.001		0	NR	NR	NR	NR	0
LDS	0.001		0	NR	NR	NR	NR	0
MCS	0.001		0	NR	NR	NR	NR	0
SPILLS 90	0.001		0	NR	NR	NR	NR	0
Other Ascertainable Records								
RCRA NonGen / NLR	0.250		0	0	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	0.001		0	NR	NR	NR	NR	0
EPA WATCH LIST	0.001		0	NR	NR	NR	NR	0
2020 COR ACTION	0.250		0	0	NR	NR	NR	0
TSCA	0.001		0	NR	NR	NR	NR	0
TRIS	0.001		0	NR	NR	NR	NR	0
SSTS	0.001		0	NR	NR	NR	NR	0
ROD	1.000		0	0	0	0	NR	0
RMP	0.001		0	NR	NR	NR	NR	0
RAATS	0.001		0	NR	NR	NR	NR	0
PRP	0.001		0	NR	NR	NR	NR	0
PADS	0.001		0	NR	NR	NR	NR	0
ICIS	0.001		0	NR	NR	NR	NR	0
FTTS	0.001		0	NR	NR	NR	NR	0
MLTS	0.001		0	NR	NR	NR	NR	0
COAL ASH DOE	0.001		0	NR	NR	NR	NR	0
COAL ASH EPA	0.500		0	0	0	NR	NR	0
PCB TRANSFORMER	0.001		0	NR	NR	NR	NR	0
RADINFO	0.001		0	NR	NR	NR	NR	0
HIST FTTS	0.001		0	NR	NR	NR	NR	0
DOT OPS	0.001		0	NR	NR	NR	NR	0
CONSENT	1.000		0	0	0	0	NR	0
INDIAN RESERV	0.001		0	NR	NR	NR	NR	0
FUSRAP	1.000		0	0	0	0	NR	0
UMTRA	0.500		0	0	0	NR	NR	0
LEAD SMELTERS	0.001		0	NR	NR	NR	NR	0
US AIRS	0.001		0	NR	NR	NR	NR	0
US MINES	0.250		0	0	NR	NR	NR	0
ABANDONED MINES	0.001		0	NR	NR	NR	NR	0
FINDS	0.001		0	NR	NR	NR	NR	0
UXO	1.000		0	0	0	0	NR	0
ECHO	0.001		0	NR	NR	NR	NR	0
DOCKET HWC	0.001		0	NR	NR	NR	NR	0
FUELS PROGRAM	0.250		0	0	NR	NR	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	0.001		0	NR	NR	NR	NR	0
ENF	0.001		0	NR	NR	NR	NR	0
Financial Assurance	0.001		0	NR	NR	NR	NR	0
HAZNET	0.001		0	NR	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
ICE	0.001		0	NR	NR	NR	NR	0
HIST CORTESE	0.500		0	0	2	NR	NR	2
HWP	1.000		0	0	0	0	NR	0
HWT	0.250		0	0	NR	NR	NR	0
MINES	0.001		0	NR	NR	NR	NR	0
MWMP	0.250		0	0	NR	NR	NR	0
NPDES	0.001		0	NR	NR	NR	NR	0
PEST LIC	0.001		0	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	0.001		0	NR	NR	NR	NR	0
WASTEWATER PITS	0.500		0	0	0	NR	NR	0
WDS	0.001		0	NR	NR	NR	NR	0
WIP	0.250		0	0	NR	NR	NR	0
EDR HIGH RISK HISTORICAL RECORDS								
EDR Exclusive Records								
EDR MGP	1.000		0	0	0	0	NR	0
EDR Hist Auto	0.125		0	NR	NR	NR	NR	0
EDR Hist Cleaner	0.125		0	NR	NR	NR	NR	0
EDR RECOVERED GOVERNMENT ARCHIVES								
Exclusive Recovered Govt. Archives								
RGA LF	0.001		0	NR	NR	NR	NR	0
RGA LUST	0.001		0	NR	NR	NR	NR	0
- Totals --		0	0	3	6	1	0	10

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

A1 ENE 1/8-1/4 0.245 mi. 1294 ft. — **THE ARTESIA COMPANIES**, **103 S HIGH**, **DELANO, CA** — **AST** — **A100337044**, **N/A**

Site 1 of 3 in cluster A

Relative: Higher

Actual: 314 ft.

AST:

Certified Unified Program Agencies:	Kern
Owner:	THE ARTESIA COMPANIES
Total Gallons:	10,220
CERSID:	Not reported
Facility ID:	Not reported
Business Name:	Not reported
Phone:	Not reported
Fax:	Not reported
Mailing Address:	Not reported
Mailing Address City:	Not reported
Mailing Address State:	Not reported
Mailing Address Zip Code:	Not reported
Operator Name:	Not reported
Operator Phone:	Not reported
Owner Phone:	Not reported
Owner Mail Address:	Not reported
Owner State:	Not reported
Owner Zip Code:	Not reported
Owner Country:	Not reported
Property Owner Name:	Not reported
Property Owner Phone:	Not reported
Property Owner Mailing Address:	Not reported
Property Owner City:	Not reported
Property Owner Stat :	Not reported
Property Owner Zip Code:	Not reported
Property Owner Country:	Not reported
EPAID:	Not reported

A2 ENE 1/8-1/4 0.245 mi. 1294 ft. — **DELANO ROCK CO., INC.**, **103 S HIGH ST**, **DELANO, CA 93215** — **HIST UST** — **U001581085**, **N/A**

Site 2 of 3 in cluster A

Relative: Higher

Actual: 314 ft.

HIST UST:

File Number:	Not reported
URL:	Not reported
Region:	STATE
Facility ID:	00000036018
Facility Type:	Other
Other Type:	Not reported
Contact Name:	ARLAN ADAMS
Telephone:	8057251151
Owner Name:	DEALNO ROCK CO., INC.
Owner Address:	103 S HIGH ST.
Owner City,St,Zip:	DELANO, CA 93215
Total Tanks:	0002
Tank Num:	001
Container Num:	2
Year Installed:	1973
Tank Capacity:	00010000
Tank Used for:	PRODUCT

DELANO ROCK CO., INC. (Continued) **U001581085**

Type of Fuel:	DIESEL
Container Construction Thickness:	1/4
Leak Detection:	Visual, Stock Inventor
Tank Num:	002
Container Num:	1
Year Installed:	Not reported
Tank Capacity:	00000500
Tank Used for:	PRODUCT
Type of Fuel:	UNLEADED
Container Construction Thickness:	Not reported
Leak Detection:	Visual, Stock Inventor

A3 ENE 1/8-1/4 0.245 mi. 1294 ft. **DELANO ROCK CO, INC** **UST** **U004112991**
103 S HIGH ST **N/A**
DELANO, CA

Site 3 of 3 in cluster A

Relative: Higher

Actual: 314 ft.

KERN CO. UST:

Region:	Kern
Facility ID:	Not reported
CERSID:	Not reported
Owner Id:	500010
Owner Name:	DELANO ROCK CO, INC
Tank Num:	1
Tank Capacity:	0
Common Name:	Not reported
Description:	Not reported
Number of Compartments:	Not reported
Date of Closure:	Not reported
Mailing Address:	Not reported
Mailing Address (care of):	Not reported
Mailing City/State/Zip:	Not reported

B4 SSE 1/4-1/2 0.495 mi. 2616 ft. **CENTRAL CAL EQUIPMENT INC** **LUST** **S102426484**
1300 GARZOLI **HIST CORTESE** **N/A**
DELANO, CA 93215

Site 1 of 2 in cluster B

Relative: Higher

Actual: 308 ft.

LUST:

Region:	STATE
Global Id:	T0602900356
Latitude:	35.7433669
Longitude:	-119.2438109
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	08/18/1992
Lead Agency:	KERN COUNTY
Case Worker:	KER
Local Agency:	KERN COUNTY
RB Case Number:	5T15000363
LOC Case Number:	460002
File Location:	Not reported

CENTRAL CAL EQUIPMENT INC (Continued) **S102426484**

Potential Media Affect: Soil
Potential Contaminants of Concern: Gasoline
Site History: Not reported

Click here to access the California GeoTracker records for this facility:

Contact:
Global Id: T0602900356
Contact Type: Regional Board Caseworker
Contact Name: JOHN WHITING
Organization Name: CENTRAL VALLEY RWQCB (REGION 5F)
Address: 1685 E STREET
City: FRESNO
Email: john.whiting@waterboards.ca.gov
Phone Number: Not reported

Global Id: T0602900356
Contact Type: Local Agency Caseworker
Contact Name: X KERN COUNTY QUARTERLY REP
Organization Name: KERN COUNTY
Address: Not reported
City: R5 UNKNOWN
Email: Not reported
Phone Number: Not reported

Status History:
Global Id: T0602900356
Status: Completed - Case Closed
Status Date: 08/18/1992

Global Id: T0602900356
Status: Open - Case Begin Date
Status Date: 06/27/1989

Global Id: T0602900356
Status: Open - Remediation
Status Date: 05/02/1990

Global Id: T0602900356
Status: Open - Site Assessment
Status Date: 06/27/1989

Global Id: T0602900356
Status: Open - Site Assessment
Status Date: 07/29/1989

Global Id: T0602900356
Status: Open - Site Assessment
Status Date: 02/05/1990

Regulatory Activities:
Global Id: T0602900356
Action Type: Other
Date: 06/27/1989
Action: Leak Reported

Global Id: T0602900356

CENTRAL CAL EQUIPMENT INC (Continued) **S102426484**

Action Type:	Other
Date:	06/27/1989
Action:	Leak Discovery

LUST REG 5:

Region:	5
Status:	Case Closed
Case Number:	5T15000363
Case Type:	Soil only
Substance:	GASOLINE
Staff Initials:	JDW
Lead Agency:	Local
Program:	LUST
MTBE Code:	N/A

HIST CORTESE:

Region:	CORTESE
Facility County Code:	15
Reg By:	LTNKA
Reg Id:	5T15000363

B5 **PIONEER TRUCKSTOP** **LUST** **S102435254**
SSE **1000 GARZOLI** **HIST CORTESE** **N/A**
1/4-1/2 **DELANO, CA 93215**
0.495 mi.
2616 ft. **Site 2 of 2 in cluster B**

Relative:
Higher

Actual:
308 ft.

LUST:

Region:	STATE
Global Id:	T0602900207
Latitude:	35.74584
Longitude:	-119.244092
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	01/20/1993
Lead Agency:	KERN COUNTY
Case Worker:	DOL
Local Agency:	KERN COUNTY
RB Case Number:	5T15000208
LOC Case Number:	460012
File Location:	Not reported
Potential Media Affect:	Soil
Potential Contaminants of Concern:	Gasoline
Site History:	Not reported

Click here to access the California GeoTracker records for this facility:

Contact:

Global Id:	T0602900207
Contact Type:	Local Agency Caseworker
Contact Name:	DOLORES GOUGH
Organization Name:	KERN COUNTY
Address:	2700 "M" STREET SUITE 300
City:	BAKERSFIELD
Email:	Not reported
Phone Number:	Not reported

PIONEER TRUCKSTOP (Continued) **S102435254**

Global Id: T0602900207
Contact Type: Regional Board Caseworker
Contact Name: JOHN WHITING
Organization Name: CENTRAL VALLEY RWQCB (REGION 5F)
Address: 1685 E STREET
City: FRESNO
Email: john.whiting@waterboards.ca.gov
Phone Number: Not reported

Status History:
Global Id: T0602900207
Status: Completed - Case Closed
Status Date: 01/20/1993

Global Id: T0602900207
Status: Open - Case Begin Date
Status Date: 06/07/1989

Global Id: T0602900207
Status: Open - Remediation
Status Date: 12/12/1990

Global Id: T0602900207
Status: Open - Site Assessment
Status Date: 06/22/1989

Global Id: T0602900207
Status: Open - Site Assessment
Status Date: 07/06/1989

Global Id: T0602900207
Status: Open - Site Assessment
Status Date: 08/17/1989

Global Id: T0602900207
Status: Open - Site Assessment
Status Date: 08/18/1989

Regulatory Activities:
Global Id: T0602900207
Action Type: Other
Date: 07/03/1989
Action: Leak Reported

Global Id: T0602900207
Action Type: Other
Date: 06/07/1989
Action: Leak Discovery

Region: STATE
Global Id: T0602906189
Latitude: 35.746137
Longitude: -119.244048
Case Type: LUST Cleanup Site
Status: Completed - Case Closed

PIONEER TRUCKSTOP (Continued) **S102435254**

Status Date:	12/22/2008
Lead Agency:	KERN COUNTY
Case Worker:	Not reported
Local Agency:	KERN COUNTY
RB Case Number:	5T15000905
LOC Case Number:	460012
File Location:	Local Agency
Potential Media Affect:	Soil
Potential Contaminants of Concern:	Diesel
Site History:	Not reported

Click here to access the California GeoTracker records for this facility:

Contact:

Global Id:	T0602906189
Contact Type:	Regional Board Caseworker
Contact Name:	JOHN WHITING
Organization Name:	CENTRAL VALLEY RWQCB (REGION 5F)
Address:	1685 E STREET
City:	FRESNO
Email:	john.whiting@waterboards.ca.gov
Phone Number:	Not reported

Global Id:	T0602906189
Contact Type:	Local Agency Caseworker
Contact Name:	WAQAR RUSTAM
Organization Name:	KERN COUNTY
Address:	2700 M STREET, SUITE 300
City:	BAKERSFIELD
Email:	rustamw@co.kern.ca.us
Phone Number:	6618628728

Status History:

Global Id:	T0602906189
Status:	Completed - Case Closed
Status Date:	10/12/1999

Global Id:	T0602906189
Status:	Completed - Case Closed
Status Date:	12/22/2008

Global Id:	T0602906189
Status:	Open - Case Begin Date
Status Date:	10/12/1999

Global Id:	T0602906189
Status:	Open - Reopen Case
Status Date:	12/27/2005

Global Id:	T0602906189
Status:	Open - Site Assessment
Status Date:	12/28/2005

Regulatory Activities:

Global Id:	T0602906189
Action Type:	Other
Date:	12/09/2005

PIONEER TRUCKSTOP (Continued) **S102435254**

Action: Leak Reported

Global Id: T0602906189
Action Type: ENFORCEMENT
Date: 12/22/2008
Action: Closure/No Further Action Letter

Global Id: T0602906189
Action Type: ENFORCEMENT
Date: 08/25/2008
Action: LOP Case Closure Summary to RB

Global Id: T0602906189
Action Type: Other
Date: 12/09/2005
Action: Leak Discovery

LUST REG 5:
Region: 5
Status: Case Closed
Case Number: 5T15000208
Case Type: Soil only
Substance: GASOLINE
Staff Initials: JDW
Lead Agency: Local
Program: LUST
MTBE Code: N/A

Region: 5
Status: Preliminary site assessment workplan submitted
Case Number: 5T15000905
Case Type: Soil only
Substance: DIESEL
Staff Initials: JDW
Lead Agency: Local
Program: LUST
MTBE Code: N/A

HIST CORTESE:
Region: CORTESE
Facility County Code: 15
Reg By: LTNKA
Reg Id: 5T15000208

6
SE
1/4-1/2
0.496 mi.
2618 ft.

CROP PRODUCTION SERVICES (CPS) DELANO **ENVIROSTOR** **S106483834**
930 WOOLOMES AVE **SLIC** **N/A**
DELANO, CA 93215

Relative:
Higher

Actual:
311 ft.

ENVIROSTOR:
Facility ID: 15070002
Status: Refer: Other Agency
Status Date: 11/16/1994
Site Code: Not reported
Site Type: Historical

CROP PRODUCTION SERVICES (CPS) DELANO (Continued) **S106483834**

Site Type Detailed: * Historical
Acres: Not reported
NPL: NO
Regulatory Agencies: NONE SPECIFIED
Lead Agency: NONE SPECIFIED
Program Manager: Not reported
Supervisor: Referred - Not Assigned
Division Branch: Cleanup Sacramento
Assembly: 32
Senate: 14
Special Program: Not reported
Restricted Use: NO
Site Mgmt Req: NONE SPECIFIED
Funding: Not reported
Latitude: 35.74666
Longitude: -119.2425
APN: NONE SPECIFIED
Past Use: NONE SPECIFIED
Potential COC: NONE SPECIFIED
Confirmed COC: NONE SPECIFIED
Potential Description: NONE SPECIFIED
Alias Name: COBERLY & PLUMB OF KERN
Alias Type: Alternate Name
Alias Name: CAD066230798
Alias Type: HWTS Identification Code
Alias Name: 15070002
Alias Type: Envirostor ID Number

Completed Info:
Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: * Discovery
Completed Date: 02/09/1981
Comments: Facility Identified: Industrial Waste Haulers Survey.

Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported
Future Due Date: Not reported
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

SLIC:
Region: STATE
Facility Status: Open - Remediation
Status Date: 11/17/2014
Global Id: SL185724257
Lead Agency: CENTRAL VALLEY RWQCB (REGION 5F)
Lead Agency Case Number: Not reported
Latitude: 35.7466
Longitude: -119.2422
Case Type: Cleanup Program Site
Case Worker: GJI
Local Agency: Not reported

CROP PRODUCTION SERVICES (CPS) DELANO (Continued) **S106483834**

RB Case Number: SL185724257
File Location: Regional Board
Potential Media Affected: Aquifer used for drinking water supply
Potential Contaminants of Concern: Other Chlorinated Hydrocarbons, Other Solvent or Non-Petroleum Hydrocarbon, DDD / DDE / DDT, * * 1,1,2-TRICHLOROETHANE, * * 1,2,3-TRICHLOROPROPANE, * * 1,4-DICHLOROBENZENE, * * 2,4-D, * * 2,4-DB, * * BROMOFORM (THM), * * DDD, * * DDE, * * DIBROMOCHLOROMETHANE (THM), * * DIBROMOCHLOROPROPANE (DBCP), * * DICAMBA, * * DINOSEB, * * ENDOSULFAN I, * * ENDOSULFAN II, * * HEPTACHLOR, * * NITRATE + NITRITE (AS N), * * TRICHLOROFLUOROMETHANE
Site History: In 1983, yellowish surficial soil staining was observed in two distinct areas onsite: (1) near the southwest corner of the warehouse and former formulation/mixing area and near an empty Telone II/D-D tank . The yellow color was reportedly attributed to dinoseb (Dinitro). In April 1984, WFS reported that approximately 220 cubic yards of soil was excavated from these two areas and disposed of at a Class I hazardous waste facility. WFS (1984) reported that post-excavation confirmation soil samples did not contain dinoseb concentrations above the laboratory method reporting level of 0.02 milligrams per kilogram (mg/kg). In 1993, soil samples were collected from six to 30 inches bgs from six shallow test pits in the vicinity of the proposed new tank farm location to evaluate current soil conditions . Organochlorine pesticides and/or dinoseb were detected in all six shallow soil sample locations. Based on soil analytical results, the proposed new tank farm location was dismissed and the former tank farm/old Telone storage tanks were upgraded. In October 1995, a baseline environmental site assessment was conducted to meet the terms of the sale contract between WFS and Shell Oil Company. The purpose of the baseline assessment was to identify environmental issues that may have resulted from site operations during Shell Oil Companys ownership of the property. The field investigation included the collection and laboratory analysis of select soil samples from 41 soil boring locations. Additional assessment and corrective action occurred subsequent to the 1995 baseline assessment. In 2015, a proposed pilot test was implemented. Injection well IW-1 was installed approximately 10 feet upgradient of monitoring well MW-14. The pilot test was designed to use IW-1 for the injection of a solution of Wilclear (registered trademark), which is a 60% sodium or potassium lactate electron donor solution. Approximately 1,200 pounds of Wilclear mixed with 950 gallons of water was gravity fed into IW-1.
Not reported

Click here to access the California GeoTracker records for this facility:

7
SW
1/2-1
0.576 mi.
3042 ft.

KERN COUNTY DUMP **ENVIROSTOR** **S101480472**
SE OF XING OF STRADLEY & WOOLOMES AVES **N/A**
DELANO, CA 93215

Relative:
Lower

Actual:
296 ft.

ENVIROSTOR:
Facility ID: 15490017
Status: Refer: RWQCB
Status Date: 06/23/1992
Site Code: 102297
Site Type: Evaluation
Site Type Detailed: Evaluation
Acres: Not reported

KERN COUNTY DUMP (Continued) **S101480472**

NPL: NO
Regulatory Agencies: SMBRP, RWQCB 5F - Central Valley, US EPA
Lead Agency: RWQCB 5F - Central Valley
Program Manager: Not reported
Supervisor: Referred - Not Assigned
Division Branch: Cleanup Sacramento
Assembly: 32
Senate: 14
Special Program: Not reported
Restricted Use: NO
Site Mgmt Req: NONE SPECIFIED
Funding: Not reported
Latitude: 35.74616
Longitude: -119.2577
APN: NONE SPECIFIED
Past Use: NONE SPECIFIED
Potential COC: NONE SPECIFIED
Confirmed COC: NONE SPECIFIED
Potential Description: NONE SPECIFIED
Alias Name: DELANO BURNING DUMP
Alias Type: Alternate Name
Alias Name: MCFARLANE-DELANO LANDFILL
Alias Type: Alternate Name
Alias Name: CAD980817886
Alias Type: EPA Identification Number
Alias Name: 102297
Alias Type: Project Code (Site Code)
Alias Name: 15490017
Alias Type: Envirostor ID Number

Completed Info:
Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: * Discovery
Completed Date: 06/27/1989
Comments: Facility identified via EPA Field Investigation Team (FIT) Preliminary Assessment (PA). EPA completed PA and recommended Screening Site Inspection; EPA is lead agency. Site is located in the northwest quarter of Township 25 S, Range 25 E, Section 23.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Screening
Completed Date: 08/09/2006
Comments: DTSC completed a reassessment for USEPA under the PA/SI grant.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Screening
Completed Date: 08/12/2016
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: * Discovery
Completed Date: 06/01/1997
Comments: Not reported

KERN COUNTY DUMP (Continued) **S101480472**

Future Area Name:	Not reported
Future Sub Area Name:	Not reported
Future Document Type:	Not reported
Future Due Date:	Not reported
Schedule Area Name:	Not reported
Schedule Sub Area Name:	Not reported
Schedule Document Type:	Not reported
Schedule Due Date:	Not reported
Schedule Revised Date:	Not reported

Count: 0 records.

ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
		NO SITES FOUND			

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

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: 04/05/2017
Date Data Arrived at EDR: 04/21/2017
Date Made Active in Reports: 05/12/2017
Number of Days to Update: 21

Source: EPA
Telephone: N/A
Last EDR Contact: 07/07/2017
Next Scheduled EDR Contact: 10/16/2017
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 6
Telephone: 214-655-6659

EPA Region 3
Telephone 215-814-5418

EPA Region 7
Telephone: 913-551-7247

EPA Region 4
Telephone 404-562-8033

EPA Region 8
Telephone: 303-312-6774

EPA Region 5
Telephone 312-886-6686

EPA Region 9
Telephone: 415-947-4246

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.

Date of Government Version: 04/05/2017
Date Data Arrived at EDR: 04/21/2017
Date Made Active in Reports: 05/12/2017
Number of Days to Update: 21

Source: EPA
Telephone: N/A
Last EDR Contact: 07/07/2017
Next Scheduled EDR Contact: 10/16/2017
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: 04/05/2017	Source: EPA
Date Data Arrived at EDR: 04/21/2017	Telephone: N/A
Date Made Active in Reports: 05/12/2017	Last EDR Contact: 07/07/2017
Number of Days to Update: 21	Next Scheduled EDR Contact: 10/16/2017
	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: 11/07/2016	Source: Environmental Protection Agency
Date Data Arrived at EDR: 01/05/2017	Telephone: 703-603-8704
Date Made Active in Reports: 04/07/2017	Last EDR Contact: 07/07/2017
Number of Days to Update: 92	Next Scheduled EDR Contact: 10/16/2017
	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: 02/07/2017	Source: EPA
Date Data Arrived at EDR: 04/19/2017	Telephone: 800-424-9346
Date Made Active in Reports: 05/05/2017	Last EDR Contact: 07/21/2017
Number of Days to Update: 16	Next Scheduled EDR Contact: 10/30/2017
	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: 02/07/2017
Date Data Arrived at EDR: 04/19/2017
Date Made Active in Reports: 05/05/2017
Number of Days to Update: 16

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 07/28/2017
Next Scheduled EDR Contact: 10/30/2017
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: 12/12/2016
Date Data Arrived at EDR: 12/28/2016
Date Made Active in Reports: 02/10/2017
Number of Days to Update: 44

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 08/11/2017
Next Scheduled EDR Contact: 10/09/2017
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: 12/12/2016
Date Data Arrived at EDR: 12/28/2016
Date Made Active in Reports: 02/10/2017
Number of Days to Update: 44

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 08/11/2017
Next Scheduled EDR Contact: 10/09/2017
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: 12/12/2016
Date Data Arrived at EDR: 12/28/2016
Date Made Active in Reports: 02/10/2017
Number of Days to Update: 44

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 08/11/2017
Next Scheduled EDR Contact: 10/09/2017
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: 12/12/2016
Date Data Arrived at EDR: 12/28/2016
Date Made Active in Reports: 02/10/2017
Number of Days to Update: 44

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 08/11/2017
Next Scheduled EDR Contact: 10/09/2017
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: 12/12/2016
Date Data Arrived at EDR: 12/28/2016
Date Made Active in Reports: 02/10/2017
Number of Days to Update: 44

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 08/11/2017
Next Scheduled EDR Contact: 10/09/2017
Data 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: 12/28/2016
Date Data Arrived at EDR: 01/04/2017
Date Made Active in Reports: 04/07/2017
Number of Days to Update: 93

Source: Department of the Navy
Telephone: 843-820-7326
Last EDR Contact: 08/10/2017
Next Scheduled EDR Contact: 11/27/2017
Data 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: 02/13/2017
Date Data Arrived at EDR: 02/28/2017
Date Made Active in Reports: 06/09/2017
Number of Days to Update: 101

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 05/31/2017
Next Scheduled EDR Contact: 09/11/2017
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: 02/13/2017
Date Data Arrived at EDR: 02/28/2017
Date Made Active in Reports: 06/09/2017
Number of Days to Update: 101

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 05/31/2017
Next Scheduled EDR Contact: 09/11/2017
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: 09/26/2016
Date Data Arrived at EDR: 09/29/2016
Date Made Active in Reports: 11/11/2016
Number of Days to Update: 43

Source: National Response Center, United States Coast Guard
Telephone: 202-267-2180
Last EDR Contact: 06/28/2017
Next Scheduled EDR Contact: 10/09/2017
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: 07/31/2017
Date Data Arrived at EDR: 08/01/2017
Date Made Active in Reports: 08/15/2017
Number of Days to Update: 14

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 08/01/2017
Next Scheduled EDR Contact: 11/13/2017
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: 07/31/2017
Date Data Arrived at EDR: 08/01/2017
Date Made Active in Reports: 08/15/2017
Number of Days to Update: 14

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 08/01/2017
Next Scheduled EDR Contact: 11/13/2017
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 inve ntory 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: 02/13/2017
Date Data Arrived at EDR: 02/15/2017
Date Made Active in Reports: 05/02/2017
Number of Days to Update: 76

Source: Department of Resources Recycling and Recovery
Telephone: 916-341-6320
Last EDR Contact: 08/17/2017
Next Scheduled EDR Contact: 11/27/2017
Data Release Frequency: Quarterly

State and tribal leaking storage tank lists

LUST: Leaking Underground Fuel Tank Report (GEOTRACKER)
Leaking Underground Storage Tank (LUST) Sites included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 06/12/2017
Date Data Arrived at EDR: 06/14/2017
Date Made Active in Reports: 08/22/2017
Number of Days to Update: 69

Source: State Water Resources Control Board
Telephone: see region list
Last EDR Contact: 06/14/2017
Next Scheduled EDR Contact: 09/25/2017
Data Release Frequency: Quarterly

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 7: Leaking Underground Storage Tank Case Listing
Leaking Underground Storage Tank locations. 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 Case Listing
Leaking Underground Storage Tank locations. 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 REG 3: Leaking Underground Storage Tank Database
Leaking Underground Storage Tank locations. 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
Date Made Active in Reports: 06/02/2003
Number of Days to Update: 14

Source: California Regional Water Quality Control Board Central Coast Region (3)
Telephone: 805-542-4786
Last EDR Contact: 07/18/2011
Next Scheduled EDR Contact: 10/31/2011
Data Release Frequency: No Update Planned

LUST REG 4: Underground Storage Tank Leak List
Los Angeles, Ventura counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

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 Los Angeles Region (4)
Telephone: 213-576-6710
Last EDR Contact: 09/06/2011
Next Scheduled EDR Contact: 12/19/2011
Data Release Frequency: No Update Planned

LUST REG 8: Leaking Underground Storage Tanks
California Regional Water Quality Control Board Santa Ana Region (8). For more current information, please refer to the State Water Resources Control Board's 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 1: Active Toxic Site Investigation
Del Norte, Humboldt, Lake, Mendocino, Modoc, Siskiyou, Sonoma, Trinity counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/01/2001
Date Data Arrived at EDR: 02/28/2001
Date Made Active in Reports: 03/29/2001
Number of Days to Update: 29

Source: California Regional Water Quality Control Board North Coast (1)
Telephone: 707-570-3769
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

LUST REG 2: Fuel Leak List
Leaking Underground Storage Tank locations. Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano, Sonoma counties.

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: California Regional Water Quality Control Board San Francisco Bay Region (2)
Telephone: 510-622-2433
Last EDR Contact: 09/19/2011
Next Scheduled EDR Contact: 01/02/2012
Data Release Frequency: Quarterly

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

INDIAN LUST R5: Leaking Underground Storage Tanks on Indian Land
Leaking underground storage tanks located on Indian Land in Michigan, Minnesota and Wisconsin.

Date of Government Version: 11/14/2016
Date Data Arrived at EDR: 01/26/2017
Date Made Active in Reports: 05/05/2017
Number of Days to Update: 99

Source: EPA, Region 5
Telephone: 312-886-7439
Last EDR Contact: 07/27/2017
Next Scheduled EDR Contact: 11/08/2017
Data Release Frequency: Varies

INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

Date of Government Version: 10/07/2016
Date Data Arrived at EDR: 01/26/2017
Date Made Active in Reports: 05/05/2017
Number of Days to Update: 99

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 07/27/2017
Next Scheduled EDR Contact: 11/08/2017
Data Release Frequency: Quarterly

INDIAN LUST R9: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Arizona, California, New Mexico and Nevada

Date of Government Version: 10/06/2016
Date Data Arrived at EDR: 01/26/2017
Date Made Active in Reports: 05/05/2017
Number of Days to Update: 99

Source: Environmental Protection Agency
Telephone: 415-972-3372
Last EDR Contact: 07/27/2017
Next Scheduled EDR Contact: 11/08/2017
Data Release Frequency: Quarterly

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: 10/17/2016
Date Data Arrived at EDR: 01/26/2017
Date Made Active in Reports: 05/05/2017
Number of Days to Update: 99

Source: EPA Region 8
Telephone: 303-312-6271
Last EDR Contact: 07/27/2017
Next Scheduled EDR Contact: 11/08/2017
Data Release Frequency: Quarterly

INDIAN LUST R7: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Iowa, Kansas, and Nebraska

Date of Government Version: 09/01/2016
Date Data Arrived at EDR: 01/26/2017
Date Made Active in Reports: 05/05/2017
Number of Days to Update: 99

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 07/27/2017
Next Scheduled EDR Contact: 11/08/2017
Data Release Frequency: Varies

INDIAN LUST R6: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in New Mexico and Oklahoma.

Date of Government Version: 10/01/2016
Date Data Arrived at EDR: 01/26/2017
Date Made Active in Reports: 05/05/2017
Number of Days to Update: 99

Source: EPA Region 6
Telephone: 214-665-6597
Last EDR Contact: 07/27/2017
Next Scheduled EDR Contact: 11/08/2017
Data Release Frequency: Varies

INDIAN LUST R1: Leaking Underground Storage Tanks on Indian Land
A listing of leaking underground storage tank locations on Indian Land.

Date of Government Version: 11/14/2016
Date Data Arrived at EDR: 01/26/2017
Date Made Active in Reports: 05/05/2017
Number of Days to Update: 99

Source: EPA Region 1
Telephone: 617-918-1313
Last EDR Contact: 07/27/2017
Next Scheduled EDR Contact: 11/08/2017
Data Release Frequency: Varies

INDIAN LUST R4: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Florida, Mississippi and North Carolina.

Date of Government Version: 10/14/2016
Date Data Arrived at EDR: 01/27/2017
Date Made Active in Reports: 05/05/2017
Number of Days to Update: 98

Source: EPA Region 4
Telephone: 404-562-8677
Last EDR Contact: 07/28/2017
Next Scheduled EDR Contact: 11/08/2017
Data Release Frequency: Semi-Annually

SLIC: Statewide SLIC Cases (GEOTRACKER)
Cleanup Program Sites (CPS; also known as Site Cleanups [SC] and formerly known as Spills, Leaks, Investigations, and Cleanups [SLIC] sites) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 06/12/2017
Date Data Arrived at EDR: 06/14/2017
Date Made Active in Reports: 08/23/2017
Number of Days to Update: 70

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 06/14/2017
Next Scheduled EDR Contact: 09/25/2017
Data Release Frequency: Varies

SLIC 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 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: 09/30/2004
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 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: 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 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: 04/01/2005
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 & 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: 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 storage 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: 07/14/2017
Next Scheduled EDR Contact: 10/23/2017
Data Release Frequency: Varies

UST: Active UST Facilities
Active UST facilities gathered from the local regulatory agencies

Date of Government Version: 06/12/2017
Date Data Arrived at EDR: 06/14/2017
Date Made Active in Reports: 08/23/2017
Number of Days to Update: 70

Source: SWRCB
Telephone: 916-341-5851
Last EDR Contact: 06/14/2017
Next Scheduled EDR Contact: 09/25/2017
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: 07/06/2016
Date Data Arrived at EDR: 07/12/2016
Date Made Active in Reports: 09/19/2016
Number of Days to Update: 69

Source: California Environmental Protection Agency
Telephone: 916-327-5092
Last EDR Contact: 06/21/2017
Next Scheduled EDR Contact: 10/09/2017
Data Release Frequency: Quarterly

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: 10/01/2016
Date Data Arrived at EDR: 01/26/2017
Date Made Active in Reports: 05/05/2017
Number of Days to Update: 99

Source: EPA Region 6
Telephone: 214-665-7591
Last EDR Contact: 07/27/2017
Next Scheduled EDR Contact: 11/08/2017
Data Release Frequency: Semi-Annually

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: 10/14/2016
Date Data Arrived at EDR: 01/27/2017
Date Made Active in Reports: 05/05/2017
Number of Days to Update: 98

Source: EPA Region 4
Telephone: 404-562-9424
Last EDR Contact: 07/28/2017
Next Scheduled EDR Contact: 11/08/2017
Data Release Frequency: Semi-Annually

INDIAN UST R1: 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 1 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont and ten Tribal Nations).

Date of Government Version: 11/14/2016
Date Data Arrived at EDR: 01/26/2017
Date Made Active in Reports: 05/05/2017
Number of Days to Update: 99

Source: EPA, Region 1
Telephone: 617-918-1313
Last EDR Contact: 07/27/2017
Next Scheduled EDR Contact: 11/08/2017
Data Release Frequency: Varies

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: 01/14/2017
Date Data Arrived at EDR: 01/26/2017
Date Made Active in Reports: 05/05/2017
Number of Days to Update: 99

Source: EPA Region 5
Telephone: 312-886-6136
Last EDR Contact: 07/27/2017
Next Scheduled EDR Contact: 11/08/2017
Data Release Frequency: Varies

INDIAN UST R10: 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 10 (Alaska, Idaho, Oregon, Washington, and Tribal Nations).

Date of Government Version: 10/07/2016
Date Data Arrived at EDR: 01/26/2017
Date Made Active in Reports: 05/05/2017
Number of Days to Update: 99

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 07/27/2017
Next Scheduled EDR Contact: 11/08/2017
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 Indian land in EPA Region 9 (Arizona, California, Hawaii, Nevada, the Pacific Islands, and Tribal Nations).

Date of Government Version: 10/06/2016
Date Data Arrived at EDR: 01/26/2017
Date Made Active in Reports: 05/05/2017
Number of Days to Update: 99

Source: EPA Region 9
Telephone: 415-972-3368
Last EDR Contact: 07/27/2017
Next Scheduled EDR Contact: 11/08/2017
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 Indian land in EPA Region 8 (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming and 27 Tribal Nations).

Date of Government Version: 10/17/2016
Date Data Arrived at EDR: 01/26/2017
Date Made Active in Reports: 05/05/2017
Number of Days to Update: 99

Source: EPA Region 8
Telephone: 303-312-6137
Last EDR Contact: 07/27/2017
Next Scheduled EDR Contact: 11/08/2017
Data Release Frequency: Quarterly

INDIAN UST R7: 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 7 (Iowa, Kansas, Missouri, Nebraska, and 9 Tribal Nations).

Date of Government Version: 09/01/2016
Date Data Arrived at EDR: 01/26/2017
Date Made Active in Reports: 05/05/2017
Number of Days to Update: 99

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 07/27/2017
Next Scheduled EDR Contact: 11/08/2017
Data Release Frequency: Varies

State and tribal voluntary cleanup sites

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: 06/27/2017
Next Scheduled EDR Contact: 10/09/2017
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: 07/31/2017
Date Data Arrived at EDR: 08/01/2017
Date Made Active in Reports: 08/15/2017
Number of Days to Update: 14

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 08/01/2017
Next Scheduled EDR Contact: 11/13/2017
Data Release Frequency: Quarterly

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
Date Data Arrived at EDR: 04/22/2008
Date Made Active in Reports: 05/19/2008
Number of Days to Update: 27

Source: EPA, Region 7
Telephone: 913-551-7365
Last EDR Contact: 04/20/2009
Next Scheduled EDR Contact: 07/20/2009
Data Release Frequency: Varies

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: 01/03/2017
Date Data Arrived at EDR: 01/04/2017
Date Made Active in Reports: 03/02/2017
Number of Days to Update: 57

Source: State Water Resources Control Board
Telephone: 916-323-7905
Last EDR Contact: 06/28/2017
Next Scheduled EDR Contact: 10/09/2017
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: 03/02/2017
Date Data Arrived at EDR: 03/02/2017
Date Made Active in Reports: 04/07/2017
Number of Days to Update: 36

Source: Environmental Protection Agency
Telephone: 202-566-2777
Last EDR Contact: 06/20/2017
Next Scheduled EDR Contact: 10/02/2017
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: 08/03/2017
Next Scheduled EDR Contact: 11/20/2017
Data Release Frequency: No Update Planned

SWRCY: Recycler Database
A listing of recycling facilities in California.

Date of Government Version: 03/13/2017
Date Data Arrived at EDR: 03/14/2017
Date Made Active in Reports: 05/03/2017
Number of Days to Update: 50

Source: Department of Conservation
Telephone: 916-323-3836
Last EDR Contact: 06/14/2017
Next Scheduled EDR Contact: 09/25/2017
Data Release Frequency: Quarterly

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

Date of Government Version: 05/30/2017
Date Data Arrived at EDR: 05/31/2017
Date Made Active in Reports: 08/15/2017
Number of Days to Update: 76

Source: Integrated Waste Management Board
Telephone: 916-341-6422
Last EDR Contact: 08/10/2017
Next Scheduled EDR Contact: 11/27/2017
Data Release Frequency: Varies

INDIAN ODI: Report on the Status of Open Dumps on Indian Lands
Location of open dumps on Indian land.

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: 08/01/2017
Next Scheduled EDR Contact: 11/13/2017
Data Release Frequency: Varies

ODI: Open Dump Inventory
An open dump is defined as a disposal facility that does not comply with one or more of the Part 257 or Part 258 Subtitle D Criteria.

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

DEBRIS REGION 9: Torres Martinez Reservation Illegal Dump Site Locations
A listing of illegal dump sites location on the Torres Martinez Indian Reservation located in eastern Riverside County and northern Imperial County, California.

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: 07/24/2017
Next Scheduled EDR Contact: 11/08/2017
Data Release Frequency: No Update Planned

IHS OPEN DUMPS: Open Dumps on Indian Land
A listing of all open dumps located on Indian Land in the United States.

Date of Government Version: 04/01/2014
Date Data Arrived at EDR: 08/06/2014
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 176

Source: Department of Health & Human Serivces, Indian Health Service
Telephone: 301-443-1452
Last EDR Contact: 08/10/2017
Next Scheduled EDR Contact: 11/13/2017
Data Release Frequency: Varies

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL: National Clandestine Laboratory Register
A listing of clandestine drug lab locations that have been removed from the DEAs National Clandestine Laboratory Register.

Date of Government Version: 02/09/2017
Date Data Arrived at EDR: 03/08/2017
Date Made Active in Reports: 06/09/2017
Number of Days to Update: 93

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 02/28/2017
Next Scheduled EDR Contact: 06/12/2017
Data Release Frequency: No Update Planned

HIST CAL-SITES: Calsites Database

The Calsites database contains potential or confirmed hazardous substance release properties. In 1996, California EPA reevaluated and significantly reduced the number of sites in the Calsites database. No longer updated by the state agency. It has been replaced by ENVIROSTOR.

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: 07/31/2017
Date Data Arrived at EDR: 08/01/2017
Date Made Active in Reports: 08/15/2017
Number of Days to Update: 14

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 08/01/2017
Next Scheduled EDR Contact: 11/13/2017
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: 12/31/2016
Date Data Arrived at EDR: 03/17/2017
Date Made Active in Reports: 05/10/2017
Number of Days to Update: 54

Source: Department of Toxic Substances Control
Telephone: 916-255-6504
Last EDR Contact: 08/14/2017
Next Scheduled EDR Contact: 10/23/2017
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: 02/09/2017
Date Data Arrived at EDR: 03/08/2017
Date Made Active in Reports: 06/09/2017
Number of Days to Update: 93

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 05/31/2017
Next Scheduled EDR Contact: 09/11/2017
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: 06/02/2017
Date Data Arrived at EDR: 06/06/2017
Date Made Active in Reports: 08/25/2017
Number of Days to Update: 80

Source: Department of Public Health
Telephone: 707-463-4466
Last EDR Contact: 08/24/2017
Next Scheduled EDR Contact: 12/11/2017
Data Release Frequency: Annually

HIST UST: Hazardous Substance Storage Container Database

The Hazardous Substance Storage Container Database is a historical listing of UST sites. Refer to local/county source for current data.

Date of Government Version: 10/15/1990
Date Data Arrived at EDR: 01/25/1991
Date Made Active in Reports: 02/12/1991
Number of Days to Update: 18

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: 10/31/1994
Date Data Arrived at EDR: 09/05/1995
Date Made Active in Reports: 09/29/1995
Number of Days to Update: 24

Source: California Environmental Protection Agency
Telephone: 916-341-5851
Last EDR Contact: 12/28/1998
Next Scheduled EDR Contact: N/A
Data 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: 06/02/2017
Date Data Arrived at EDR: 06/06/2017
Date Made Active in Reports: 08/22/2017
Number of Days to Update: 77

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 06/02/2017
Next Scheduled EDR Contact: 09/18/2017
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: 07/26/2017
Next Scheduled EDR Contact: 11/08/2017
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: 06/05/2017
Date Data Arrived at EDR: 06/06/2017
Date Made Active in Reports: 08/10/2017
Number of Days to Update: 65

Source: DTSC and SWRCB
Telephone: 916-323-3400
Last EDR Contact: 06/06/2017
Next Scheduled EDR Contact: 09/18/2017
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: 12/28/2016
Date Data Arrived at EDR: 12/28/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 37

Source: U.S. Department of Transportation
Telephone: 202-366-4555
Last EDR Contact: 06/28/2017
Next Scheduled EDR Contact: 10/09/2017
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: 12/06/2016
Date Data Arrived at EDR: 01/25/2017
Date Made Active in Reports: 05/10/2017
Number of Days to Update: 105

Source: Office of Emergency Services
Telephone: 916-845-8400
Last EDR Contact: 07/26/2017
Next Scheduled EDR Contact: 11/08/2017
Data Release Frequency: Varies

LDS: Land Disposal Sites Listing (GEOTRACKER)

Land Disposal sites (Landfills) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 06/12/2017
Date Data Arrived at EDR: 06/14/2017
Date Made Active in Reports: 08/18/2017
Number of Days to Update: 65

Source: State Water Qualilty Control Board
Telephone: 866-480-1028
Last EDR Contact: 06/14/2017
Next Scheduled EDR Contact: 09/25/2017
Data Release Frequency: Quarterly

MCS: Military Cleanup Sites Listing (GEOTRACKER)

Military sites (consisting of: Military UST sites; Military Privatized sites; and Military Cleanup sites [formerly known as DoD non UST]) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 06/12/2017
Date Data Arrived at EDR: 06/14/2017
Date Made Active in Reports: 08/22/2017
Number of Days to Update: 69

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 06/14/2017
Next Scheduled EDR Contact: 09/25/2017
Data Release Frequency: Quarterly

SPILLS 90: SPILLS90 data from FirstSearch

Spills 90 includes those spill and release records available exclusively from FirstSearch databases. Typically, they may include chemical, oil and/or hazardous substance spills recorded after 1990. Duplicate records that are already included in EDR incident and release records are not included in Spills 90.

Date of Government Version: 06/06/2012
Date Data Arrived at EDR: 01/03/2013
Date Made Active in Reports: 02/22/2013
Number of Days to Update: 50

Source: FirstSearch
Telephone: N/A
Last EDR Contact: 01/03/2013
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

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 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: 12/12/2016
Date Data Arrived at EDR: 12/28/2016
Date Made Active in Reports: 02/10/2017
Number of Days to Update: 44

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 08/11/2017
Next Scheduled EDR Contact: 10/09/2017
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: 08/25/2017
Next Scheduled EDR Contact: 12/04/2017
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: 07/12/2017
Next Scheduled EDR Contact: 10/23/2017
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: 12/31/2005
Date Data Arrived at EDR: 02/06/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 339

Source: U.S. Geological Survey
Telephone: 888-275-8747
Last EDR Contact: 07/14/2017
Next Scheduled EDR Contact: 10/23/2017
Data 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: 01/01/2017
Date Data Arrived at EDR: 02/03/2017
Date Made Active in Reports: 04/07/2017
Number of Days to Update: 63

Source: Environmental Protection Agency
Telephone: 615-532-8599
Last EDR Contact: 08/18/2017
Next Scheduled EDR Contact: 11/27/2017
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: 02/13/2017
Date Data Arrived at EDR: 02/15/2017
Date Made Active in Reports: 05/12/2017
Number of Days to Update: 86

Source: Environmental Protection Agency
Telephone: 202-566-1917
Last EDR Contact: 08/11/2017
Next Scheduled EDR Contact: 10/09/2017
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: 08/07/2017
Next Scheduled EDR Contact: 11/20/2017
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: 08/24/2017
Next Scheduled EDR Contact: 11/20/2017
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: 06/21/2017
Next Scheduled EDR Contact: 10/02/2017
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: 08/23/2017
Next Scheduled EDR Contact: 12/04/2017
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: 12/31/2009
Date Data Arrived at EDR: 12/10/2010
Date Made Active in Reports: 02/25/2011
Number of Days to Update: 77

Source: EPA
Telephone: 202-564-4203
Last EDR Contact: 07/28/2017
Next Scheduled EDR Contact: 11/08/2017
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: 06/09/2017
Next Scheduled EDR Contact: 09/18/2017
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: 02/01/2017
Date Data Arrived at EDR: 02/09/2017
Date Made Active in Reports: 04/07/2017
Number of Days to Update: 57

Source: Environmental Protection Agency
Telephone: 202-564-8600
Last EDR Contact: 07/24/2017
Next Scheduled EDR Contact: 11/08/2017
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
Date Data Arrived at EDR: 10/17/2014
Date Made Active in Reports: 10/20/2014
Number of Days to Update: 3

Source: EPA
Telephone: 202-564-6023
Last EDR Contact: 08/08/2017
Next Scheduled EDR Contact: 11/20/2017
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: 01/20/2016
Date Data Arrived at EDR: 04/28/2016
Date Made Active in Reports: 09/02/2016
Number of Days to Update: 127

Source: EPA
Telephone: 202-566-0500
Last EDR Contact: 04/10/2017
Next Scheduled EDR Contact: 07/24/2017
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: 11/18/2016
Date Data Arrived at EDR: 11/23/2016
Date Made Active in Reports: 02/10/2017
Number of Days to Update: 79

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 07/28/2017
Next Scheduled EDR Contact: 10/23/2017
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
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25

Source: EPA/Office of Prevention, Pesticides and Toxic Substances
Telephone: 202-566-1667
Last EDR Contact: 08/18/2017
Next Scheduled EDR Contact: 12/04/2017
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
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25

Source: EPA
Telephone: 202-566-1667
Last EDR Contact: 08/18/2017
Next Scheduled EDR Contact: 12/04/2017
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: 08/30/2016
Date Data Arrived at EDR: 09/08/2016
Date Made Active in Reports: 10/21/2016
Number of Days to Update: 43

Source: Nuclear Regulatory Commission
Telephone: 301-415-7169
Last EDR Contact: 08/01/2017
Next Scheduled EDR Contact: 11/20/2017
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
Date Data Arrived at EDR: 08/07/2009
Date Made Active in Reports: 10/22/2009
Number of Days to Update: 76

Source: Department of Energy
Telephone: 202-586-8719
Last EDR Contact: 06/05/2017
Next Scheduled EDR Contact: 09/18/2017
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: 06/05/2017
Next Scheduled EDR Contact: 09/18/2017
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
Date Data Arrived at EDR: 10/19/2011
Date Made Active in Reports: 01/10/2012
Number of Days to Update: 83

Source: Environmental Protection Agency
Telephone: 202-566-0517
Last EDR Contact: 07/28/2017
Next Scheduled EDR Contact: 11/08/2017
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: 01/04/2017
Date Data Arrived at EDR: 01/06/2017
Date Made Active in Reports: 02/10/2017
Number of Days to Update: 35

Source: Environmental Protection Agency
Telephone: 202-343-9775
Last EDR Contact: 07/12/2017
Next Scheduled EDR Contact: 10/16/2017
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
Date Data Arrived at EDR: 08/07/2012
Date Made Active in Reports: 09/18/2012
Number of Days to Update: 42

Source: Department of Transporation, Office of Pipeline Safety
Telephone: 202-366-4595
Last EDR Contact: 08/01/2017
Next Scheduled EDR Contact: 11/13/2017
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: 09/30/2016
Date Data Arrived at EDR: 11/18/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 77

Source: Department of Justice, Consent Decree Library
Telephone: Varies
Last EDR Contact: 06/21/2017
Next Scheduled EDR Contact: 10/09/2017
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: 08/25/2017
Next Scheduled EDR Contact: 12/04/2017
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: 12/31/2014
Date Data Arrived at EDR: 07/14/2015
Date Made Active in Reports: 01/10/2017
Number of Days to Update: 546

Source: USGS
Telephone: 202-208-3710
Last EDR Contact: 07/11/2017
Next Scheduled EDR Contact: 10/23/2017
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: 12/23/2016
Date Data Arrived at EDR: 12/27/2016
Date Made Active in Reports: 02/17/2017
Number of Days to Update: 52

Source: Department of Energy
Telephone: 202-586-3559
Last EDR Contact: 08/03/2017
Next Scheduled EDR Contact: 11/20/2017
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: 08/22/2017
Next Scheduled EDR Contact: 12/04/2017
Data Release Frequency: Varies

LEAD SMELTER 1: Lead Smelter Sites
A listing of former lead smelter site locations.

Date of Government Version: 12/05/2016
Date Data Arrived at EDR: 01/05/2017
Date Made Active in Reports: 02/10/2017
Number of Days to Update: 36

Source: Environmental Protection Agency
Telephone: 703-603-8787
Last EDR Contact: 07/07/2017
Next Scheduled EDR Contact: 10/16/2017
Data 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: 10/12/2016
Date Data Arrived at EDR: 10/26/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 100

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 08/11/2017
Next Scheduled EDR Contact: 10/09/2017
Data Release Frequency: Annually

US AIRS MINOR: Air Facility System Data
A listing of minor source facilities.

Date of Government Version: 10/12/2016
Date Data Arrived at EDR: 10/26/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 100

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 08/11/2017
Next Scheduled EDR Contact: 10/09/2017
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: 02/08/2017
Date Data Arrived at EDR: 02/28/2017
Date Made Active in Reports: 04/07/2017
Number of Days to Update: 38

Source: Department of Labor, Mine Safety and Health Administration
Telephone: 303-231-5959
Last EDR Contact: 05/31/2017
Next Scheduled EDR Contact: 09/11/2017
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: 05/31/2017
Next Scheduled EDR Contact: 09/11/2017
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: 06/02/2017
Next Scheduled EDR Contact: 09/11/2017
Data Release Frequency: Varies

ABANDONED MINES: Abandoned Mines

An inventory of land and water impacted by past mining (primarily coal mining) is maintained by OSMRE to provide information needed to implement the Surface Mining Control and Reclamation Act of 1977 (SMCRA). The inventory contains information on the location, type, and extent of AML impacts, as well as, information on the cost associated with the reclamation of those problems. The inventory is based upon field surveys by State, Tribal, and OSMRE program officials. It is dynamic to the extent that it is modified as new problems are identified and existing problems are reclaimed.

Date of Government Version: 03/14/2017
Date Data Arrived at EDR: 03/17/2017
Date Made Active in Reports: 04/07/2017
Number of Days to Update: 21

Source: Department of Interior
Telephone: 202-208-2609
Last EDR Contact: 06/09/2017
Next Scheduled EDR Contact: 09/25/2017
Data Release Frequency: Quarterly

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 (Criminal 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: 04/04/2017
Date Data Arrived at EDR: 04/07/2017
Date Made Active in Reports: 05/12/2017
Number of Days to Update: 35

Source: EPA
Telephone: (415) 947-8000
Last EDR Contact: 06/07/2017
Next Scheduled EDR Contact: 09/18/2017
Data Release Frequency: Quarterly

DOCKET HWC: Hazardous Waste Compliance Docket Listing

A complete list of the Federal Agency Hazardous Waste Compliance Docket Facilities.

Date of Government Version: 06/02/2016
Date Data Arrived at EDR: 06/03/2016
Date Made Active in Reports: 09/02/2016
Number of Days to Update: 91

Source: Environmental Protection Agency
Telephone: 202-564-0527
Last EDR Contact: 08/24/2017
Next Scheduled EDR Contact: 12/11/2017
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: 03/19/2017
Date Data Arrived at EDR: 03/21/2017
Date Made Active in Reports: 05/12/2017
Number of Days to Update: 52

Source: Environmental Protection Agency
Telephone: 202-564-2280
Last EDR Contact: 06/07/2017
Next Scheduled EDR Contact: 09/18/2017
Data Release Frequency: Quarterly

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: 07/17/2017
Next Scheduled EDR Contact: 10/30/2017
Data Release Frequency: Varies

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: 02/22/2017
Date Data Arrived at EDR: 02/22/2017
Date Made Active in Reports: 05/12/2017
Number of Days to Update: 79

Source: EPA
Telephone: 800-385-6164
Last EDR Contact: 08/17/2017
Next Scheduled EDR Contact: 12/04/2017
Data Release Frequency: Quarterly

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: 12/28/2016
Date Data Arrived at EDR: 12/28/2016
Date Made Active in Reports: 03/02/2017
Number of Days to Update: 64

Source: CAL EPA/Office of Emergency Information
Telephone: 916-323-3400
Last EDR Contact: 06/28/2017
Next Scheduled EDR Contact: 10/09/2017
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: 03/09/2017
Date Data Arrived at EDR: 04/11/2017
Date Made Active in Reports: 05/23/2017
Number of Days to Update: 42

Source: Department of Toxic Substance Control
Telephone: 916-327-4498
Last EDR Contact: 07/13/2017
Next Scheduled EDR Contact: 09/18/2017
Data Release Frequency: Annually

EMI: Emissions Inventory Data
Toxics and criteria pollutant emissions data collected by the ARB and local air pollution agencies.

Date of Government Version: 12/31/2015
Date Data Arrived at EDR: 03/21/2017
Date Made Active in Reports: 08/15/2017
Number of Days to Update: 147

Source: California Air Resources Board
Telephone: 916-322-2990
Last EDR Contact: 06/23/2017
Next Scheduled EDR Contact: 10/02/2017
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: 05/01/2017
Date Data Arrived at EDR: 05/03/2017
Date Made Active in Reports: 08/15/2017
Number of Days to Update: 104

Source: State Water Resoruces Control Board
Telephone: 916-445-9379
Last EDR Contact: 08/18/2017
Next Scheduled EDR Contact: 11/08/2017
Data Release Frequency: Varies

Financial Assurance 1: Financial Assurance Information Listing

Financial Assurance information

Date of Government Version: 06/05/2017
Date Data Arrived at EDR: 06/09/2017
Date Made Active in Reports: 08/15/2017
Number of Days to Update: 67

Source: Department of Toxic Substances Control
Telephone: 916-255-3628
Last EDR Contact: 07/21/2017
Next Scheduled EDR Contact: 10/30/2017
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: 05/16/2017
Date Data Arrived at EDR: 05/19/2017
Date Made Active in Reports: 08/15/2017
Number of Days to Update: 88

Source: California Integrated Waste Management Board
Telephone: 916-341-6066
Last EDR Contact: 08/10/2017
Next Scheduled EDR Contact: 11/27/2017
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: 12/31/2015
Date Data Arrived at EDR: 10/12/2016
Date Made Active in Reports: 12/15/2016
Number of Days to Update: 64

Source: California Environmental Protection Agency
Telephone: 916-255-1136
Last EDR Contact: 07/12/2017
Next Scheduled EDR Contact: 10/23/2017
Data Release Frequency: Annually

ICE: ICE

Contains data pertaining to the Permitted Facilities with Inspections / Enforcements sites tracked in Envirostor.

Date of Government Version: 05/22/2017
Date Data Arrived at EDR: 05/24/2017
Date Made Active in Reports: 08/18/2017
Number of Days to Update: 86

Source: Department of Toxic Subsances Control
Telephone: 877-786-9427
Last EDR Contact: 08/22/2017
Next Scheduled EDR Contact: 12/04/2017
Data Release Frequency: Quarterly

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: 05/22/2017
Date Data Arrived at EDR: 05/24/2017
Date Made Active in Reports: 08/18/2017
Number of Days to Update: 86

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 08/22/2017
Next Scheduled EDR Contact: 12/04/2017
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: 04/11/2017
Date Data Arrived at EDR: 04/13/2017
Date Made Active in Reports: 04/26/2017
Number of Days to Update: 13

Source: Department of Toxic Substances Control
Telephone: 916-440-7145
Last EDR Contact: 07/12/2017
Next Scheduled EDR Contact: 10/23/2017
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: 09/12/2016
Date Data Arrived at EDR: 09/14/2016
Date Made Active in Reports: 10/14/2016
Number of Days to Update: 30

Source: Department of Conservation
Telephone: 916-322-1080
Last EDR Contact: 06/14/2017
Next Scheduled EDR Contact: 09/25/2017
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: 05/25/2017
Date Data Arrived at EDR: 06/06/2017
Date Made Active in Reports: 08/23/2017
Number of Days to Update: 78

Source: Department of Public Health
Telephone: 916-558-1784
Last EDR Contact: 06/06/2017
Next Scheduled EDR Contact: 09/18/2017
Data Release Frequency: Varies

NPDES: NPDES Permits Listing
A listing of NPDES permits, including stormwater.

Date of Government Version: 11/14/2016
Date Data Arrived at EDR: 11/15/2016
Date Made Active in Reports: 03/02/2017
Number of Days to Update: 107

Source: State Water Resources Control Board
Telephone: 916-445-9379
Last EDR Contact: 08/17/2017
Next Scheduled EDR Contact: 11/27/2017
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: 06/05/2017
Date Data Arrived at EDR: 06/07/2017
Date Made Active in Reports: 08/25/2017
Number of Days to Update: 79

Source: Department of Pesticide Regulation
Telephone: 916-445-4038
Last EDR Contact: 06/07/2017
Next Scheduled EDR Contact: 09/18/2017
Data Release Frequency: Quarterly

PROC: Certified Processors Database
A listing of certified processors.

Date of Government Version: 03/13/2017
Date Data Arrived at EDR: 03/14/2017
Date Made Active in Reports: 05/03/2017
Number of Days to Update: 50

Source: Department of Conservation
Telephone: 916-323-3836
Last EDR Contact: 06/14/2017
Next Scheduled EDR Contact: 09/25/2017
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: 12/16/2016
Date Data Arrived at EDR: 12/22/2016
Date Made Active in Reports: 03/02/2017
Number of Days to Update: 70

Source: State Water Resources Control Board
Telephone: 916-445-3846
Last EDR Contact: 06/16/2017
Next Scheduled EDR Contact: 10/02/2017
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: 01/20/2017
Date Data Arrived at EDR: 03/14/2017
Date Made Active in Reports: 05/03/2017
Number of Days to Update: 50

Source: Deaprtment of Conservation
Telephone: 916-445-2408
Last EDR Contact: 06/14/2017
Next Scheduled EDR Contact: 09/25/2017
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.

Date of Government Version: 04/15/2015
Date Data Arrived at EDR: 04/17/2015
Date Made Active in Reports: 06/23/2015
Number of Days to Update: 67

Source: RWQCB, Central Valley Region
Telephone: 559-445-5577
Last EDR Contact: 07/14/2017
Next Scheduled EDR Contact: 10/23/2017
Data Release Frequency: Varies

WDS: Waste Discharge System
Sites which have been issued waste discharge requirements.

Date of Government Version: 06/19/2007
Date Data Arrived at EDR: 06/20/2007
Date Made Active in Reports: 06/29/2007
Number of Days to Update: 9

Source: State Water Resources Control Board
Telephone: 916-341-5227
Last EDR Contact: 08/18/2017
Next Scheduled EDR Contact: 12/04/2017
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: 06/27/2017
Next Scheduled EDR Contact: 10/09/2017
Data Release Frequency: Varies

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: 04/10/2017
Date Data Arrived at EDR: 04/11/2017
Date Made Active in Reports: 05/12/2017
Number of Days to Update: 31

Source: Alameda County Environmental Health Services
Telephone: 510-567-6700
Last EDR Contact: 07/07/2017
Next Scheduled EDR Contact: 10/23/2017
Data Release Frequency: Semi-Annually

Underground Tanks

Underground storage tank sites located in Alameda county.

Date of Government Version: 07/07/2017
Date Data Arrived at EDR: 07/11/2017
Date Made Active in Reports: 08/23/2017
Number of Days to Update: 43

Source: Alameda County Environmental Health Services
Telephone: 510-567-6700
Last EDR Contact: 07/07/2017
Next Scheduled EDR Contact: 04/24/2047
Data Release Frequency: Semi-Annually

AMADOR COUNTY:

CUPA Facility List

Cupa Facility List

Date of Government Version: 06/20/2017
Date Data Arrived at EDR: 06/21/2017
Date Made Active in Reports: 08/09/2017
Number of Days to Update: 49

Source: Amador County Environmental Health
Telephone: 209-223-6439
Last EDR Contact: 06/16/2017
Next Scheduled EDR Contact: 09/18/2017
Data Release Frequency: Varies

BUTTE COUNTY:

CUPA Facility Listing

Cupa facility list.

Date of Government Version: 04/21/2017
Date Data Arrived at EDR: 04/25/2017
Date Made Active in Reports: 08/09/2017
Number of Days to Update: 106

Source: Public Health Department
Telephone: 530-538-7149
Last EDR Contact: 08/21/2017
Next Scheduled EDR Contact: 10/23/2017
Data Release Frequency: No Update Planned

CALVERAS COUNTY:

CUPA Facility Listing
Cupa Facility Listing

Date of Government Version: 04/25/2017
Date Data Arrived at EDR: 04/27/2017
Date Made Active in Reports: 08/09/2017
Number of Days to Update: 104

Source: Calveras County Environmental Health
Telephone: 209-754-6399
Last EDR Contact: 06/27/2017
Next Scheduled EDR Contact: 10/09/2017
Data Release Frequency: Quarterly

COLUSA COUNTY:

CUPA Facility List
Cupa facility list.

Date of Government Version: 02/23/2017
Date Data Arrived at EDR: 02/24/2017
Date Made Active in Reports: 05/12/2017
Number of Days to Update: 77

Source: Health & Human Services
Telephone: 530-458-0396
Last EDR Contact: 08/03/2017
Next Scheduled EDR Contact: 11/20/2017
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: 05/26/2017
Date Data Arrived at EDR: 05/30/2017
Date Made Active in Reports: 07/27/2017
Number of Days to Update: 58

Source: Contra Costa Health Services Department
Telephone: 925-646-2286
Last EDR Contact: 07/31/2017
Next Scheduled EDR Contact: 11/13/2017
Data Release Frequency: Semi-Annually

DEL NORTE COUNTY:

CUPA Facility List
Cupa Facility list

Date of Government Version: 05/02/2017
Date Data Arrived at EDR: 05/04/2017
Date Made Active in Reports: 08/04/2017
Number of Days to Update: 92

Source: Del Norte County Environmental Health Division
Telephone: 707-465-0426
Last EDR Contact: 07/27/2017
Next Scheduled EDR Contact: 11/13/2017
Data Release Frequency: Varies

EL DORADO COUNTY:

CUPA Facility List
CUPA facility list.

Date of Government Version: 06/19/2017
Date Data Arrived at EDR: 06/20/2017
Date Made Active in Reports: 08/09/2017
Number of Days to Update: 50

Source: El Dorado County Environmental Management Department
Telephone: 530-621-6623
Last EDR Contact: 07/31/2017
Next Scheduled EDR Contact: 11/13/2017
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: 06/30/2017
Date Data Arrived at EDR: 07/05/2017
Date Made Active in Reports: 08/04/2017
Number of Days to Update: 30

Source: Dept. of Community Health
Telephone: 559-445-3271
Last EDR Contact: 06/29/2017
Next Scheduled EDR Contact: 10/16/2017
Data Release Frequency: Semi-Annually

GLENN COUNTY:

CUPA Facility List

Cupa facility list

Date of Government Version: 12/02/2016
Date Data Arrived at EDR: 02/03/2017
Date Made Active in Reports: 05/25/2017
Number of Days to Update: 111

Source: Glenn County Air Pollution Control District
Telephone: 830-934-6500
Last EDR Contact: 07/21/2017
Next Scheduled EDR Contact: 11/08/2017
Data Release Frequency: Varies

HUMBOLDT COUNTY:

CUPA Facility List

CUPA facility list.

Date of Government Version: 03/20/2017
Date Data Arrived at EDR: 03/21/2017
Date Made Active in Reports: 05/17/2017
Number of Days to Update: 57

Source: Humboldt County Environmental Health
Telephone: N/A
Last EDR Contact: 08/03/2017
Next Scheduled EDR Contact: 12/04/2017
Data Release Frequency: Varies

IMPERIAL COUNTY:

CUPA Facility List

Cupa facility list.

Date of Government Version: 04/24/2017
Date Data Arrived at EDR: 04/25/2017
Date Made Active in Reports: 08/04/2017
Number of Days to Update: 101

Source: San Diego Border Field Office
Telephone: 760-339-2777
Last EDR Contact: 07/21/2017
Next Scheduled EDR Contact: 11/08/2017
Data Release Frequency: Varies

INYO COUNTY:

CUPA Facility List
Cupa facility list.

Date of Government Version: 06/08/2017
Date Data Arrived at EDR: 06/09/2017
Date Made Active in Reports: 08/04/2017
Number of Days to Update: 56

Source: Inyo County Environmental Health Services
Telephone: 760-878-0238
Last EDR Contact: 08/18/2017
Next Scheduled EDR Contact: 12/04/2017
Data Release Frequency: Varies

KERN COUNTY:

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

Date of Government Version: 02/07/2017
Date Data Arrived at EDR: 02/10/2017
Date Made Active in Reports: 05/02/2017
Number of Days to Update: 81

Source: Kern County Environment Health Services Department
Telephone: 661-862-8700
Last EDR Contact: 08/03/2017
Next Scheduled EDR Contact: 11/20/2017
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: 03/06/2017
Date Data Arrived at EDR: 03/07/2017
Date Made Active in Reports: 05/17/2017
Number of Days to Update: 71

Source: Kings County Department of Public Health
Telephone: 559-584-1411
Last EDR Contact: 08/03/2017
Next Scheduled EDR Contact: 12/04/2017
Data Release Frequency: Varies

LAKE COUNTY:

CUPA Facility List
Cupa facility list

Date of Government Version: 05/09/2017
Date Data Arrived at EDR: 05/11/2017
Date Made Active in Reports: 08/09/2017
Number of Days to Update: 90

Source: Lake County Environmental Health
Telephone: 707-263-1164
Last EDR Contact: 07/17/2017
Next Scheduled EDR Contact: 10/30/2017
Data Release Frequency: Varies

LASSEN COUNTY:

CUPA Facility List
Cupa facility list

Date of Government Version: 01/13/2017
Date Data Arrived at EDR: 04/25/2017
Date Made Active in Reports: 08/04/2017
Number of Days to Update: 101

Source: Lassen County Environmental Health
Telephone: 530-251-8528
Last EDR Contact: 07/21/2017
Next Scheduled EDR Contact: 11/08/2017
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 Government Version: 03/30/2009
Date Data Arrived at EDR: 03/31/2009
Date Made Active in Reports: 10/23/2009
Number of Days to Update: 206

Source: EPA Region 9
Telephone: 415-972-3178
Last EDR Contact: 06/16/2017
Next Scheduled EDR Contact: 10/02/2017
Data Release Frequency: No Update Planned

HMS: Street Number List
Industrial Waste and Underground Storage Tank Sites.

Date of Government Version: 04/18/2017
Date Data Arrived at EDR: 04/25/2017
Date Made Active in Reports: 08/18/2017
Number of Days to Update: 115

Source: Department of Public Works
Telephone: 626-458-3517
Last EDR Contact: 07/07/2017
Next Scheduled EDR Contact: 10/23/2017
Data Release Frequency: Semi-Annually

List of Solid Waste Facilities
Solid Waste Facilities in Los Angeles County.

Date of Government Version: 04/17/2017
Date Data Arrived at EDR: 04/18/2017
Date Made Active in Reports: 05/02/2017
Number of Days to Update: 14

Source: La County Department of Public Works
Telephone: 818-458-5185
Last EDR Contact: 07/18/2017
Next Scheduled EDR Contact: 10/30/2017
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
Date Data Arrived at EDR: 01/26/2016
Date Made Active in Reports: 03/22/2016
Number of Days to Update: 56

Source: Engineering & Construction Division
Telephone: 213-473-7869
Last EDR Contact: 07/13/2017
Next Scheduled EDR Contact: 10/30/2017
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
Date Data Arrived at EDR: 04/06/2016
Date Made Active in Reports: 06/13/2016
Number of Days to Update: 68

Source: Community Health Services
Telephone: 323-890-7806
Last EDR Contact: 07/17/2017
Next Scheduled EDR Contact: 10/30/2017
Data Release Frequency: Annually

City of El Segundo Underground Storage Tank
Underground storage tank sites located in El Segundo city.

Date of Government Version: 01/17/2017
Date Data Arrived at EDR: 01/18/2017
Date Made Active in Reports: 05/10/2017
Number of Days to Update: 112

Source: City of El Segundo Fire Department
Telephone: 310-524-2236
Last EDR Contact: 07/13/2017
Next Scheduled EDR Contact: 10/30/2017
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: 03/09/2017
Date Data Arrived at EDR: 03/10/2017
Date Made Active in Reports: 05/03/2017
Number of Days to Update: 54

Source: City of Long Beach Fire Department
Telephone: 562-570-2563
Last EDR Contact: 07/21/2017
Next Scheduled EDR Contact: 11/08/2017
Data Release Frequency: Annually

City of Torrance Underground Storage Tank
Underground storage tank sites located in the city of Torrance.

Date of Government Version: 01/10/2017
Date Data Arrived at EDR: 01/13/2017
Date Made Active in Reports: 05/03/2017
Number of Days to Update: 110

Source: City of Torrance Fire Department
Telephone: 310-618-2973
Last EDR Contact: 07/07/2017
Next Scheduled EDR Contact: 10/23/2017
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: 06/01/2017
Date Data Arrived at EDR: 06/02/2017
Date Made Active in Reports: 08/04/2017
Number of Days to Update: 63

Source: Madera County Environmental Health
Telephone: 559-675-7823
Last EDR Contact: 08/21/2017
Next Scheduled EDR Contact: 12/04/2017
Data Release Frequency: Varies

MARIN COUNTY:

Underground Storage Tank Sites
Currently permitted USTs in Marin County.

Date of Government Version: 03/31/2017
Date Data Arrived at EDR: 04/06/2017
Date Made Active in Reports: 05/03/2017
Number of Days to Update: 27

Source: Public Works Department Waste Management
Telephone: 415-473-6647
Last EDR Contact: 06/29/2017
Next Scheduled EDR Contact: 10/16/2017
Data Release Frequency: Semi-Annually

MERCED COUNTY:

CUPA Facility List
CUPA facility list.

Date of Government Version: 02/22/2017
Date Data Arrived at EDR: 02/23/2017
Date Made Active in Reports: 05/17/2017
Number of Days to Update: 83

Source: Merced County Environmental Health
Telephone: 209-381-1094
Last EDR Contact: 08/18/2017
Next Scheduled EDR Contact: 12/04/2017
Data Release Frequency: Varies

MONO COUNTY:

CUPA Facility List
CUPA Facility List

Date of Government Version: 02/21/2017
Date Data Arrived at EDR: 03/02/2017
Date Made Active in Reports: 05/17/2017
Number of Days to Update: 76

Source: Mono County Health Department
Telephone: 760-932-5580
Last EDR Contact: 08/08/2017
Next Scheduled EDR Contact: 12/11/2017
Data Release Frequency: Varies

MONTEREY COUNTY:

CUPA Facility Listing
CUPA Program listing from the Environmental Health Division.

Date of Government Version: 06/22/2017
Date Data Arrived at EDR: 06/23/2017
Date Made Active in Reports: 08/09/2017
Number of Days to Update: 47

Source: Monterey County Health Department
Telephone: 831-796-1297
Last EDR Contact: 08/21/2017
Next Scheduled EDR Contact: 12/04/2017
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: 01/09/2017
Date Data Arrived at EDR: 01/11/2017
Date Made Active in Reports: 03/02/2017
Number of Days to Update: 50

Source: Napa County Department of Environmental Management
Telephone: 707-253-4269
Last EDR Contact: 08/24/2017
Next Scheduled EDR Contact: 12/11/2017
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: 05/31/2017
Date Data Arrived at EDR: 06/01/2017
Date Made Active in Reports: 08/25/2017
Number of Days to Update: 85

Source: Napa County Department of Environmental Management
Telephone: 707-253-4269
Last EDR Contact: 08/24/2017
Next Scheduled EDR Contact: 12/11/2017
Data Release Frequency: No Update Planned

NEVADA COUNTY:

CUPA Facility List
CUPA facility list.

Date of Government Version: 05/08/2017
Date Data Arrived at EDR: 05/09/2017
Date Made Active in Reports: 08/09/2017
Number of Days to Update: 92

Source: Community Development Agency
Telephone: 530-265-1467
Last EDR Contact: 07/27/2017
Next Scheduled EDR Contact: 11/13/2017
Data Release Frequency: Varies

ORANGE COUNTY:

List of Industrial Site Cleanups
Petroleum and non-petroleum spills.

Date of Government Version: 05/03/2017
Date Data Arrived at EDR: 05/11/2017
Date Made Active in Reports: 08/18/2017
Number of Days to Update: 99

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 08/07/2017
Next Scheduled EDR Contact: 11/20/2017
Data Release Frequency: Annually

List of Underground Storage Tank Cleanups
Orange County Underground Storage Tank Cleanups (LUST).

Date of Government Version: 11/04/2016
Date Data Arrived at EDR: 11/11/2016
Date Made Active in Reports: 01/23/2017
Number of Days to Update: 73

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 08/07/2017
Next Scheduled EDR Contact: 11/20/2017
Data Release Frequency: Quarterly

List of Underground Storage Tank Facilities
Orange County Underground Storage Tank Facilities (UST).

Date of Government Version: 02/06/2017
Date Data Arrived at EDR: 02/07/2017
Date Made Active in Reports: 05/03/2017
Number of Days to Update: 85

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 08/09/2017
Next Scheduled EDR Contact: 11/20/2017
Data Release Frequency: Quarterly

PLACER COUNTY:

Master List of Facilities
List includes aboveground tanks, underground tanks and cleanup sites.

Date of Government Version: 06/02/2017
Date Data Arrived at EDR: 06/06/2017
Date Made Active in Reports: 08/22/2017
Number of Days to Update: 77

Source: Placer County Health and Human Services
Telephone: 530-745-2363
Last EDR Contact: 06/02/2017
Next Scheduled EDR Contact: 09/18/2017
Data Release Frequency: Semi-Annually

PLUMAS COUNTY:

CUPA Facility List
Plumas County CUPA Program facilities.

Date of Government Version: 06/19/2017
Date Data Arrived at EDR: 07/05/2017
Date Made Active in Reports: 08/09/2017
Number of Days to Update: 35

Source: Plumas County Environmental Health
Telephone: 530-283-6355
Last EDR Contact: 07/21/2017
Next Scheduled EDR Contact: 11/08/2017
Data Release Frequency: Varies

RIVERSIDE COUNTY:

Listing of Underground Tank Cleanup Sites
Riverside County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 04/18/2017
Date Data Arrived at EDR: 04/20/2017
Date Made Active in Reports: 04/21/2017
Number of Days to Update: 1

Source: Department of Environmental Health
Telephone: 951-358-5055
Last EDR Contact: 06/19/2017
Next Scheduled EDR Contact: 10/02/2017
Data Release Frequency: Quarterly

Underground Storage Tank Tank List
Underground storage tank sites located in Riverside county.

Date of Government Version: 01/19/2017
Date Data Arrived at EDR: 01/25/2017
Date Made Active in Reports: 05/03/2017
Number of Days to Update: 98

Source: Department of Environmental Health
Telephone: 951-358-5055
Last EDR Contact: 06/19/2017
Next Scheduled EDR Contact: 10/02/2017
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: 02/06/2017
Date Data Arrived at EDR: 04/04/2017
Date Made Active in Reports: 08/09/2017
Number of Days to Update: 127

Source: Sacramento County Environmental Management
Telephone: 916-875-8406
Last EDR Contact: 07/06/2017
Next Scheduled EDR Contact: 10/16/2017
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: 05/03/2017
Date Data Arrived at EDR: 07/06/2017
Date Made Active in Reports: 08/22/2017
Number of Days to Update: 47

Source: Sacramento County Environmental Management
Telephone: 916-875-8406
Last EDR Contact: 07/06/2017
Next Scheduled EDR Contact: 10/16/2017
Data Release Frequency: Quarterly

SAN BENITO COUNTY:

CUPA Facility List

Cupa facility list

Date of Government Version: 11/30/2016
Date Data Arrived at EDR: 02/09/2017
Date Made Active in Reports: 05/25/2017
Number of Days to Update: 105

Source: San Benito County Environmental Health
Telephone: N/A
Last EDR Contact: 08/03/2017
Next Scheduled EDR Contact: 11/20/2017
Data Release Frequency: Varies

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: 05/30/2017
Date Data Arrived at EDR: 06/01/2017
Date Made Active in Reports: 08/25/2017
Number of Days to Update: 85

Source: San Bernardino County Fire Department Hazardous Materials Division
Telephone: 909-387-3041
Last EDR Contact: 08/07/2017
Next Scheduled EDR Contact: 11/20/2017
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: 06/05/2017
Date Data Arrived at EDR: 06/07/2017
Date Made Active in Reports: 08/15/2017
Number of Days to Update: 69

Source: Hazardous Materials Management Division
Telephone: 619-338-2268
Last EDR Contact: 06/07/2017
Next Scheduled EDR Contact: 09/18/2017
Data 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: 07/21/2017
Next Scheduled EDR Contact: 11/08/2017
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: 06/05/2017
Next Scheduled EDR Contact: 09/18/2017
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
Date Data Arrived at EDR: 09/19/2008
Date Made Active in Reports: 09/29/2008
Number of Days to Update: 10

Source: Department Of Public Health San Francisco County
Telephone: 415-252-3920
Last EDR Contact: 08/07/2017
Next Scheduled EDR Contact: 11/20/2017
Data Release Frequency: Quarterly

Underground Storage Tank Information
Underground storage tank sites located in San Francisco county.

Date of Government Version: 05/03/2017
Date Data Arrived at EDR: 05/08/2017
Date Made Active in Reports: 08/25/2017
Number of Days to Update: 109

Source: Department of Public Health
Telephone: 415-252-3920
Last EDR Contact: 08/21/2017
Next Scheduled EDR Contact: 11/20/2017
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: 03/21/2017
Date Data Arrived at EDR: 03/23/2017
Date Made Active in Reports: 05/09/2017
Number of Days to Update: 47

Source: Environmental Health Department
Telephone: N/A
Last EDR Contact: 06/16/2017
Next Scheduled EDR Contact: 10/02/2017
Data Release Frequency: Semi-Annually

SAN LUIS OBISPO COUNTY:

CUPA Facility List
Cupa Facility List.

Date of Government Version: 06/05/2017
Date Data Arrived at EDR: 06/16/2017
Date Made Active in Reports: 08/09/2017
Number of Days to Update: 54

Source: San Luis Obispo County Public Health Department
Telephone: 805-781-5596
Last EDR Contact: 08/18/2017
Next Scheduled EDR Contact: 12/04/2017
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: 03/15/2017
Date Data Arrived at EDR: 04/07/2017
Date Made Active in Reports: 05/10/2017
Number of Days to Update: 33

Source: San Mateo County Environmental Health Services Division
Telephone: 650-363-1921
Last EDR Contact: 06/09/2017
Next Scheduled EDR Contact: 09/25/2017
Data Release Frequency: Annually

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

Date of Government Version: 06/15/2017
Date Data Arrived at EDR: 06/19/2017
Date Made Active in Reports: 08/22/2017
Number of Days to Update: 64

Source: San Mateo County Environmental Health Services Division
Telephone: 650-363-1921
Last EDR Contact: 06/09/2017
Next Scheduled EDR Contact: 09/25/2017
Data Release Frequency: Semi-Annually

SANTA BARBARA COUNTY:

CUPA Facility Listing
CUPA Program Listing from the Environmental Health Services division.

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

Source: Santa Barbara County Public Health Department
Telephone: 805-686-8167
Last EDR Contact: 08/18/2017
Next Scheduled EDR Contact: 12/04/2017
Data Release Frequency: Varies

SANTA CLARA COUNTY:

Cupa Facility List
Cupa facility list

Date of Government Version: 02/22/2017
Date Data Arrived at EDR: 02/23/2017
Date Made Active in Reports: 05/23/2017
Number of Days to Update: 89

Source: Department of Environmental Health
Telephone: 408-918-1973
Last EDR Contact: 08/07/2017
Next Scheduled EDR Contact: 12/04/2017
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: 08/24/2017
Next Scheduled EDR Contact: 12/11/2017
Data Release Frequency: Annually

Hazardous Material Facilities
Hazardous material facilities, including underground storage tank sites.

Date of Government Version: 05/04/2017
Date Data Arrived at EDR: 05/08/2017
Date Made Active in Reports: 07/27/2017
Number of Days to Update: 80

Source: City of San Jose Fire Department
Telephone: 408-535-7694
Last EDR Contact: 08/03/2017
Next Scheduled EDR Contact: 11/20/2017
Data Release Frequency: Annually

SANTA CRUZ COUNTY:

CUPA Facility List
CUPA facility listing.

Date of Government Version: 01/21/2017
Date Data Arrived at EDR: 02/22/2017
Date Made Active in Reports: 05/23/2017
Number of Days to Update: 90

Source: Santa Cruz County Environmental Health
Telephone: 831-464-2761
Last EDR Contact: 08/18/2017
Next Scheduled EDR Contact: 12/04/2017
Data Release Frequency: Varies

SHASTA COUNTY:

CUPA Facility List
Cupa Facility List.

Date of Government Version: 06/15/2017
Date Data Arrived at EDR: 06/19/2017
Date Made Active in Reports: 08/09/2017
Number of Days to Update: 51

Source: Shasta County Department of Resource Management
Telephone: 530-225-5789
Last EDR Contact: 08/21/2017
Next Scheduled EDR Contact: 12/04/2017
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: 06/15/2017
Date Data Arrived at EDR: 06/20/2017
Date Made Active in Reports: 08/22/2017
Number of Days to Update: 63

Source: Solano County Department of Environmental Management
Telephone: 707-784-6770
Last EDR Contact: 06/09/2017
Next Scheduled EDR Contact: 09/25/2017
Data Release Frequency: Quarterly

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

Date of Government Version: 03/15/2017
Date Data Arrived at EDR: 03/17/2017
Date Made Active in Reports: 05/03/2017
Number of Days to Update: 47

Source: Solano County Department of Environmental Management
Telephone: 707-784-6770
Last EDR Contact: 06/09/2017
Next Scheduled EDR Contact: 09/25/2017
Data Release Frequency: Quarterly

SONOMA COUNTY:

Cupa Facility List
Cupa Facility list

Date of Government Version: 06/23/2017
Date Data Arrived at EDR: 06/27/2017
Date Made Active in Reports: 08/09/2017
Number of Days to Update: 43

Source: County of Sonoma Fire & Emergency Services Department
Telephone: 707-565-1174
Last EDR Contact: 06/21/2017
Next Scheduled EDR Contact: 10/09/2017
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: 07/05/2017
Date Data Arrived at EDR: 07/06/2017
Date Made Active in Reports: 08/22/2017
Number of Days to Update: 47

Source: Department of Health Services
Telephone: 707-565-6565
Last EDR Contact: 06/21/2017
Next Scheduled EDR Contact: 10/09/2017
Data Release Frequency: Quarterly

STANISLAUS COUNTY:

CUPA Facility List
Cupa facility list

Date of Government Version: 05/10/2017
Date Data Arrived at EDR: 05/16/2017
Date Made Active in Reports: 08/09/2017
Number of Days to Update: 85

Source: Stanislaus County Department of Ennvironmental Protection
Telephone: 209-525-6751
Last EDR Contact: 07/17/2017
Next Scheduled EDR Contact: 10/30/2017
Data Release Frequency: Varies

SUTTER COUNTY:

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

Date of Government Version: 06/02/2017
Date Data Arrived at EDR: 06/06/2017
Date Made Active in Reports: 08/25/2017
Number of Days to Update: 80

Source: Sutter County Department of Agriculture
Telephone: 530-822-7500
Last EDR Contact: 06/02/2017
Next Scheduled EDR Contact: 09/18/2017
Data Release Frequency: Semi-Annually

TEHAMA COUNTY:

CUPA Facility List
Cupa facilities

Date of Government Version: 05/01/2017
Date Data Arrived at EDR: 05/08/2017
Date Made Active in Reports: 08/09/2017
Number of Days to Update: 93

Source: Tehama County Department of Environmental Health
Telephone: 530-527-8020
Last EDR Contact: 08/03/2017
Next Scheduled EDR Contact: 11/20/2017
Data Release Frequency: Varies

TRINITY COUNTY:

CUPA Facility List
Cupa facility list

Date of Government Version: 04/24/2017
Date Data Arrived at EDR: 04/25/2017
Date Made Active in Reports: 08/09/2017
Number of Days to Update: 106

Source: Department of Toxic Substances Control
Telephone: 760-352-0381
Last EDR Contact: 07/21/2017
Next Scheduled EDR Contact: 11/08/2017
Data Release Frequency: Varies

TULARE COUNTY:

CUPA Facility List
Cupa program facilities

Date of Government Version: 01/05/2017
Date Data Arrived at EDR: 02/10/2017
Date Made Active in Reports: 05/25/2017
Number of Days to Update: 104

Source: Tulare County Environmental Health Services Division
Telephone: 559-624-7400
Last EDR Contact: 08/18/2017
Next Scheduled EDR Contact: 11/20/2017
Data Release Frequency: Varies

TUOLUMNE COUNTY:

CUPA Facility List
Cupa facility list

Date of Government Version: 04/27/2017
Date Data Arrived at EDR: 04/27/2017
Date Made Active in Reports: 08/10/2017
Number of Days to Update: 105

Source: Divison of Environmental Health
Telephone: 209-533-5633
Last EDR Contact: 08/18/2017
Next Scheduled EDR Contact: 11/08/2017
Data Release Frequency: Varies

VENTURA COUNTY:

Business Plan, Hazardous Waste Producers, and Operating Underground Tanks
The BWT list indicates by site address whether the Environmental Health Division has Business Plan (B), Waste Producer (W), and/or Underground Tank (T) information.

Date of Government Version: 12/27/2016
Date Data Arrived at EDR: 01/27/2017
Date Made Active in Reports: 05/10/2017
Number of Days to Update: 103

Source: Ventura County Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 07/24/2017
Next Scheduled EDR Contact: 11/08/2017
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: 06/29/2017
Next Scheduled EDR Contact: 10/16/2017
Data Release Frequency: Annually

Listing of Underground Tank Cleanup Sites
Ventura County Underground Storage Tank Cleanup 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: 08/10/2017
Next Scheduled EDR Contact: 11/27/2017
Data Release Frequency: Quarterly

Medical Waste Program List
To protect public health and safety and the environment from potential exposure to disease causing agents, the Environmental Health Division Medical Waste Program regulates the generation, handling, storage, treatment and disposal of medical waste throughout the County.

Date of Government Version: 09/26/2016
Date Data Arrived at EDR: 10/27/2016
Date Made Active in Reports: 01/24/2017
Number of Days to Update: 89

Source: Ventura County Resource Management Agency
Telephone: 805-654-2813
Last EDR Contact: 07/24/2017
Next Scheduled EDR Contact: 11/08/2017
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: 02/27/2017
Date Data Arrived at EDR: 03/15/2017
Date Made Active in Reports: 05/03/2017
Number of Days to Update: 49

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 08/24/2017
Next Scheduled EDR Contact: 09/25/2017
Data Release Frequency: Quarterly

YOLO COUNTY:

Underground Storage Tank Comprehensive Facility Report
Underground storage tank sites located in Yolo county.

Date of Government Version: 06/29/2017
Date Data Arrived at EDR: 07/05/2017
Date Made Active in Reports: 08/25/2017
Number of Days to Update: 51

Source: Yolo County Department of Health
Telephone: 530-666-8646
Last EDR Contact: 06/29/2017
Next Scheduled EDR Contact: 10/16/2017
Data Release Frequency: Annually

YUBA COUNTY:

CUPA Facility List
CUPA facility listing for Yuba County.

Date of Government Version: 01/30/2017
Date Data Arrived at EDR: 01/31/2017
Date Made Active in Reports: 05/23/2017
Number of Days to Update: 112

Source: Yuba County Environmental Health Department
Telephone: 530-749-7523
Last EDR Contact: 07/27/2017
Next Scheduled EDR Contact: 11/13/2017
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: 08/18/2017
Next Scheduled EDR Contact: 11/27/2017
Data Release Frequency: No Update Planned

NJ MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 12/31/2016
Date Data Arrived at EDR: 04/11/2017
Date Made Active in Reports: 07/27/2017
Number of Days to Update: 107

Source: Department of Environmental Protection
Telephone: N/A
Last EDR Contact: 07/10/2017
Next Scheduled EDR Contact: 10/23/2017
Data Release Frequency: Annually

NY MANIFEST: 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: 01/30/2017
Date Data Arrived at EDR: 02/01/2017
Date Made Active in Reports: 02/13/2017
Number of Days to Update: 12

Source: Department of Environmental Conservation
Telephone: 518-402-8651
Last EDR Contact: 08/03/2017
Next Scheduled EDR Contact: 11/13/2017
Data Release Frequency: Annually

PA MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 12/31/2015
Date Data Arrived at EDR: 07/22/2016
Date Made Active in Reports: 11/22/2016
Number of Days to Update: 123

Source: Department of Environmental Protection
Telephone: 717-783-8990
Last EDR Contact: 07/17/2017
Next Scheduled EDR Contact: 10/30/2017
Data Release Frequency: Annually

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 Management
Telephone: 401-222-2797
Last EDR Contact: 08/21/2017
Next Scheduled EDR Contact: 12/04/2017
Data Release Frequency: Annually

WI MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 12/31/2016
Date Data Arrived at EDR: 04/13/2017
Date Made Active in Reports: 07/14/2017
Number of Days to Update: 92

Source: Department of Natural Resources
Telephone: N/A
Last EDR Contact: 06/12/2017
Next Scheduled EDR Contact: 09/25/2017
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
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.

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 was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.
Source: FEMA
Telephone: 877-336-2627
Date of Government Version: 2003, 2015

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

GEOCHECK ®- PHYSICAL SETTING SOURCE ADDENDUM

TARGET PROPERTY ADDRESS

FORMER AGRICULTURAL PROPERTY
1692 DOVER PARKWAY
DELANO, CA 93215

TARGET PROPERTY COORDINATES

Latitude (North):	35.751795 - 35˚ 45’ 6.46’’
Longitude (West):	119.249026 - 119˚ 14’ 56.49’’
Universal Tranverse Mercator:	Zone 11
UTM X (Meters):	296645.9
UTM Y (Meters):	3958552.2
Elevation:	307 ft. above sea level

USGS TOPOGRAPHIC MAP

Target Property Map:	5639473 DELANO EAST, CA
Version Date:	2012
Southeast Map:	5639499 MCFARLAND, CA
Version Date:	2012
Southwest Map:	5639507 POND, CA
Version Date:	2012
Northwest Map:	5639072 DELANO WEST, 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.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

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).

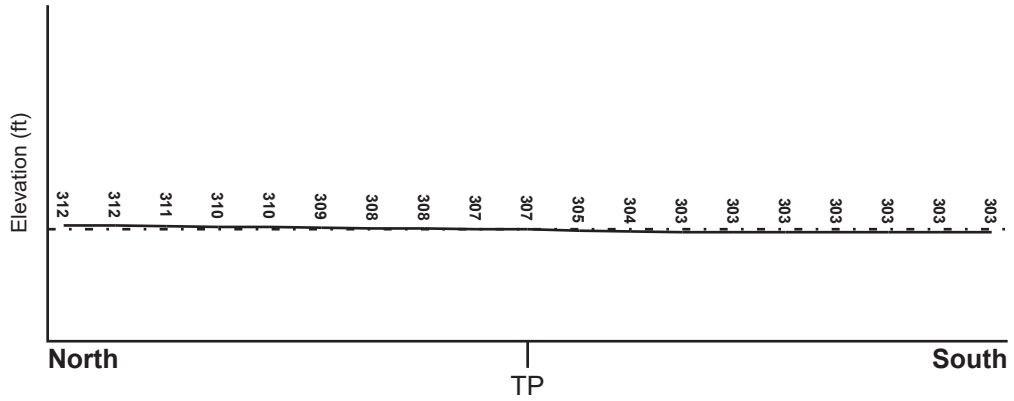
TOPOGRAPHIC INFORMATION

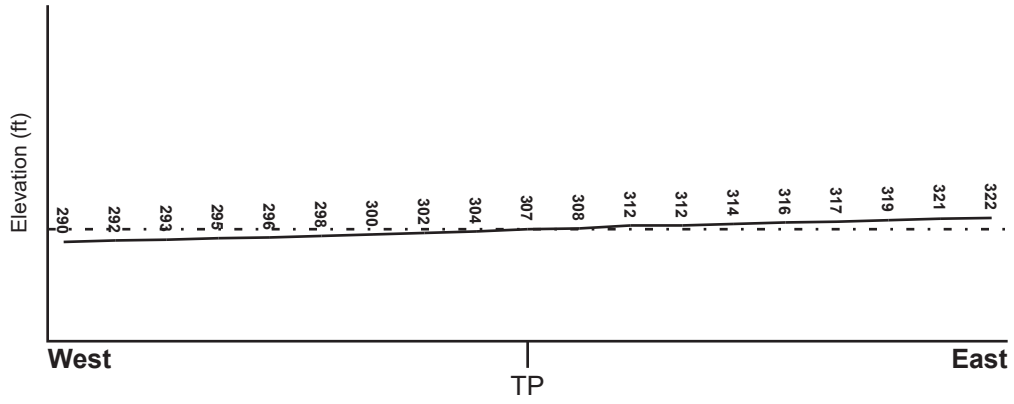
Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient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

TARGET PROPERTY TOPOGRAPHY

General Topographic Gradient: General WSW

SURROUNDING TOPOGRAPHY: ELEVATION PROFILES





Target Property Elevation: 307 ft.

0 1/2 1 Miles

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.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

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

Flood Plain Panel at Target Property	FEMA Source Type
06029C0225E	FEMA FIRM Flood data

Additional Panels in search area:	FEMA Source Type
06107C2270E	FEMA FIRM Flood data
06029C0200E	FEMA FIRM Flood data
06029C0725E	FEMA FIRM Flood data
06029C0750E	FEMA FIRM Flood data

NATIONAL WETLAND INVENTORY

NWI Quad at Target Property	NWI Electronic Data Coverage
DELANO EAST	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:	Not 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	LOCATION FROM TP	GENERAL DIRECTION GROUNDWATER FLOW
Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

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

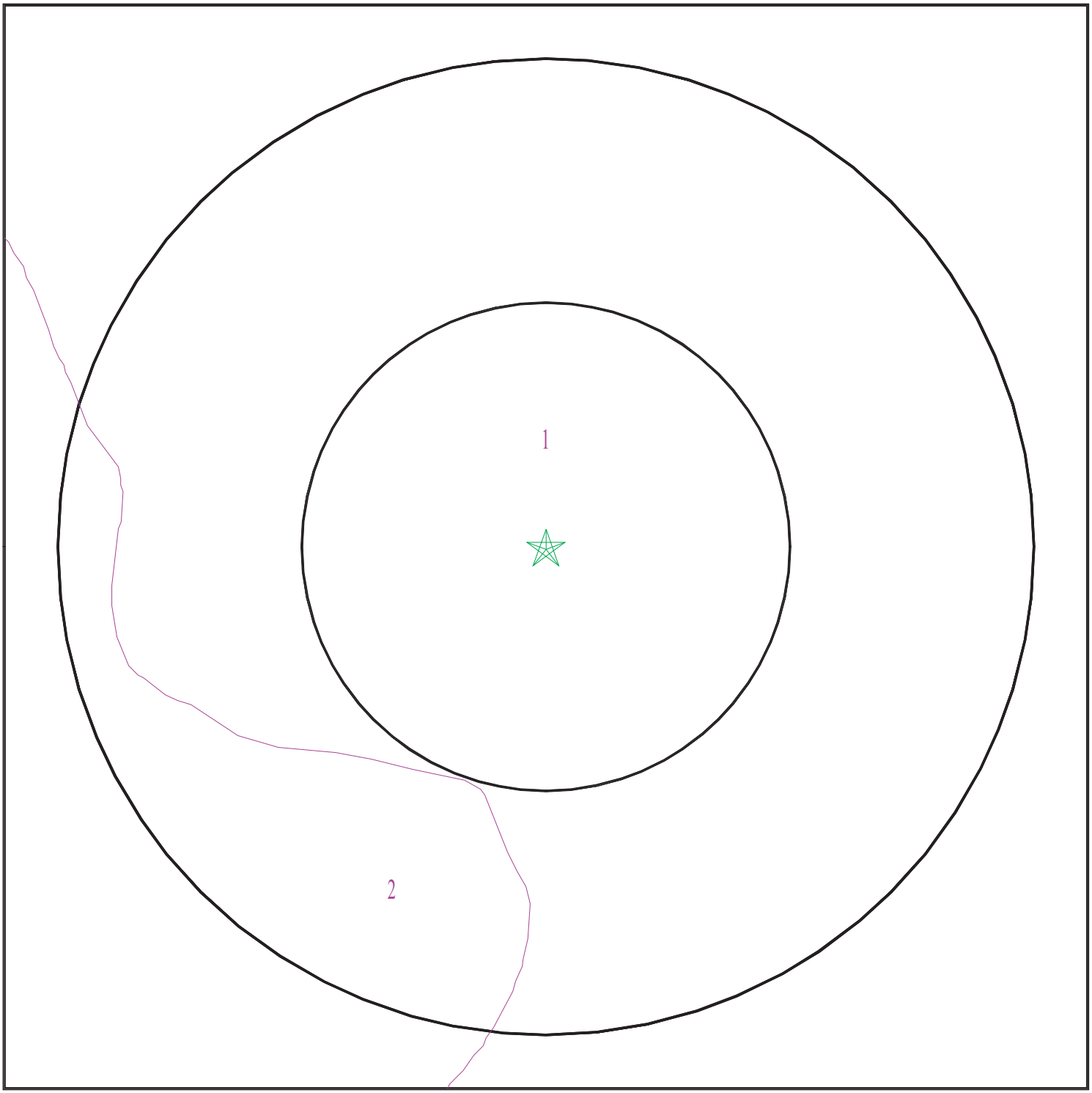
Era:	Cenozoic
System:	Quaternary
Series:	Quaternary
Code:	Q *(decoded above as Era, System & Series)*

GEOLOGIC AGE IDENTIFICATION

Category: Stratifed Sequence

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).

SSURGO SOIL MAP - 5034705.2s



Target Property
SSURGO Soil
Water

0 1/16 1/8 1/4 Miles

N

SITE NAME:	Former Agricultural Property	CLIENT:	Avocet Environmental, Inc.
ADDRESS:	1692 Dover Parkway Delano CA 93215	CONTACT:	Scott Ruud
		INQUIRY #:	5034705.2s
LAT/LONG:	35.751795 / 119.249026	DATE:	August 28, 2017 7:16 pm

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

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: WASCO

Soil Surface Texture:
Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

Hydric Status: Not 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 conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	14 inches		Not reported	Not reported	Max: 42 Min: 14	Max: 7.8 Min: 6.1
2	14 inches	59 inches		Not reported	Not reported	Max: 42 Min: 14	Max: 8.4 Min: 6.6

Soil Map ID: 2

Soil Component Name: KIMBERLINA

Soil Surface Texture:
Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Hydric Status: Not 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 conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	9 inches		Not reported	Not reported	Max: 42 Min: 14	Max: 8.4 Min: 6.6
2	9 inches	44 inches		Not reported	Not reported	Max: 42 Min: 14	Max: 8.4 Min: 7.9
3	44 inches	70 inches		Not reported	Not reported	Max: 14 Min: 4	Max: 8.4 Min: 7.9

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 0.001 miles
State Database	1.000

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
1	USGS40000167096	0 - 1/8 Mile East
4	USGS40000167135	1/4 - 1/2 Mile NW
A5	USGS40000167057	1/4 - 1/2 Mile SE
6	USGS40000167095	1/4 - 1/2 Mile East
8	USGS40000167155	1/4 - 1/2 Mile NNW
9	USGS40000167007	1/2 - 1 Mile SE
10	USGS40000167053	1/2 - 1 Mile ESE
11	USGS40000167165	1/2 - 1 Mile North
B13	USGS40000167161	1/2 - 1 Mile NNW
14	USGS40000167179	1/2 - 1 Mile NNW

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
16	USGS40000166991	1/2 - 1 Mile SW
19	USGS40000166960	1/2 - 1 Mile SSE
20	USGS40000167157	1/2 - 1 Mile WNW
C21	USGS40000167154	1/2 - 1 Mile ENE
22	USGS40000166952	1/2 - 1 Mile SSE
23	USGS40000167219	1/2 - 1 Mile NE
24	USGS40000167247	1/2 - 1 Mile North
25	USGS40000167189	1/2 - 1 Mile NW
26	USGS40000166932	1/2 - 1 Mile SSE

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

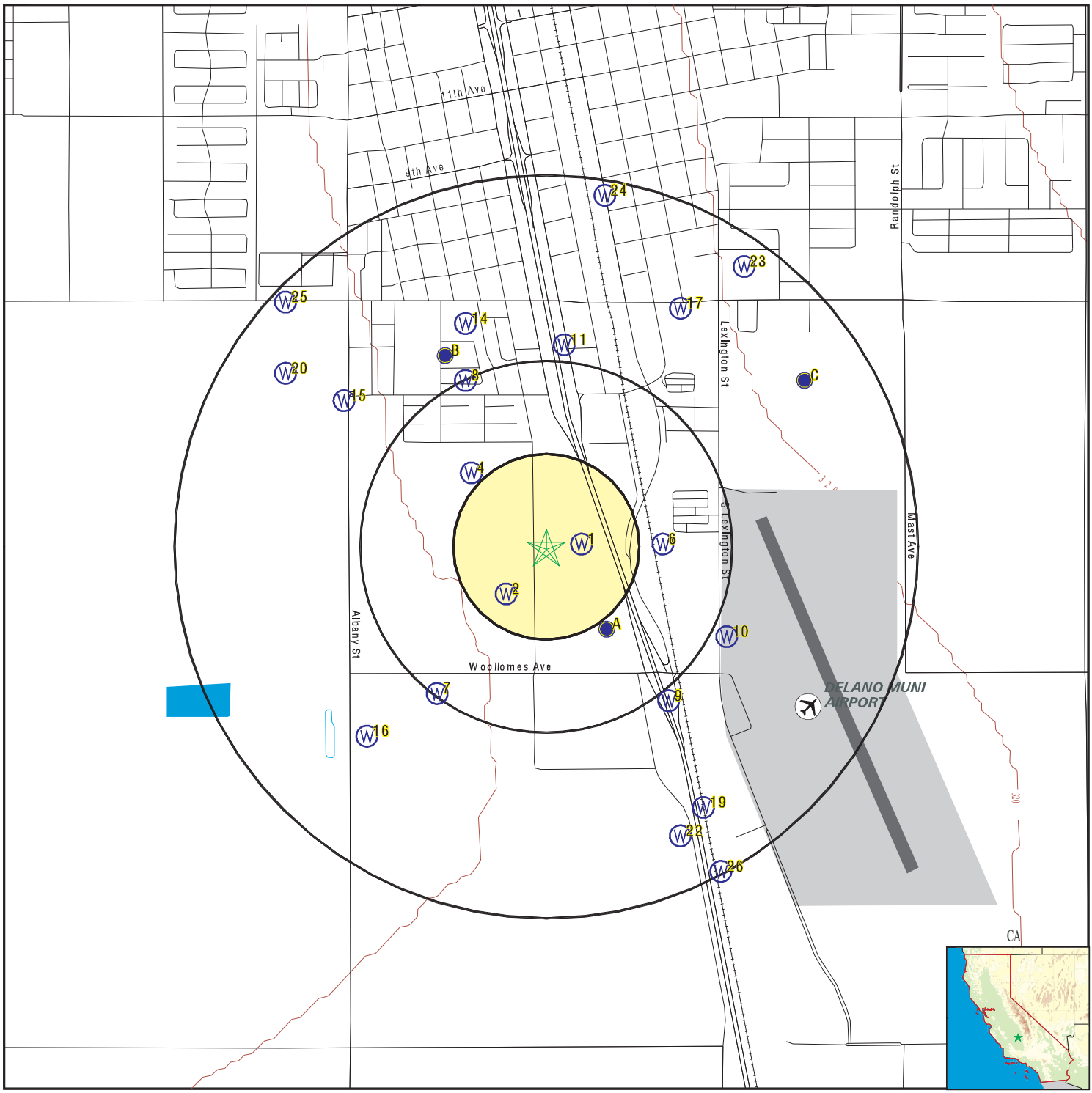
MAP ID	WELL ID	LOCATION FROM TP
No PWS System Found		

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

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
2	15887	1/8 - 1/4 Mile SW
A3	CADW60000012301	1/4 - 1/2 Mile SSE
7	15886	1/4 - 1/2 Mile SW
B12	15885	1/2 - 1 Mile NNW
15	CADW60000012295	1/2 - 1 Mile NW
17	CADW60000012294	1/2 - 1 Mile NNE
C18	CADW60000035916	1/2 - 1 Mile NE

PHYSICAL SETTING SOURCE MAP - 5034705.2s



County Boundary
Major Roads
Contour Lines
Earthquake Fault Lines
Airports
Earthquake epicenter, Richter 5 or greater
Water Wells
Public Water Supply Wells
Cluster of Multiple Icons

0 1/4 1/2 1 Miles

Groundwater Flow Direction
GI Indeterminate Groundwater Flow at Location
GV Groundwater Flow Varies at Location
HD Closest Hydrogeological Data
Oil, gas or related wells

N

SITE NAME: Former Agricultural Property	CLIENT: Avocet Environmental, Inc.
ADDRESS: 1692 Dover Parkway Delano CA 93215	CONTACT: Scott Ruud INQUIRY #: 5034705.2s
LAT/LONG: 35.751795 / 119.249026	DATE: August 28, 2017 7:15 pm

Map ID Direction Distance Elevation	Database	EDR ID Number
1 **East** **0 - 1/8 Mile** **Higher**	**FED USGS**	**USGS40000167096**

Org. Identifier:	USGS-CA		
Formal name:	USGS California Water Science Center		
Monloc Identifier:	USGS-354507119144701		
Monloc name:	025S025E14R001M		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	18030012	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	35.7518981
Longitude:	-119.2473313	Sourcemap scale:	63360
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	311.00
Vert measure units:	feet	Vertacc measure val:	52
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	Central Valley aquifer system		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	19521021	Welldepth:	300
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
1952-10-21	151.20	

---

2 **SW** **1/8 - 1/4 Mile** **Lower**	**CA WELLS**	**15887**

Water System Information:

Prime Station Code:	25S/25E-23H02 M	User ID:	CYA
FRDS Number:	1510005013	County:	Kern
District Number:	12	Station Type:	WELL/AMBNT/MUN/INTAKE/SUPPLY
Water Type:	Well/Groundwater	Well Status:	Active Treated
Source Lat/Long:	354500.0 1191500.0	Precision:	Undefined
Source Name:	WELL 14 - TREATED		
System Number:	1510005		
System Name:	DELANO, CITY OF		
Organization That Operates System:			
	725 S LEXINGTON DELANO, CA 93215		
Pop Served:	29944	Connections:	6098
Area Served:	DELANO		

Sample Collected:	26-JAN-11	Findings:	6.1 UG/L
Chemical:	ARSENIC		
Sample Collected:	11-APR-11	Findings:	6.4 UG/L
Chemical:	ARSENIC		
Sample Collected:	25-APR-11	Findings:	720. US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	01-JUL-11	Findings:	6.1 UG/L
Chemical:	ARSENIC		
Sample Collected:	06-JUL-11	Findings:	700. US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	11-JUL-11	Findings:	24. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	09-AUG-11	Findings:	1.01 PCI/L
Chemical:	RADIUM 228		
Sample Collected:	09-AUG-11	Findings:	0.471 PCI/L
Chemical:	RADIUM 228 COUNTING ERROR		
Sample Collected:	04-OCT-11	Findings:	690. US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	04-OCT-11	Findings:	5. UG/L
Chemical:	ARSENIC		
Sample Collected:	10-NOV-11	Findings:	0.396 PCI/L
Chemical:	RADIUM 228 COUNTING ERROR		
Sample Collected:	29-NOV-11	Findings:	660. US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	10-JAN-12	Findings:	720. US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	10-JAN-12	Findings:	6.4 UG/L
Chemical:	ARSENIC		
Sample Collected:	18-JAN-12	Findings:	0.433 PCI/L
Chemical:	RADIUM 228 COUNTING ERROR		
Sample Collected:	17-APR-12	Findings:	680. US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	17-APR-12	Findings:	6.2 UG/L
Chemical:	ARSENIC		
Sample Collected:	24-MAY-12	Findings:	0.382 PCI/L
Chemical:	RADIUM 228 COUNTING ERROR		
Sample Collected:	28-AUG-12	Findings:	0.328 PCI/L
Chemical:	RADIUM 228 COUNTING ERROR		
Sample Collected:	28-AUG-12	Findings:	1. UNITS
Chemical:	COLOR		
Sample Collected:	28-AUG-12	Findings:	699. US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	28-AUG-12	Findings:	8.62
Chemical:	PH, LABORATORY		

Sample Collected:	28-AUG-12	Findings:	36. MG/L
Chemical:	ALKALINITY (TOTAL) AS CACO3		
Sample Collected:	28-AUG-12	Findings:	38. MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	28-AUG-12	Findings:	2.9 MG/L
Chemical:	CARBONATE ALKALINITY		
Sample Collected:	28-AUG-12	Findings:	38. MG/L
Chemical:	HARDNESS (TOTAL) AS CACO3		
Sample Collected:	28-AUG-12	Findings:	15. MG/L
Chemical:	CALCIUM		
Sample Collected:	28-AUG-12	Findings:	0.2 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	28-AUG-12	Findings:	120. MG/L
Chemical:	SODIUM		
Sample Collected:	28-AUG-12	Findings:	97. MG/L
Chemical:	CHLORIDE		
Sample Collected:	28-AUG-12	Findings:	120. MG/L
Chemical:	SULFATE		
Sample Collected:	28-AUG-12	Findings:	0.29 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	28-AUG-12	Findings:	8.2 UG/L
Chemical:	ARSENIC		
Sample Collected:	28-AUG-12	Findings:	430. MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	28-AUG-12	Findings:	28. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	28-AUG-12	Findings:	0.49 NTU
Chemical:	TURBIDITY, LABORATORY		
Sample Collected:	28-AUG-12	Findings:	650. US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	05-NOV-12	Findings:	0.291 PCI/L
Chemical:	RADIUM 228 COUNTING ERROR		
Sample Collected:	05-NOV-12	Findings:	690. US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	05-NOV-12	Findings:	8.4 UG/L
Chemical:	ARSENIC		
Sample Collected:	11-FEB-13	Findings:	7.1 UG/L
Chemical:	ARSENIC		
Sample Collected:	05-MAR-13	Findings:	0.341 PCI/L
Chemical:	RADIUM 228 COUNTING ERROR		
Sample Collected:	11-MAR-13	Findings:	650. US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	30-APR-13	Findings:	0.327 PCI/L
Chemical:	RADIUM 228 COUNTING ERROR		

Sample Collected:	30-APR-13	Findings:	680. US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	30-APR-13	Findings:	6.2 UG/L
Chemical:	ARSENIC		
Sample Collected:	15-JUL-13	Findings:	0.353 PCI/L
Chemical:	RADIUM 228 COUNTING ERROR		
Sample Collected:	15-JUL-13	Findings:	690. US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	15-JUL-13	Findings:	6. UG/L
Chemical:	ARSENIC		
Sample Collected:	16-JUL-13	Findings:	26. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	02-OCT-13	Findings:	6.1 UG/L
Chemical:	ARSENIC		
Sample Collected:	02-OCT-13	Findings:	0.406 PCI/L
Chemical:	RADIUM 228 COUNTING ERROR		
Sample Collected:	23-OCT-13	Findings:	680. US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	13-JAN-14	Findings:	0.335 PCI/L
Chemical:	RADIUM 228 COUNTING ERROR		
Sample Collected:	13-JAN-14	Findings:	680. US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	13-JAN-14	Findings:	5.5 UG/L
Chemical:	ARSENIC		
Sample Collected:	07-APR-14	Findings:	7.3 UG/L
Chemical:	ARSENIC		
Sample Collected:	07-APR-14	Findings:	0.366 PCI/L
Chemical:	RADIUM 228 COUNTING ERROR		
Sample Collected:	12-MAY-14	Findings:	670. US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	01-JUL-14	Findings:	680. US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	01-JUL-14	Findings:	8.4
Chemical:	PH, LABORATORY		
Sample Collected:	01-JUL-14	Findings:	38. MG/L
Chemical:	ALKALINITY (TOTAL) AS CACO3		
Sample Collected:	01-JUL-14	Findings:	42. MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	01-JUL-14	Findings:	2.1 MG/L
Chemical:	CARBONATE ALKALINITY		
Sample Collected:	01-JUL-14	Findings:	39. MG/L
Chemical:	HARDNESS (TOTAL) AS CACO3		
Sample Collected:	01-JUL-14	Findings:	15. MG/L
Chemical:	CALCIUM		

Sample Collected:	01-JUL-14	Findings:	0.2 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	01-JUL-14	Findings:	120. MG/L
Chemical:	SODIUM		
Sample Collected:	01-JUL-14	Findings:	92. MG/L
Chemical:	CHLORIDE		
Sample Collected:	01-JUL-14	Findings:	120. MG/L
Chemical:	SULFATE		
Sample Collected:	01-JUL-14	Findings:	0.22 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	01-JUL-14	Findings:	5.9 UG/L
Chemical:	ARSENIC		
Sample Collected:	01-JUL-14	Findings:	410. MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	01-JUL-14	Findings:	- 0.4
Chemical:	LANGELIER INDEX @ 60 C		
Sample Collected:	01-JUL-14	Findings:	27. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	01-JUL-14	Findings:	12.
Chemical:	AGGRSSIVE INDEX (CORROSIVITY)		
Sample Collected:	28-JUL-14	Findings:	0.3 PCI/L
Chemical:	RADIUM 228 COUNTING ERROR		
Sample Collected:	11-AUG-14	Findings:	3.7 UG/L
Chemical:	CHROMIUM, HEXAVALENT		
Sample Collected:	07-OCT-14	Findings:	5.7 UG/L
Chemical:	ARSENIC		
Sample Collected:	19-DEC-14	Findings:	670. US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	21-JAN-15	Findings:	6.4 UG/L
Chemical:	ARSENIC		
Sample Collected:	20-MAY-15	Findings:	5.9 UG/L
Chemical:	ARSENIC		
Sample Collected:	13-JUL-15	Findings:	4.5 UG/L
Chemical:	ARSENIC		
Sample Collected:	21-JUL-15	Findings:	28. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	13-OCT-15	Findings:	5. UG/L
Chemical:	ARSENIC		
Sample Collected:	27-OCT-15	Findings:	670. US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	12-JAN-16	Findings:	720. US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	12-JAN-16	Findings:	5.2 UG/L
Chemical:	ARSENIC		

Map ID Direction Distance Elevation	Database	EDR ID Number
A3 **SSE** **1/4 - 1/2 Mile** **Higher**	**CA WELLS**	**CADW60000012301**

Objectid:	12301
Latitude:	35.7486
Longitude:	-119.2466
Site code:	357486N1192466W001
State well numbe:	25S25E23B001M
Local well name:	”
Well use id:	6
Well use descrip:	Unknown
County id:	15
County name:	Kern
Basin code:	’5-22.14’
Basin desc:	Kern County
Dwr region id:	80237
Dwr region:	South Central Region Office
Site id:	CADW60000012301

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4 **NW** **1/4 - 1/2 Mile** **Lower**		**FED USGS**	**USGS40000167135**

Org. Identifier:	USGS-CA		
Formal name:	USGS California Water Science Center		
Monloc Identifier:	USGS-354517119150601		
Monloc name:	025S025E14P001M		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	18030012	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	35.7546759
Longitude:	-119.2526093	Sourcemap scale:	63360
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	302.00
Vert measure units:	feet	Vertacc measure val:	52
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
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 **SE** **1/4 - 1/2 Mile** **Higher**	**FED USGS**	**USGS40000167057**

Org. Identifier:	USGS-CA		
Formal name:	USGS California Water Science Center		
Monloc Identifier:	USGS-354455119144101		
Monloc name:	025S025E23B001M		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	18030012	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	35.7485647
Longitude:	-119.2456646	Sourcemap scale:	63360
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	308.00
Vert measure units:	feet	Vertacc measure val:	2
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	Central Valley aquifer system		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	19580201	Welldepth:	400
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
1958-02-01	123.00	

6
East
1/4 - 1/2 Mile
Higher

FED USGS **USGS40000167095**

Org. Identifier:	USGS-CA		
Formal name:	USGS California Water Science Center		
Monloc Identifier:	USGS-354507119143301		
Monloc name:	025S025E13N001M		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	18030012	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	35.751898
Longitude:	-119.2434423	Sourcemap scale:	63360
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	308.00
Vert measure units:	feet	Vertacc measure val:	52
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
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

7
SW **CA WELLS** **15886**
1/4 - 1/2 Mile
Lower

Water System Information:

Prime Station Code:	25S/25E-23D01 M	User ID:	15C
FRDS Number:	1502455001	County:	Kern
District Number:	45	Station Type:	WELL/AMBNT/MUN/INTAKE
Water Type:	Well/Groundwater	Well Status:	Active Raw
Source Lat/Long:	354446.0 1191512.0	Precision:	0.5 Mile (30 Seconds)
Source Name:	WELL 01		
System Number:	1502455		
System Name:	BOWEN WATER SYSTEM		
Organization That Operates System:	Not Reported		
Pop Served:	Unknown, Small System	Connections:	Unknown, Small System
Area Served:	Not Reported		

8
NNW **FED USGS** **USGS40000167155**
1/4 - 1/2 Mile
Lower

Org. Identifier:	USGS-CA		
Formal name:	USGS California Water Science Center		
Monloc Identifier:	USGS-354530119150701		
Monloc name:	025S025E14L001M		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	18030012	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	35.758287
Longitude:	-119.252887	Sourcemap scale:	63360
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	303.00
Vert measure units:	feet	Vertacc measure val:	52
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
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

Map ID Direction Distance Elevation	Database	EDR ID Number
9 **SE** **1/2 - 1 Mile** **Higher**	**FED USGS**	**USGS40000167007**

Org. Identifier:	USGS-CA		
Formal name:	USGS California Water Science Center		
Monloc Identifier:	USGS-354445119143201		
Monloc name:	025S025E23H001M		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	18030012	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	35.745787
Longitude:	-119.2431645	Sourcemap scale:	63360
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	304.00
Vert measure units:	feet	Vertacc measure val:	2
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	Central Valley aquifer system		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	19580201	Welldepth:	Not Reported
Welldepth units:	Not Reported	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
1958-02-01	121.30	

10 **ESE** **1/2 - 1 Mile** **Higher**	**FED USGS**	**USGS40000167053**

Org. Identifier:	USGS-CA		
Formal name:	USGS California Water Science Center		
Monloc Identifier:	USGS-354454119142201		
Monloc name:	025S025E23A001M		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	18030012	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	35.7482869
Longitude:	-119.2403866	Sourcemap scale:	63360
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	312.00
Vert measure units:	feet	Vertacc measure val:	2
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	Central Valley aquifer system		
Formation type:	Not Reported		

Aquifer type:	Not Reported		
Construction date:	19340101	Welldepth:	Not Reported
Welldepth units:	Not Reported	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

11
North
1/2 - 1 Mile
Higher

FED USGS **USGS40000167165**

Org. Identifier:	USGS-CA		
Formal name:	USGS California Water Science Center		
Monloc Identifier:	USGS-354535119145001		
Monloc name:	025S025E14H001M		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	18030012	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	35.7596759
Longitude:	-119.2481647	Sourcemap scale:	63360
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	310.00
Vert measure units:	feet	Vertacc measure val:	52
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	Central Valley aquifer system		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	19561119	Welldepth:	Not Reported
Welldepth units:	Not Reported	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
1956-11-19	139.50	

B12
NNW
1/2 - 1 Mile
Lower

CA WELLS **15885**

Water System Information:

Prime Station Code:	25S/25E-14D01 M	User ID:	CYA
FRDS Number:	1510005016	County:	Kern
District Number:	12	Station Type:	WELL/AMBNT/MUN/INTAKE
Water Type:	Well/Groundwater	Well Status:	Active Treated
Source Lat/Long:	354534.0 1191509.0	Precision:	100 Feet (one Second)
Source Name:	WELL 19 - TREATED		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

System Number: 1510005
System Name: DELANO, CITY OF
Organization That Operates System:
725 S LEXINGTON
DELANO, CA 93215

Pop Served: 29944 Connections: 6098
Area Served: DELANO

Sample Collected:	26-JAN-11	Findings:	15. UG/L
Chemical:	ARSENIC		
Sample Collected:	11-APR-11	Findings:	15. UG/L
Chemical:	ARSENIC		
Sample Collected:	25-APR-11	Findings:	580. US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	01-JUL-11	Findings:	13. UG/L
Chemical:	ARSENIC		
Sample Collected:	06-JUL-11	Findings:	560. US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	11-JUL-11	Findings:	19. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	09-AUG-11	Findings:	10.3 PCI/L
Chemical:	GROSS ALPHA		
Sample Collected:	09-AUG-11	Findings:	0.33 PCI/L
Chemical:	GROSS ALPHA COUNTING ERROR		
Sample Collected:	04-OCT-11	Findings:	560. US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	04-OCT-11	Findings:	13. UG/L
Chemical:	ARSENIC		
Sample Collected:	14-DEC-11	Findings:	740. US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	04-JUN-12	Findings:	19. UG/L
Chemical:	ARSENIC		
Sample Collected:	12-JUN-12	Findings:	540. US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	11-JUL-12	Findings:	1. UNITS
Chemical:	COLOR		
Sample Collected:	11-JUL-12	Findings:	549. US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	11-JUL-12	Findings:	8.86
Chemical:	PH, LABORATORY		
Sample Collected:	11-JUL-12	Findings:	57. MG/L
Chemical:	ALKALINITY (TOTAL) AS CACO3		
Sample Collected:	11-JUL-12	Findings:	57. MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	11-JUL-12	Findings:	6.2 MG/L
Chemical:	CARBONATE ALKALINITY		

Sample Collected:	11-JUL-12	Findings:	26. MG/L
Chemical:	HARDNESS (TOTAL) AS CACO3		
Sample Collected:	11-JUL-12	Findings:	10. MG/L
Chemical:	CALCIUM		
Sample Collected:	11-JUL-12	Findings:	100. MG/L
Chemical:	SODIUM		
Sample Collected:	11-JUL-12	Findings:	74. MG/L
Chemical:	CHLORIDE		
Sample Collected:	11-JUL-12	Findings:	73. MG/L
Chemical:	SULFATE		
Sample Collected:	11-JUL-12	Findings:	0.46 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	11-JUL-12	Findings:	18. UG/L
Chemical:	ARSENIC		
Sample Collected:	11-JUL-12	Findings:	270. MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	11-JUL-12	Findings:	19. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	11-JUL-12	Findings:	0.15 NTU
Chemical:	TURBIDITY, LABORATORY		
Sample Collected:	24-JUL-12	Findings:	540. US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	16-OCT-12	Findings:	550. US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	16-OCT-12	Findings:	15. UG/L
Chemical:	ARSENIC		
Sample Collected:	22-OCT-12	Findings:	550. US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	22-OCT-12	Findings:	15. UG/L
Chemical:	ARSENIC		

B13
NNW
1/2 - 1 Mile
Lower

FED USGS **USGS40000167161**

Org. Identifier:	USGS-CA		
Formal name:	USGS California Water Science Center		
Monloc Identifier:	USGS-354533119151201		
Monloc name:	025S025E14D001M		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	18030012	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	35.7591203
Longitude:	-119.254276	Sourcemap scale:	24000

Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	302
Vert measure units:	feet	Vertacc measure val:	2.5
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	Central Valley aquifer system		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	19811009	Welldepth:	1420
Welldepth units:	ft	Wellholedepth:	1440
Wellholedepth units:	ft		

Ground-water levels, Number of Measurements: 0

14
NNW
1/2 - 1 Mile
Lower

FED USGS **USGS40000167179**

Org. Identifier:	USGS-CA		
Formal name:	USGS California Water Science Center		
Monloc Identifier:	USGS-354538119150701		
Monloc name:	025S025E14F001M		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	18030012	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	35.7605092
Longitude:	-119.252887	Sourcemap scale:	63360
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	304.00
Vert measure units:	feet	Vertacc measure val:	52
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	Central Valley aquifer system		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	19590302	Welldepth:	Not Reported
Welldepth units:	Not Reported	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
1959-03-02	129.20	

15
NW
1/2 - 1 Mile
Lower

CA WELLS **CADW60000012295**

Objectid:	12295
Latitude:	35.7575
Longitude:	-119.2587
Site code:	357575N1192587W001
State well numbe:	25S25E15H002M
Local well name:	’’
Well use id:	6
Well use descrip:	Unknown
County id:	15
County name:	Kern
Basin code:	’5-22.14’
Basin desc:	Kern County
Dwr region id:	80237
Dwr region:	South Central Region Office
Site id:	CADW60000012295

16
SW
1/2 - 1 Mile
Lower

FED USGS **USGS40000166991**

Org. Identifier:	USGS-CA		
Formal name:	USGS California Water Science Center		
Monloc Identifier:	USGS-354440119152401		
Monloc name:	025S025E22H001M		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	18030012	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	35.7443982
Longitude:	-119.2576095	Sourcemap scale:	63360
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	293.00
Vert measure units:	feet	Vertacc measure val:	2
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
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

17
NNE
1/2 - 1 Mile
Higher

CA WELLS **CADW60000012294**

Objectid:	12294
Latitude:	35.7611
Longitude:	-119.2426
Site code:	357611N1192426W001
State well numbe:	25S25E14A001M
Local well name:	’’
Well use id:	6
Well use descrip:	Unknown
County id:	15
County name:	Kern

Basin code:	’5-22.14’
Basin desc:	Kern County
Dwr region id:	80237
Dwr region:	South Central Region Office
Site id:	CADW60000012294

C18
NE
1/2 - 1 Mile
Higher

CA WELLS **CADW60000035916**

Objectid:	35916
Latitude:	35.7583
Longitude:	-119.2371
Site code:	357583N1192371W001
State well numbe:	25S25E13L001M
Local well name:	’’
Well use id:	6
Well use descrip:	Unknown
County id:	15
County name:	Kern
Basin code:	’5-22.14’
Basin desc:	Kern County
Dwr region id:	80237
Dwr region:	South Central Region Office
Site id:	CADW60000035916

19
SSE
1/2 - 1 Mile
Higher

FED USGS **USGS40000166960**

Org. Identifier:	USGS-CA		
Formal name:	USGS California Water Science Center		
Monloc Identifier:	USGS-354430119142601		
Monloc name:	025S025E23J002M		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	18030012	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	35.7416204
Longitude:	-119.2414977	Sourcemap scale:	63360
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	305.00
Vert measure units:	feet	Vertacc measure val:	2
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	Central Valley aquifer system		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	Not Reported	Welldepth:	228
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

Map ID Direction Distance Elevation	Database	EDR ID Number
20 **WNW** **1/2 - 1 Mile** **Lower**	**FED USGS**	**USGS40000167157**

Org. Identifier:	USGS-CA		
Formal name:	USGS California Water Science Center		
Monloc Identifier:	USGS-354531119153801		
Monloc name:	025S025E15J001M		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	18030012	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	35.7585648
Longitude:	-119.2614986	Sourcemap scale:	63360
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	295.00
Vert measure units:	feet	Vertacc measure val:	52
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	Central Valley aquifer system		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	19521017	Welldepth:	509
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
1952-10-17	125.60	

C21 **ENE** **1/2 - 1 Mile** **Higher**	**FED USGS**	**USGS40000167154**

Org. Identifier:	USGS-CA		
Formal name:	USGS California Water Science Center		
Monloc Identifier:	USGS-354530119140701		
Monloc name:	025S025E13L001M		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	18030012	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	35.7582869
Longitude:	-119.2362198	Sourcemap scale:	63360
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	319.00
Vert measure units:	feet	Vertacc measure val:	52
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	Central Valley aquifer system		
Formation type:	Not Reported		

Aquifer type:	Not Reported		
Construction date:	19550701	Welldepth:	300
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
1955-07-01	120.00	

22
SSE
1/2 - 1 Mile
Higher

FED USGS **USGS40000166952**

Org. Identifier:	USGS-CA		
Formal name:	USGS California Water Science Center		
Monloc Identifier:	USGS-354426119143001		
Monloc name:	025S025E23J003M		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	18030012	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	35.7405093
Longitude:	-119.2426089	Sourcemap scale:	63360
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	304.00
Vert measure units:	feet	Vertacc measure val:	2
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
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

23
NE
1/2 - 1 Mile
Higher

FED USGS **USGS40000167219**

Org. Identifier:	USGS-CA		
Formal name:	USGS California Water Science Center		
Monloc Identifier:	USGS-354546119141901		
Monloc name:	025S025E13D001M		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	18030012	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	35.7627314
Longitude:	-119.2395533	Sourcemap scale:	63360

Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	321.00
Vert measure units:	feet	Vertacc measure val:	52
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	Central Valley aquifer system		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	19500101	Welldepth:	1000
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

24
North
1/2 - 1 Mile
Higher

FED USGS **USGS40000167247**

Org. Identifier:	USGS-CA		
Formal name:	USGS California Water Science Center		
Monloc Identifier:	USGS-354556119144301		
Monloc name:	025S025E14A001M		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	18030012	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	35.7655092
Longitude:	-119.2462202	Sourcemap scale:	63360
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	314.00
Vert measure units:	feet	Vertacc measure val:	52
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
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

25
NW
1/2 - 1 Mile
Lower

FED USGS **USGS40000167189**

Org. Identifier:	USGS-CA		
Formal name:	USGS California Water Science Center		
Monloc Identifier:	USGS-354541119153801		
Monloc name:	025S025E15H002M		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	18030012	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	35.7613426
Longitude:	-119.2614986	Sourcemap scale:	63360

Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	296.00
Vert measure units:	feet	Vertacc measure val:	52
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
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

26
SSE
1/2 - 1 Mile
Higher

FED USGS **USGS40000166932**

Org. Identifier:	USGS-CA		
Formal name:	USGS California Water Science Center		
Monloc Identifier:	USGS-354421119142301		
Monloc name:	025S025E23J001M		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	18030012	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	35.7391204
Longitude:	-119.2406643	Sourcemap scale:	63360
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	307.00
Vert measure units:	feet	Vertacc measure val:	2
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	Central Valley aquifer system		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	19460101	Welldepth:	Not Reported
Welldepth units:	Not Reported	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS
RADON

AREA RADON INFORMATION

State Database: CA Radon

Radon Test Results

Zipcode	Num Tests	> 4 pCi/L
93215	3	0

Federal EPA Radon Zone for KERN County: 2

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 KERN COUNTY, CA

Number of sites tested: 94

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	1.422 pCi/L	98%	2%	0%
Living Area - 2nd Floor	Not Reported	Not Reported	Not Reported	Not Reported
Basement	Not Reported	Not Reported	Not Reported	Not Reported

PHYSICAL SETTING SOURCE RECORDS SEARCHED

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 was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.
Source: FEMA
Telephone: 877-336-2627
Date of Government Version: 2003, 2015

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

Appendix G

Laboratory Analytical Report

AVOCET
ENVIRONMENTAL, INC.

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WORK ORDER NUMBER: 17-09-0143

The difference is service

AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: Avocet Environmental, Inc.

Client Project Name: Dover Parkway Adjacent Property / 1531.001

Attention: Deke Siren
1 Technology Drive
Suite C515
Irvine, CA 92618-5302

Approved for release on 09/12/2017 by:
Virendra Patel
Project Manager

ResultLink ▸

Email your PM ▸

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Contents

Client Project Name: Dover Parkway Adjacent Property / 1531.001
Work Order Number: 17-09-0143

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Work Order Narrative

Work Order: 17-09-0143 Page 1 of 1

Condition Upon Receipt:

Samples were received under Chain-of-Custody (COC) on 09/05/17. They were assigned to Work Order 17-09-0143.

Unless otherwise noted on the Sample Receiving forms all samples were received in good condition and within the recommended EPA temperature criteria for the methods noted on the COC. The COC and Sample Receiving Documents are integral elements of the analytical report and are presented at the back of the report.

Holding Times:

All samples were analyzed within prescribed holding times (HT) and/or in accordance with the Calscience Sample Acceptance Policy unless otherwise noted in the analytical report and/or comprehensive case narrative, if required.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

Quality Control:

All quality control parameters (QC) were within established control limits except where noted in the QC summary forms or described further within this report.

Subcontractor Information:

Unless otherwise noted below (or on the subcontract form), no samples were subcontracted.

Additional Comments:

Air - Sorbent-extracted air methods (EPA TO-4A, EPA TO-10, EPA TO-13A, EPA TO-17): Analytical results are converted from mass/sample basis to mass/volume basis using client-supplied air volumes.

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are always reported on a wet weight basis.

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Sample Summary

Client:	Avocet Environmental, Inc. 1 Technology Drive, Suite C515 Irvine, CA 92618-5302	Work Order:	17-09-0143
		Project Name:	Dover Parkway Adjacent Property / 1531.001
		PO Number:	
		Date/Time Received:	09/05/17 15:22
		Number of Containers:	4
Attn:	Deke Siren		

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
SS_1	17-09-0143-1	09/05/17 11:00	1	Solid
SS_2	17-09-0143-2	09/05/17 11:05	1	Solid
SS_3	17-09-0143-3	09/05/17 11:10	1	Solid
SS_4	17-09-0143-4	09/05/17 11:15	1	Solid

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Detections Summary

Client:	Avocet Environmental, Inc. 1 Technology Drive, Suite C515 Irvine, CA 92618-5302	Work Order:	17-09-0143
		Project Name:	Dover Parkway Adjacent Property / 1531.001
		Received:	09/05/17
Attn:	Deke Siren		Page 1 of 1

Client SampleID Analyte	Result	Qualifiers	RL	Units	Method	Extraction
SS_1 (17-09-0143-1)						
Arsenic	1.47		0.761	mg/kg	EPA 6010B	EPA 3050B
4,4'-DDE	59		25	ug/kg	EPA 8081A	EPA 3545
SS_2 (17-09-0143-2)						
Arsenic	1.87		0.769	mg/kg	EPA 6010B	EPA 3050B
4,4'-DDE	71		24	ug/kg	EPA 8081A	EPA 3545
SS_3 (17-09-0143-3)						
Arsenic	3.26		0.765	mg/kg	EPA 6010B	EPA 3050B
4,4'-DDE	120		25	ug/kg	EPA 8081A	EPA 3545
SS_4 (17-09-0143-4)						
Arsenic	1.61		0.746	mg/kg	EPA 6010B	EPA 3050B
4,4'-DDE	120		24	ug/kg	EPA 8081A	EPA 3545

Subcontracted analyses, if any, are not included in this summary.

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* MDL is shown

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Analytical Report

Avocet Environmental, Inc.		Date Received:	09/05/17
1 Technology Drive, Suite C515		Work Order:	17-09-0143
Irvine, CA 92618-5302		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Dover Parkway Adjacent Property / 1531.001			Page 1 of 1

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SS_1	**17-09-0143-1-A**	**09/05/17 11:00**	**Solid**	**ICP 7300**	**09/08/17**	**09/11/17 11:25**	**170907L05**

Parameter	Result	RL	DF	Qualifiers
Arsenic	1.47	0.761	1.02	

SS_2	**17-09-0143-2-A**	**09/05/17 11:05**	**Solid**	**ICP 7300**	**09/08/17**	**09/11/17 11:30**	**170907L05**

Parameter	Result	RL	DF	Qualifiers
Arsenic	1.87	0.769	1.03	

SS_3	**17-09-0143-3-A**	**09/05/17 11:10**	**Solid**	**ICP 7300**	**09/08/17**	**09/11/17 11:31**	**170907L05**

Parameter	Result	RL	DF	Qualifiers
Arsenic	3.26	0.765	1.02	

SS_4	**17-09-0143-4-A**	**09/05/17 11:15**	**Solid**	**ICP 7300**	**09/08/17**	**09/11/17 11:31**	**170907L05**

Parameter	Result	RL	DF	Qualifiers
Arsenic	1.61	0.746	0.995	

Method Blank	**097-01-002-25316**	**N/A**	**Solid**	**ICP 7300**	**09/07/17**	**09/07/17 19:31**	**170907L05**

Parameter	Result	RL	DF	Qualifiers
Arsenic	ND	0.743	0.990	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Avocet Environmental, Inc.		Date Received:	09/05/17
1 Technology Drive, Suite C515		Work Order:	17-09-0143
Irvine, CA 92618-5302		Preparation:	EPA 3545
		Method:	EPA 8081A
		Units:	ug/kg
Project: Dover Parkway Adjacent Property / 1531.001			Page 1 of 5

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SS_1	**17-09-0143-1-A**	**09/05/17 11:00**	**Solid**	**GC 41**	**09/06/17**	**09/08/17 14:20**	**170906L05**

Parameter	Result	RL	DF	Qualifiers
Aldrin	ND	5.0	1.00	
Alpha-BHC	ND	10	1.00	
Beta-BHC	ND	5.0	1.00	
Chlordane	ND	50	1.00	
4,4'-DDD	ND	5.0	1.00	
4,4'-DDT	ND	5.0	1.00	
Delta-BHC	ND	10	1.00	
Dieldrin	ND	5.0	1.00	
Endosulfan I	ND	5.0	1.00	
Endosulfan II	ND	5.0	1.00	
Endosulfan Sulfate	ND	5.0	1.00	
Endrin	ND	5.0	1.00	
Endrin Aldehyde	ND	5.0	1.00	
Endrin Ketone	ND	5.0	1.00	
Gamma-BHC	ND	5.0	1.00	
Heptachlor	ND	5.0	1.00	
Heptachlor Epoxide	ND	10	1.00	
Methoxychlor	ND	5.0	1.00	
Toxaphene	ND	100	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	91	24-168	
2,4,5,6-Tetrachloro-m-Xylene	67	25-145	

SS_1	**17-09-0143-1-A**	**09/05/17 11:00**	**Solid**	**GC 41**	**09/06/17**	**09/08/17 15:52**	**170906L05**

Parameter	Result	RL	DF	Qualifiers
4,4'-DDE	59	25	5.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	96	24-168	
2,4,5,6-Tetrachloro-m-Xylene	63	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Avocet Environmental, Inc.		Date Received:	09/05/17
1 Technology Drive, Suite C515		Work Order:	17-09-0143
Irvine, CA 92618-5302		Preparation:	EPA 3545
		Method:	EPA 8081A
		Units:	ug/kg
Project: Dover Parkway Adjacent Property / 1531.001			Page 2 of 5

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SS_2	**17-09-0143-2-A**	**09/05/17 11:05**	**Solid**	**GC 41**	**09/06/17**	**09/08/17 14:35**	**170906L05**

Parameter	Result	RL	DF	Qualifiers
Aldrin	ND	4.9	1.00	
Alpha-BHC	ND	9.8	1.00	
Beta-BHC	ND	4.9	1.00	
Chlordane	ND	49	1.00	
4,4'-DDD	ND	4.9	1.00	
4,4'-DDT	ND	4.9	1.00	
Delta-BHC	ND	9.8	1.00	
Dieldrin	ND	4.9	1.00	
Endosulfan I	ND	4.9	1.00	
Endosulfan II	ND	4.9	1.00	
Endosulfan Sulfate	ND	4.9	1.00	
Endrin	ND	4.9	1.00	
Endrin Aldehyde	ND	4.9	1.00	
Endrin Ketone	ND	4.9	1.00	
Gamma-BHC	ND	4.9	1.00	
Heptachlor	ND	4.9	1.00	
Heptachlor Epoxide	ND	9.8	1.00	
Methoxychlor	ND	4.9	1.00	
Toxaphene	ND	98	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	104	24-168	
2,4,5,6-Tetrachloro-m-Xylene	66	25-145	

SS_2	**17-09-0143-2-A**	**09/05/17 11:05**	**Solid**	**GC 41**	**09/06/17**	**09/08/17 16:07**	**170906L05**

Parameter	Result	RL	DF	Qualifiers
4,4'-DDE	71	24	5.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	99	24-168	
2,4,5,6-Tetrachloro-m-Xylene	68	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Avocet Environmental, Inc.		Date Received:	09/05/17
1 Technology Drive, Suite C515		Work Order:	17-09-0143
Irvine, CA 92618-5302		Preparation:	EPA 3545
		Method:	EPA 8081A
		Units:	ug/kg
Project: Dover Parkway Adjacent Property / 1531.001			Page 3 of 5

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SS_3	**17-09-0143-3-A**	**09/05/17 11:10**	**Solid**	**GC 41**	**09/06/17**	**09/08/17 14:50**	**170906L05**

Parameter	Result	RL	DF	Qualifiers
Aldrin	ND	5.0	1.00	
Alpha-BHC	ND	9.9	1.00	
Beta-BHC	ND	5.0	1.00	
Chlordane	ND	50	1.00	
4,4'-DDD	ND	5.0	1.00	
4,4'-DDT	ND	5.0	1.00	
Delta-BHC	ND	9.9	1.00	
Dieldrin	ND	5.0	1.00	
Endosulfan I	ND	5.0	1.00	
Endosulfan II	ND	5.0	1.00	
Endosulfan Sulfate	ND	5.0	1.00	
Endrin	ND	5.0	1.00	
Endrin Aldehyde	ND	5.0	1.00	
Endrin Ketone	ND	5.0	1.00	
Gamma-BHC	ND	5.0	1.00	
Heptachlor	ND	5.0	1.00	
Heptachlor Epoxide	ND	9.9	1.00	
Methoxychlor	ND	5.0	1.00	
Toxaphene	ND	99	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	105	24-168	
2,4,5,6-Tetrachloro-m-Xylene	68	25-145	

SS_3	**17-09-0143-3-A**	**09/05/17 11:10**	**Solid**	**GC 41**	**09/06/17**	**09/08/17 16:22**	**170906L05**

Parameter	Result	RL	DF	Qualifiers
4,4'-DDE	120	25	5.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	99	24-168	
2,4,5,6-Tetrachloro-m-Xylene	74	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Avocet Environmental, Inc.		Date Received:	09/05/17
1 Technology Drive, Suite C515		Work Order:	17-09-0143
Irvine, CA 92618-5302		Preparation:	EPA 3545
		Method:	EPA 8081A
		Units:	ug/kg
Project: Dover Parkway Adjacent Property / 1531.001			Page 4 of 5

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SS_4	**17-09-0143-4-A**	**09/05/17 11:15**	**Solid**	**GC 41**	**09/06/17**	**09/08/17 15:05**	**170906L05**

Parameter	Result	RL	DF	Qualifiers
Aldrin	ND	4.9	1.00	
Alpha-BHC	ND	9.8	1.00	
Beta-BHC	ND	4.9	1.00	
Chlordane	ND	49	1.00	
4,4'-DDD	ND	4.9	1.00	
4,4'-DDT	ND	4.9	1.00	
Delta-BHC	ND	9.8	1.00	
Dieldrin	ND	4.9	1.00	
Endosulfan I	ND	4.9	1.00	
Endosulfan II	ND	4.9	1.00	
Endosulfan Sulfate	ND	4.9	1.00	
Endrin	ND	4.9	1.00	
Endrin Aldehyde	ND	4.9	1.00	
Endrin Ketone	ND	4.9	1.00	
Gamma-BHC	ND	4.9	1.00	
Heptachlor	ND	4.9	1.00	
Heptachlor Epoxide	ND	9.8	1.00	
Methoxychlor	ND	4.9	1.00	
Toxaphene	ND	98	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	107	24-168	
2,4,5,6-Tetrachloro-m-Xylene	67	25-145	

SS_4	**17-09-0143-4-A**	**09/05/17 11:15**	**Solid**	**GC 41**	**09/06/17**	**09/08/17 16:37**	**170906L05**

Parameter	Result	RL	DF	Qualifiers
4,4'-DDE	120	24	5.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	100	24-168	
2,4,5,6-Tetrachloro-m-Xylene	69	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Avocet Environmental, Inc.		Date Received:	09/05/17
1 Technology Drive, Suite C515		Work Order:	17-09-0143
Irvine, CA 92618-5302		Preparation:	EPA 3545
		Method:	EPA 8081A
		Units:	ug/kg
Project: Dover Parkway Adjacent Property / 1531.001			Page 5 of 5

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-12-537-2790**	**N/A**	**Solid**	**GC 41**	**09/06/17**	**09/08/17 11:31**	**170906L05**

Parameter	Result	RL	DF	Qualifiers
Aldrin	ND	5.0	1.00	
Alpha-BHC	ND	10	1.00	
Beta-BHC	ND	5.0	1.00	
Chlordane	ND	50	1.00	
4,4'-DDD	ND	5.0	1.00	
4,4'-DDE	ND	5.0	1.00	
4,4'-DDT	ND	5.0	1.00	
Delta-BHC	ND	10	1.00	
Dieldrin	ND	5.0	1.00	
Endosulfan I	ND	5.0	1.00	
Endosulfan II	ND	5.0	1.00	
Endosulfan Sulfate	ND	5.0	1.00	
Endrin	ND	5.0	1.00	
Endrin Aldehyde	ND	5.0	1.00	
Endrin Ketone	ND	5.0	1.00	
Gamma-BHC	ND	5.0	1.00	
Heptachlor	ND	5.0	1.00	
Heptachlor Epoxide	ND	10	1.00	
Methoxychlor	ND	5.0	1.00	
Toxaphene	ND	100	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	82	24-168	
2,4,5,6-Tetrachloro-m-Xylene	79	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Avocet Environmental, Inc.		Date Received:	09/05/17
1 Technology Drive, Suite C515		Work Order:	17-09-0143
Irvine, CA 92618-5302		Preparation:	EPA 3545
		Method:	EPA 8141A
		Units:	mg/kg
Project: Dover Parkway Adjacent Property / 1531.001			Page 1 of 5

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SS_1	**17-09-0143-1-A**	**09/05/17 11:00**	**Solid**	**GC 68**	**09/06/17**	**09/09/17 01:32**	**170906L13**

Parameter	Result	RL	DF	Qualifiers
Demeton-o/s	ND	0.49	1.00	
Azinphos Methyl	ND	0.49	1.00	
Bolstar	ND	0.49	1.00	
Chlorpyrifos	ND	0.49	1.00	
Coumaphos	ND	0.49	1.00	
Diazinon	ND	0.49	1.00	
Dichlorvos	ND	0.49	1.00	
Disulfoton	ND	0.49	1.00	
Ethoprop	ND	0.49	1.00	
Fensulfothion	ND	0.49	1.00	
Fenthion	ND	0.49	1.00	
Merphos	ND	0.49	1.00	
Methyl Parathion	ND	0.49	1.00	
Mevinphos	ND	0.49	1.00	
Naled	ND	3.9	1.00	
Phorate	ND	0.49	1.00	
Ronnel	ND	0.49	1.00	
Stirophos	ND	2.0	1.00	
Tokuthion	ND	0.49	1.00	
Trichloronate	ND	0.49	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Tributylphosphate	89	30-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Avocet Environmental, Inc.		Date Received:	09/05/17
1 Technology Drive, Suite C515		Work Order:	17-09-0143
Irvine, CA 92618-5302		Preparation:	EPA 3545
		Method:	EPA 8141A
		Units:	mg/kg
Project: Dover Parkway Adjacent Property / 1531.001			Page 2 of 5

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SS_2	**17-09-0143-2-A**	**09/05/17 11:05**	**Solid**	**GC 68**	**09/06/17**	**09/09/17 02:20**	**170906L13**

Parameter	Result	RL	DF	Qualifiers
Demeton-o/s	ND	0.48	1.00	
Azinphos Methyl	ND	0.48	1.00	
Bolstar	ND	0.48	1.00	
Chlorpyrifos	ND	0.48	1.00	
Coumaphos	ND	0.48	1.00	
Diazinon	ND	0.48	1.00	
Dichlorvos	ND	0.48	1.00	
Disulfoton	ND	0.48	1.00	
Ethoprop	ND	0.48	1.00	
Fensulfothion	ND	0.48	1.00	
Fenthion	ND	0.48	1.00	
Merphos	ND	0.48	1.00	
Methyl Parathion	ND	0.48	1.00	
Mevinphos	ND	0.48	1.00	
Naled	ND	3.8	1.00	
Phorate	ND	0.48	1.00	
Ronnel	ND	0.48	1.00	
Stirophos	ND	1.9	1.00	
Tokuthion	ND	0.48	1.00	
Trichloronate	ND	0.48	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Tributylphosphate	86	30-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Avocet Environmental, Inc.		Date Received:	09/05/17
1 Technology Drive, Suite C515		Work Order:	17-09-0143
Irvine, CA 92618-5302		Preparation:	EPA 3545
		Method:	EPA 8141A
		Units:	mg/kg
Project: Dover Parkway Adjacent Property / 1531.001			Page 3 of 5

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SS_3	**17-09-0143-3-A**	**09/05/17 11:10**	**Solid**	**GC 68**	**09/06/17**	**09/09/17 03:08**	**170906L13**

Parameter	Result	RL	DF	Qualifiers
Demeton-o/s	ND	0.50	1.00	
Azinphos Methyl	ND	0.50	1.00	
Bolstar	ND	0.50	1.00	
Chlorpyrifos	ND	0.50	1.00	
Coumaphos	ND	0.50	1.00	
Diazinon	ND	0.50	1.00	
Dichlorvos	ND	0.50	1.00	
Disulfoton	ND	0.50	1.00	
Ethoprop	ND	0.50	1.00	
Fensulfothion	ND	0.50	1.00	
Fenthion	ND	0.50	1.00	
Merphos	ND	0.50	1.00	
Methyl Parathion	ND	0.50	1.00	
Mevinphos	ND	0.50	1.00	
Naled	ND	4.0	1.00	
Phorate	ND	0.50	1.00	
Ronnel	ND	0.50	1.00	
Stirophos	ND	2.0	1.00	
Tokuthion	ND	0.50	1.00	
Trichloronate	ND	0.50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Tributylphosphate	104	30-130	

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Avocet Environmental, Inc.		Date Received:	09/05/17
1 Technology Drive, Suite C515		Work Order:	17-09-0143
Irvine, CA 92618-5302		Preparation:	EPA 3545
		Method:	EPA 8141A
		Units:	mg/kg
Project: Dover Parkway Adjacent Property / 1531.001			Page 4 of 5

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SS_4	**17-09-0143-4-A**	**09/05/17 11:15**	**Solid**	**GC 68**	**09/06/17**	**09/09/17 03:55**	**170906L13**

Parameter	Result	RL	DF	Qualifiers
Demeton-o/s	ND	0.48	1.00	
Azinphos Methyl	ND	0.48	1.00	
Bolstar	ND	0.48	1.00	
Chlorpyrifos	ND	0.48	1.00	
Coumaphos	ND	0.48	1.00	
Diazinon	ND	0.48	1.00	
Dichlorvos	ND	0.48	1.00	
Disulfoton	ND	0.48	1.00	
Ethoprop	ND	0.48	1.00	
Fensulfothion	ND	0.48	1.00	
Fenthion	ND	0.48	1.00	
Merphos	ND	0.48	1.00	
Methyl Parathion	ND	0.48	1.00	
Mevinphos	ND	0.48	1.00	
Naled	ND	3.8	1.00	
Phorate	ND	0.48	1.00	
Ronnel	ND	0.48	1.00	
Stirophos	ND	1.9	1.00	
Tokuthion	ND	0.48	1.00	
Trichloronate	ND	0.48	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Tributylphosphate	58	30-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Avocet Environmental, Inc.		Date Received:	09/05/17
1 Technology Drive, Suite C515		Work Order:	17-09-0143
Irvine, CA 92618-5302		Preparation:	EPA 3545
		Method:	EPA 8141A
		Units:	mg/kg
Project: Dover Parkway Adjacent Property / 1531.001			Page 5 of 5

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-15-973-350**	**N/A**	**Solid**	**GC 68**	**09/06/17**	**09/08/17 22:22**	**170906L13**

Parameter	Result	RL	DF	Qualifiers
Demeton-o/s	ND	0.50	1.00	
Azinphos Methyl	ND	0.50	1.00	
Bolstar	ND	0.50	1.00	
Chlorpyrifos	ND	0.50	1.00	
Coumaphos	ND	0.50	1.00	
Diazinon	ND	0.50	1.00	
Dichlorvos	ND	0.50	1.00	
Disulfoton	ND	0.50	1.00	
Ethoprop	ND	0.50	1.00	
Fensulfothion	ND	0.50	1.00	
Fenthion	ND	0.50	1.00	
Merphos	ND	0.50	1.00	
Methyl Parathion	ND	0.50	1.00	
Mevinphos	ND	0.50	1.00	
Naled	ND	4.0	1.00	
Phorate	ND	0.50	1.00	
Ronnel	ND	0.50	1.00	
Stirophos	ND	2.0	1.00	
Tokuthion	ND	0.50	1.00	
Trichloronate	ND	0.50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Tributylphosphate	105	30-130	

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Avocet Environmental, Inc.		Date Received:	09/05/17
1 Technology Drive, Suite C515		Work Order:	17-09-0143
Irvine, CA 92618-5302		Preparation:	EPA 8151A
		Method:	EPA 8151A
		Units:	ug/kg
Project: Dover Parkway Adjacent Property / 1531.001			Page 1 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SS_1	**17-09-0143-1-A**	**09/05/17 11:00**	**Solid**	**GC 40**	**09/06/17**	**09/07/17 20:04**	**170906L11**

Parameter	Result	RL	DF	Qualifiers
Dalapon	ND	250	1.00	
Dicamba	ND	9.9	1.00	
MCPP	ND	9900	1.00	
MCPA	ND	9900	1.00	
Dichlorprop	ND	99	1.00	
2,4-D	ND	99	1.00	
2,4,5-TP (Silvex)	ND	9.9	1.00	
2,4,5-T	ND	9.9	1.00	
2,4-DB	ND	99	1.00	
Dinoseb	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
2,4-Dichlorophenylacetic acid	77	44-146	

SS_2	**17-09-0143-2-A**	**09/05/17 11:05**	**Solid**	**GC 40**	**09/06/17**	**09/07/17 20:27**	**170906L11**

Parameter	Result	RL	DF	Qualifiers
Dalapon	ND	250	1.00	
Dicamba	ND	9.9	1.00	
MCPP	ND	9900	1.00	
MCPA	ND	9900	1.00	
Dichlorprop	ND	99	1.00	
2,4-D	ND	99	1.00	
2,4,5-TP (Silvex)	ND	9.9	1.00	
2,4,5-T	ND	9.9	1.00	
2,4-DB	ND	99	1.00	
Dinoseb	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
2,4-Dichlorophenylacetic acid	88	44-146	

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Avocet Environmental, Inc.		Date Received:	09/05/17
1 Technology Drive, Suite C515		Work Order:	17-09-0143
Irvine, CA 92618-5302		Preparation:	EPA 8151A
		Method:	EPA 8151A
		Units:	ug/kg
Project: Dover Parkway Adjacent Property / 1531.001			Page 2 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SS_3	**17-09-0143-3-A**	**09/05/17 11:10**	**Solid**	**GC 40**	**09/06/17**	**09/07/17 20:50**	**170906L11**

Parameter	Result	RL	DF	Qualifiers
Dalapon	ND	250	1.00	
Dicamba	ND	9.9	1.00	
MCPP	ND	9900	1.00	
MCPA	ND	9900	1.00	
Dichlorprop	ND	99	1.00	
2,4-D	ND	99	1.00	
2,4,5-TP (Silvex)	ND	9.9	1.00	
2,4,5-T	ND	9.9	1.00	
2,4-DB	ND	99	1.00	
Dinoseb	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
2,4-Dichlorophenylacetic acid	78	44-146	

SS_4	**17-09-0143-4-A**	**09/05/17 11:15**	**Solid**	**GC 40**	**09/06/17**	**09/07/17 21:13**	**170906L11**

Parameter	Result	RL	DF	Qualifiers
Dalapon	ND	250	1.00	
Dicamba	ND	9.9	1.00	
MCPP	ND	9900	1.00	
MCPA	ND	9900	1.00	
Dichlorprop	ND	99	1.00	
2,4-D	ND	99	1.00	
2,4,5-TP (Silvex)	ND	9.9	1.00	
2,4,5-T	ND	9.9	1.00	
2,4-DB	ND	99	1.00	
Dinoseb	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
2,4-Dichlorophenylacetic acid	88	44-146	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Avocet Environmental, Inc.		Date Received:	09/05/17
1 Technology Drive, Suite C515		Work Order:	17-09-0143
Irvine, CA 92618-5302		Preparation:	EPA 8151A
		Method:	EPA 8151A
		Units:	ug/kg
Project: Dover Parkway Adjacent Property / 1531.001			Page 3 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**095-01-033-1500**	**N/A**	**Solid**	**GC 40**	**09/06/17**	**09/07/17 18:31**	**170906L11**

Parameter	Result	RL	DF	Qualifiers
Dalapon	ND	250	1.00	
Dicamba	ND	10	1.00	
MCPP	ND	10000	1.00	
MCPA	ND	10000	1.00	
Dichlorprop	ND	100	1.00	
2,4-D	ND	100	1.00	
2,4,5-TP (Silvex)	ND	10	1.00	
2,4,5-T	ND	10	1.00	
2,4-DB	ND	100	1.00	
Dinoseb	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
2,4-Dichlorophenylacetic acid	86	44-146	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Quality Control - Spike/Spike Duplicate

Avocet Environmental, Inc.		Date Received:	09/05/17
1 Technology Drive, Suite C515		Work Order:	17-09-0143
Irvine, CA 92618-5302		Preparation:	EPA 3050B
		Method:	EPA 6010B
Project: Dover Parkway Adjacent Property / 1531.001			Page 1 of 4

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
17-09-0393-1	**Sample**	**Solid**	**ICP 7300**	**09/07/17**	**09/07/17 19:58**	**170907S05**
17-09-0393-1	**Matrix Spike**	**Solid**	**ICP 7300**	**09/07/17**	**09/07/17 19:59**	**170907S05**
17-09-0393-1	**Matrix Spike Duplicate**	**Solid**	**ICP 7300**	**09/07/17**	**09/07/17 20:00**	**170907S05**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Arsenic	189.0	25.00	183.3	4X	189.0	4X	75-125	4X	0-20	Q

RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - Spike/Spike Duplicate

Avocet Environmental, Inc.		Date Received:	09/05/17
1 Technology Drive, Suite C515		Work Order:	17-09-0143
Irvine, CA 92618-5302		Preparation:	EPA 3545
		Method:	EPA 8081A
Project: Dover Parkway Adjacent Property / 1531.001			Page 2 of 4

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
SS_1	**Sample**	**Solid**	**GC 41**	**09/06/17**	**09/08/17 14:20**	**170906S05**
SS_1	**Matrix Spike**	**Solid**	**GC 41**	**09/06/17**	**09/08/17 12:26**	**170906S05**
SS_1	**Matrix Spike Duplicate**	**Solid**	**GC 41**	**09/06/17**	**09/08/17 12:41**	**170906S05**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Aldrin	ND	25.00	19.34	77	19.81	79	50-135	2	0-25	
Alpha-BHC	ND	25.00	18.64	75	19.48	78	50-135	4	0-25	
Beta-BHC	ND	25.00	21.67	87	21.25	85	50-135	2	0-25	
4,4'-DDD	ND	25.00	23.94	96	22.11	88	50-135	8	0-25	
4,4'-DDE	59.33	25.00	92.11	131	87.16	111	50-135	6	0-25	
4,4'-DDT	ND	25.00	27.73	111	23.92	96	50-135	15	0-25	
Delta-BHC	ND	25.00	21.61	86	21.61	86	50-135	0	0-25	
Dieldrin	ND	25.00	21.60	86	20.59	82	50-135	5	0-25	
Endosulfan I	ND	25.00	19.70	79	19.24	77	50-135	2	0-25	
Endosulfan II	ND	25.00	22.17	89	19.97	80	50-135	10	0-25	
Endosulfan Sulfate	ND	25.00	22.20	89	21.13	85	50-135	5	0-25	
Endrin	ND	25.00	20.18	81	19.12	76	50-135	5	0-25	
Endrin Aldehyde	ND	25.00	22.02	88	20.42	82	50-135	8	0-25	
Gamma-BHC	ND	25.00	19.58	78	20.10	80	50-135	3	0-25	
Heptachlor	ND	25.00	19.82	79	20.75	83	50-135	5	0-25	
Heptachlor Epoxide	ND	25.00	19.69	79	20.29	81	50-135	3	0-25	
Methoxychlor	ND	25.00	24.56	98	21.08	84	50-135	15	0-25	

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RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - Spike/Spike Duplicate

Avocet Environmental, Inc.		Date Received:	09/05/17
1 Technology Drive, Suite C515		Work Order:	17-09-0143
Irvine, CA 92618-5302		Preparation:	EPA 3545
		Method:	EPA 8141A
Project: Dover Parkway Adjacent Property / 1531.001			Page 3 of 4

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
SS_4	**Sample**	**Solid**	**GC 68**	**09/06/17**	**09/09/17 03:55**	**170906S13**
SS_4	**Matrix Spike**	**Solid**	**GC 68**	**09/06/17**	**09/08/17 23:57**	**170906S13**
SS_4	**Matrix Spike Duplicate**	**Solid**	**GC 68**	**09/06/17**	**09/09/17 00:45**	**170906S13**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Azinphos Methyl	ND	4.000	4.323	108	3.572	89	30-130	19	0-30	
Bolstar	ND	4.000	4.309	108	3.413	85	30-130	23	0-30	
Chlorpyrifos	ND	4.000	3.713	93	3.035	76	30-130	20	0-30	
Coumaphos	ND	4.000	4.275	107	3.310	83	30-130	25	0-30	
Diazinon	ND	4.000	3.535	88	3.175	79	30-130	11	0-30	
Disulfoton	ND	4.000	4.138	103	3.270	82	30-130	23	0-30	
Ethoprop	ND	4.000	3.592	90	3.040	76	30-130	17	0-30	
Fensulfothion	ND	4.000	3.679	92	3.125	78	30-130	16	0-30	
Fenthion	ND	4.000	4.064	102	3.356	84	30-130	19	0-30	
Merphos	ND	4.000	4.173	104	3.614	90	30-130	14	0-30	
Methyl Parathion	ND	4.000	4.558	114	3.407	85	30-130	29	0-30	
Phorate	ND	4.000	4.644	116	3.578	89	30-130	26	0-30	
Ronnel	ND	4.000	3.681	92	3.274	82	30-130	12	0-30	
Stirophos	ND	4.000	3.997	100	3.276	82	30-130	20	0-30	
Tokuthion	ND	4.000	3.917	98	3.039	76	30-130	25	0-30	
Trichloronate	ND	4.000	3.927	98	3.538	88	30-130	10	0-30	

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RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - Spike/Spike Duplicate

Avocet Environmental, Inc.		Date Received:	09/05/17
1 Technology Drive, Suite C515		Work Order:	17-09-0143
Irvine, CA 92618-5302		Preparation:	EPA 8151A
		Method:	EPA 8151A
Project: Dover Parkway Adjacent Property / 1531.001			Page 4 of 4

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
SS_4	**Sample**	**Solid**	**GC 40**	**09/06/17**	**09/07/17 21:13**	**170906S11**
SS_4	**Matrix Spike**	**Solid**	**GC 40**	**09/06/17**	**09/07/17 19:17**	**170906S11**
SS_4	**Matrix Spike Duplicate**	**Solid**	**GC 40**	**09/06/17**	**09/07/17 19:40**	**170906S11**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
2,4-D	ND	400.0	333.0	83	369.0	92	32-146	10	0-37	
2,4,5-T	ND	40.00	28.00	70	31.00	78	27-147	10	0-37	
2,4-DB	ND	400.0	409.0	102	493.0	123	31-151	19	0-42	

RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS

Avocet Environmental, Inc.		Date Received:	09/05/17
1 Technology Drive, Suite C515		Work Order:	17-09-0143
Irvine, CA 92618-5302		Preparation:	EPA 3050B
		Method:	EPA 6010B
Project: Dover Parkway Adjacent Property / 1531.001			Page 1 of 4

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
097-01-002-25316	**LCS**	**Solid**	**ICP 7300**	**09/07/17**	**09/07/17 19:32**	**170907L05**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
Arsenic	25.00	25.07	100	80-120	

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RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS

Avocet Environmental, Inc.		Date Received:	09/05/17
1 Technology Drive, Suite C515		Work Order:	17-09-0143
Irvine, CA 92618-5302		Preparation:	EPA 3545
		Method:	EPA 8081A
Project: Dover Parkway Adjacent Property / 1531.001			Page 2 of 4

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-12-537-2790	**LCS**	**Solid**	**GC 41**	**09/06/17**	**09/08/17 15:20**	**170906L05**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	ME CL	Qualifiers
Aldrin	25.00	20.58	82	50-135	36-149	
Alpha-BHC	25.00	21.39	86	50-135	36-149	
Beta-BHC	25.00	19.53	78	50-135	36-149	
4,4'-DDD	25.00	24.54	98	50-135	36-149	
4,4'-DDE	25.00	21.47	86	50-135	36-149	
4,4'-DDT	25.00	15.82	63	50-135	36-149	
Delta-BHC	25.00	21.02	84	50-135	36-149	
Dieldrin	25.00	20.49	82	50-135	36-149	
Endosulfan I	25.00	20.35	81	50-135	36-149	
Endosulfan II	25.00	22.02	88	50-135	36-149	
Endosulfan Sulfate	25.00	23.34	93	50-135	36-149	
Endrin	25.00	21.69	87	50-135	36-149	
Endrin Aldehyde	25.00	21.85	87	50-135	36-149	
Gamma-BHC	25.00	21.71	87	50-135	36-149	
Heptachlor	25.00	21.68	87	50-135	36-149	
Heptachlor Epoxide	25.00	20.41	82	50-135	36-149	
Methoxychlor	25.00	20.94	84	50-135	36-149	

Total number of LCS compounds: 17
Total number of ME compounds: 0
Total number of ME compounds allowed: 1
LCS ME CL validation result: Pass

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RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS

Avocet Environmental, Inc.		Date Received:	09/05/17
1 Technology Drive, Suite C515		Work Order:	17-09-0143
Irvine, CA 92618-5302		Preparation:	EPA 3545
		Method:	EPA 8141A
Project: Dover Parkway Adjacent Property / 1531.001			Page 3 of 4

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-15-973-350	**LCS**	**Solid**	**GC 68**	**09/06/17**	**09/08/17 23:09**	**170906L13**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	ME CL	Qualifiers
Azinphos Methyl	4.000	4.074	102	30-130	13-147	
Bolstar	4.000	4.065	102	30-130	13-147	
Chlorpyrifos	4.000	3.666	92	30-130	13-147	
Coumaphos	4.000	3.943	99	30-130	13-147	
Diazinon	4.000	3.851	96	30-130	13-147	
Disulfoton	4.000	4.112	103	30-130	13-147	
Ethoprop	4.000	3.949	99	30-130	13-147	
Fensulfothion	4.000	4.298	107	30-130	13-147	
Fenthion	4.000	4.008	100	30-130	13-147	
Merphos	4.000	4.157	104	30-130	13-147	
Methyl Parathion	4.000	4.496	112	30-130	13-147	
Phorate	4.000	4.433	111	30-130	13-147	
Ronnel	4.000	3.849	96	30-130	13-147	
Stirophos	4.000	4.042	101	30-130	13-147	
Tokuthion	4.000	3.823	96	30-130	13-147	
Trichloronate	4.000	3.528	88	30-130	13-147	

Total number of LCS compounds: 16
Total number of ME compounds: 0
Total number of ME compounds allowed: 1
LCS ME CL validation result: Pass

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RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS

Avocet Environmental, Inc.		Date Received:	09/05/17
1 Technology Drive, Suite C515		Work Order:	17-09-0143
Irvine, CA 92618-5302		Preparation:	EPA 8151A
		Method:	EPA 8151A
Project: Dover Parkway Adjacent Property / 1531.001			Page 4 of 4

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
095-01-033-1500	**LCS**	**Solid**	**GC 40**	**09/06/17**	**09/07/17 18:08**	**170906L11**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
2,4-D	400.0	374.0	94	49-127	
2,4,5-T	40.00	35.00	88	31-145	
2,4-DB	400.0	436.0	109	48-132	

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RPD: Relative Percent Difference. CL: Control Limits

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Sample Analysis Summary Report

Work Order: 17-09-0143

Method	Extraction	Chemist ID	Instrument	Analytical Location
EPA 6010B	EPA 3050B	935	ICP 7300	1
EPA 8081A	EPA 3545	669	GC 41	1
EPA 8141A	EPA 3545	944	GC 68	1
EPA 8151A	EPA 8151A	944	GC 40	1

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Glossary of Terms and Qualifiers

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Qualifiers	Definition
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to suspected matrix interference. The associated LCS recovery was in control.
4	The MS/MSD RPD was out of control due to suspected matrix interference.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to suspected matrix interference.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
CI	See case narrative.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
HD	The chromatographic pattern was inconsistent with the profile of the reference fuel standard.
HDH	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected).
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
JA	Analyte positively identified but quantitation is an estimate.
ME	LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean).
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
SG	The sample extract was subjected to Silica Gel treatment prior to analysis.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.
	Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.
	Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.
	A calculated total result (Example: Total Pesticides) is the summation of each component concentration and/or, if "J" flags are reported, estimated concentration. Component concentrations showing not detected (ND) are summed into the calculated total result as zero concentrations.

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AVOCET ENVIRONMENTAL, INC.
1 Technology Drive, Suite C515
Irvine, California 92618-5302
TEL (949) 296-0977
FAX (949) 296-0978

CHAIN OF CUSTODY RECORD

17-09-0143

Revised COC received from Scott Ruud (Avocet) on 09/06/2017 at 11:34am.
- Virendra (ECI)

Project Information:	Event Name:
Site Name	Dover Parkway Adjacent Property
Site Location	Delano, CA
Project No.	1531.001
Project Manager	Deke Siren
Sampled By	SRR
Turnaround Time	Standard

Analyses

Sample Identification	Sample Date	Sample Time	Matrix	No. of Cntnrs.	Lab I.D. Number	Organochlorine Pesticides - EPA 8081	Organochlorine Herbicides - EPA 8151A	Organophosophorous Pesticides - EPA ~~8141B~~ 8141A	Arsenic - EPA 6010B
SS_1	9/5/17	1100	SOIL	1	1	X	X	X	X
SS_2	9/5/17	1105	SOIL	1	2	X	X	X	X
SS_3	9/5/17	1110	SOIL	1	3	X	X	X	X
SS_4	9/5/17	1115	SOIL	1	4	X	X	X	X

Relinquished by		Company	Received by		Company
Printed Name: Scott Ruud	Date: 9/5/17	Avocet Environmental, Inc.	Printed Name: DANNY LE DINNYLE	Date: 9/5/17	ECI
Signature:	Time: 1522		Signature:	Time: 15:22	
Printed Name:	Date:		Printed Name:	Date:	
Signature:	Time:		Signature:	Time:	
Printed Name:	Date:		Printed Name:	Date:	
Signature:	Time:		Signature:	Time:	

Sample Receipt		Billing Information	Special Instructions
Total Containers	TAT	Bill To: Philip Miller, P.E. AVOCET ENVIRONMENTAL, INC. 1 Technology Dive, Suite C515 Irvine, CA 92618-5302	Please bill to Avocet. If any questions, please call Deke Siren @ (949) 296 0977 Ext.111
Temperature °C °F	Lab No.		
COC Seal (Y/N/NA)	Intact (Y/N)		

P:\1531 RESD Alderson Ave Delano\001 Phase I Env Site Assessment & Lim Phase II\Field Documents\Chain of Custody rev 2014 02

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CHAIN OF CUSTODY RECORD

17-09-0143

Project Information:	Event Name:
Site Name	Dover Parkway Adjacent Property
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Project No.	1531.001
Project Manager	Deke Siren
Sampled By	SRR
Turnaround Time	Standard

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Sample Identification	Sample Date	Sample Time	Matrix	No. of Cntnrs.	Lab I.D. Number	Organochlorine Pesticides - EPA 8081	Organochlorine Herbicides - EPA 8151A	Organophosophorous Pesticides - EPA 8141B	Arsenic - EPA 6010B
SS_1	9/5/17	1100	SOIL	1	1	X	X	X	X
SS_2	9/5/17	1105	SOIL	1	2	X	X	X	X
SS_3	9/5/17	1110	SOIL	1	3	X	X	X	X
SS_4	9/5/17	1115	SOIL	1	4	X	X	X	X

Relinquished by		Company	Received by		Company
Printed Name: Scott Ruud	Date: 9/5/17	Avocet Environmental, Inc.	Printed Name: DANNY LE	Date: 9/5/17	GTZ
Signature:	Time: 1522		Signature: Danny Le	Time: 15:22	
Printed Name:	Date:		Printed Name:	Date:	
Signature:	Time:		Signature:	Time:	
Printed Name:	Date:		Printed Name:	Date:	
Signature:	Time:		Signature:	Time:	

Sample Receipt		Billing Information	Special Instructions
Total Containers	TAT	Bill To: Philip Miller, P.E. AVOCET ENVIRONMENTAL, INC. 1 Technology Dive, Suite C515 Irvine, CA 92618-5302	Please bill to Avocet. If any questions, please call Deke Siren @ (949) 296 0977 Ext.111
Temperature °C °F	Lab No.		
COC Seal (Y/N/NA)	Intact (Y/N)		

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WORK ORDER NUMBER: 17-09-

SAMPLE RECEIPT CHECKLIST

COOLER 1 OF 1

CLIENT: Avocet

DATE: 09 / 05 / 2017

TEMPERATURE: (Criteria: 0.0°C – 6.0°C, not frozen except sediment/tissue)

Thermometer ID: SC6 (CF: +0.2°C); Temperature (w/o CF): 4.8 °C (w/ CF): 5.0 °C; ☐ Blank ☑ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____)

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling

☐ Sample(s) received at ambient temperature; placed on ice for transport by courier

Ambient Temperature: ☐ Air ☐ Filter Checked by: 619

CUSTODY SEAL:

Cooler	☐ Present and Intact	☐ Present but Not Intact	☑ Not Present	☐ N/A	Checked by: 619
Sample(s)	☐ Present and Intact	☐ Present but Not Intact	☑ Not Present	☐ N/A	Checked by: 619

SAMPLE CONDITION:

	Yes	No	N/A
Chain-of-Custody (COC) document(s) received with samples	☑	☐	☐
COC document(s) received complete	☑	☐	☐
☐ Sampling date ☐ Sampling time ☐ Matrix ☐ Number of containers			
☐ No analysis requested ☐ Not relinquished ☐ No relinquished date ☐ No relinquished time			
Sampler's name indicated on COC	☑	☐	☐
Sample container label(s) consistent with COC	☑	☐	☐
Sample container(s) intact and in good condition	☑	☐	☐
Proper containers for analyses requested	☑	☐	☐
Sufficient volume/mass for analyses requested	☑	☐	☐
Samples received within holding time	☑	☐	☐
Aqueous samples for certain analyses received within 15-minute holding time			
☐ pH ☐ Residual Chlorine ☐ Dissolved Sulfide ☐ Dissolved Oxygen	☐	☐	☑
Proper preservation chemical(s) noted on COC and/or sample container	☐	☐	☑
Unpreserved aqueous sample(s) received for certain analyses			
☐ Volatile Organics ☐ Total Metals ☐ Dissolved Metals			
Acid/base preserved samples - pH within acceptable range	☐	☐	☑
Container(s) for certain analysis free of headspace	☐	☐	☑
☐ Volatile Organics ☐ Dissolved Gases (RSK-175) ☐ Dissolved Oxygen (SM 4500)			
☐ Carbon Dioxide (SM 4500) ☐ Ferrous Iron (SM 3500) ☐ Hydrogen Sulfide (Hach)			
Tedlar™ bag(s) free of condensation	☐	☐	☑

CONTAINER TYPE: (Trip Blank Lot Number: _____)

Aqueous: ☐ VOA ☐ VOA**h** ☐ VOA**na₂** ☐ 100PJ ☐ 100PJ**na₂** ☐ 125AGB ☐ 125AGB**h** ☐ 125AGB**p** ☐ 125PB ☐ 125PB**znna** (pH__9)
☐ 250AGB ☐ 250CGB ☐ 250CGB**s** (pH__2) ☐ 250PB ☐ 250PB**n** (pH__2) ☐ 500AGB ☐ 500AGJ ☐ 500AGJ**s** (pH__2) ☐ 500PB
☐ 1AGB ☐ 1AGB**na₂** ☐ 1AGB**s** (pH__2) ☐ 1AGB**s** (O&G) ☐ 1PB ☐ 1PB**na** (pH__12) ☐ _____ ☐ _____ ☐ _____
Solid: ☐ 4ozCGJ ☑ 8ozCGJ ☐ 16ozCGJ ☐ Sleeve (___) ☐ EnCores® (___) ☐ TerraCores® (___) ☐ _____ ☐ _____ ☐ _____
Air: ☐ Tedlar™ ☐ Canister ☐ Sorbent Tube ☐ PUF ☐ _____ **Other Matrix** (_____): ☐ _____ ☐ _____ ☐ _____

Container: **A** = Amber, **B** = Bottle, **C** = Clear, **E** = Envelope, **G** = Glass, **J** = Jar, **P** = Plastic, and **Z** = Ziploc/Resealable Bag

Preservative: **b** = buffered, **f** = filtered, **h** = HCl, **n** = HNO_3, **na** = NaOH, **na₂** = $Na_2S_2O_3$, **p** = H_3PO_4, **s** = H_2SO_4, **u** = ultra-pure, **x** = Na_2SO_3+$NaHSO_4.H_2O$, **znna** = Zn $(CH_3CO_2)_2$ + NaOH

Labeled/Checked by: 619

Reviewed by: SMB

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APPENDIX 3.12-1

Noise Modeling Data

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 11/30/2018
Case Description: Delano DMV_Architectural Coating

---- Receptor #1 ----

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Nearest Receiver 950'	Residential	65	60	55

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Compressor (air)	No	40		77.7	950	0

Results

	Calculated (dBA)		Noise Limits (dBA)			
			Day		Evening	
Equipment	*Lmax	Leq	Lmax	Leq	Lmax	Leq
Compressor (air)	52.1	48.1	N/A	N/A	N/A	N/A
Total	52.1	48.1	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #2 ----

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Typical Receiver 1300'	Residential	65	60	55

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Compressor (air)	No	40		77.7	1300	0

Results

	Calculated (dBA)		Noise Limits (dBA)			
			Day		Evening	
Equipment	*Lmax	Leq	Lmax	Leq	Lmax	Leq
Compressor (air)	49.4	45.4	N/A	N/A	N/A	N/A
Total	49.4	45.4	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #3 ----

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Nearest West Receivers 480'	Residential	65	60	55

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Compressor (air)	No	40		77.7	480	0

Results

	Calculated (dBA)		Noise Limits (dBA)			
			Day		Evening	
Equipment	*Lmax	Leq	Lmax	Leq	Lmax	Leq
Compressor (air)	58	54	N/A	N/A	N/A	N/A
Total	58	54	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 11/30/2018
Case Description: Delano DMV_Building Construction

---- Receptor #1 ----

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Nearest Receiver 950'	Residential	65	60	55

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Crane	No	16		80.6	950	0
Man Lift	No	20		74.7	950	0
Man Lift	No	20		74.7	950	0
Man Lift	No	20		74.7	950	0
Generator	No	50		80.6	950	0
Tractor	No	40	84		950	0
Front End Loader	No	40		79.1	950	0
Backhoe	No	40		77.6	950	0
Welder / Torch	No	40		74	950	0

Results

	Calculated (dBA)		Noise Limits (dBA)			
			Day		Evening	
Equipment	*Lmax	Leq	Lmax	Leq	Lmax	Leq
Crane	55	47	N/A	N/A	N/A	N/A
Man Lift	49.1	42.1	N/A	N/A	N/A	N/A
Man Lift	49.1	42.1	N/A	N/A	N/A	N/A
Man Lift	49.1	42.1	N/A	N/A	N/A	N/A

Generator		55.1	52	N/A	N/A	N/A	N/A
Tractor		58.4	54.4	N/A	N/A	N/A	N/A
Front End Loader		53.5	49.6	N/A	N/A	N/A	N/A
Backhoe		52	48	N/A	N/A	N/A	N/A
Welder / Torch		48.4	44.4	N/A	N/A	N/A	N/A
	Total	58.4	58.6	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #2 ----

		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
Typical Receiver 1300'	Residential	65	60	55

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Crane	No	16		80.6	1300	0
Man Lift	No	20		74.7	1300	0
Man Lift	No	20		74.7	1300	0
Man Lift	No	20		74.7	1300	0
Generator	No	50		80.6	1300	0
Tractor	No	40	84		1300	0
Front End Loader	No	40		79.1	1300	0
Backhoe	No	40		77.6	1300	0
Welder / Torch	No	40		74	1300	0

	Calculated (dBA)		Results			
			Noise Limits (dBA)			
			Day		Evening	
Equipment	*Lmax	Leq	Lmax	Leq	Lmax	Leq
Crane	52.3	44.3	N/A	N/A	N/A	N/A
Man Lift	46.4	39.4	N/A	N/A	N/A	N/A
Man Lift	46.4	39.4	N/A	N/A	N/A	N/A
Man Lift	46.4	39.4	N/A	N/A	N/A	N/A
Generator	52.3	49.3	N/A	N/A	N/A	N/A
Tractor	55.7	51.7	N/A	N/A	N/A	N/A
Front End Loader	50.8	46.8	N/A	N/A	N/A	N/A
Backhoe	49.3	45.3	N/A	N/A	N/A	N/A
Welder / Torch	45.7	41.7	N/A	N/A	N/A	N/A
Total	55.7	55.8	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #3 ----

		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
Nearest West Receivers 480'	Residential	65	60	55

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Crane	No	16		80.6	480	0
Man Lift	No	20		74.7	480	0
Man Lift	No	20		74.7	480	0
Man Lift	No	20		74.7	480	0
Generator	No	50		80.6	480	0
Tractor	No	40	84		480	0
Front End Loader	No	40		79.1	480	0
Backhoe	No	40		77.6	480	0
Welder / Torch	No	40		74	480	0

Results

	Calculated (dBA)		Noise Limits (dBA)			
			Day		Evening	
Equipment	*Lmax	Leq	Lmax	Leq	Lmax	Leq
Crane	60.9	52.9	N/A	N/A	N/A	N/A
Man Lift	55.1	48.1	N/A	N/A	N/A	N/A
Man Lift	55.1	48.1	N/A	N/A	N/A	N/A
Man Lift	55.1	48.1	N/A	N/A	N/A	N/A
Generator	61	58	N/A	N/A	N/A	N/A
Tractor	64.4	60.4	N/A	N/A	N/A	N/A
Front End Loader	59.5	55.5	N/A	N/A	N/A	N/A
Backhoe	57.9	53.9	N/A	N/A	N/A	N/A
Welder / Torch	54.4	50.4	N/A	N/A	N/A	N/A
Total	64.4	64.5	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 11/30/2018
Case Description: Delano DMV_Demolition

---- Receptor #1 ----

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Nearest Receiver 950'	Residential	65	60	55

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Backhoe	No	40		77.6	950	0
Front End Loader	No	40		79.1	950	0

Dump Truck	No	40	76.5	950	0
Dump Truck	No	40	76.5	950	0

			Results			
	Calculated (dBA)		Noise Limits (dBA)			
			Day		Evening	
Equipment	*Lmax	Leq	Lmax	Leq	Lmax	Leq
Backhoe	52	48	N/A	N/A	N/A	N/A
Front End Loader	53.5	49.6	N/A	N/A	N/A	N/A
Dump Truck	50.9	46.9	N/A	N/A	N/A	N/A
Dump Truck	50.9	46.9	N/A	N/A	N/A	N/A
Total	53.5	54	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #2 ----

		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
Typical Receiver 1300'	Residential	65	60	55

			Equipment			
			Spec	Actual	Receptor	Estimated
	Impact		Lmax	Lmax	Distance	Shielding
Description	Device	Usage(%)	(dBA)	(dBA)	(feet)	(dBA)
Backhoe	No	40	77.6		1300	0
Front End Loader	No	40	79.1		1300	0
Dump Truck	No	40	76.5		1300	0
Dump Truck	No	40	76.5		1300	0

			Results			
	Calculated (dBA)		Noise Limits (dBA)			
			Day		Evening	
Equipment	*Lmax	Leq	Lmax	Leq	Lmax	Leq
Backhoe	49.3	45.3	N/A	N/A	N/A	N/A
Front End Loader	50.8	46.8	N/A	N/A	N/A	N/A
Dump Truck	48.2	44.2	N/A	N/A	N/A	N/A
Dump Truck	48.2	44.2	N/A	N/A	N/A	N/A
Total	50.8	51.3	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #3 ----

		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
Nearest West Receivers 480'	Residential	65	60	55

			Equipment			
			Spec	Actual	Receptor	Estimated
	Impact		Lmax	Lmax	Distance	Shielding

Description	Device	Usage(%)	(dBA)	(dBA)	(feet)	(dBA)
Backhoe	No	40		77.6	480	0
Front End Loader	No	40		79.1	480	0
Dump Truck	No	40		76.5	480	0
Dump Truck	No	40		76.5	480	0

			Results			
	Calculated (dBA)		Noise Limits (dBA)			
			Day		Evening	
Equipment	*Lmax	Leq	Lmax	Leq	Lmax	Leq
Backhoe	57.9	53.9	N/A	N/A	N/A	N/A
Front End Loader	59.5	55.5	N/A	N/A	N/A	N/A
Dump Truck	56.8	52.8	N/A	N/A	N/A	N/A
Dump Truck	56.8	52.8	N/A	N/A	N/A	N/A
Total	59.5	59.9	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 11/30/2018
Case Description: Delano DMV_Paving

				---- Receptor #1 ----
		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
Nearest Receiver 950'	Residential	65	60	55

			Equipment			
			Spec	Actual	Receptor	Estimated
	Impact		Lmax	Lmax	Distance	Shielding
Description	Device	Usage(%)	(dBA)	(dBA)	(feet)	(dBA)
Concrete Mixer Truck	No	40		78.8	950	0
Concrete Mixer Truck	No	40		78.8	950	0
Paver	No	50		77.2	950	0
All Other Equipment > 5 HP	No	50	85		950	0
All Other Equipment > 5 HP	No	50	85		950	0
Roller	No	20		80	950	0
Roller	No	20		80	950	0
Tractor	No	40	84		950	0

			Results			
	Calculated (dBA)		Noise Limits (dBA)			
			Day		Evening	
Equipment	*Lmax	Leq	Lmax	Leq	Lmax	Leq
Concrete Mixer Truck	53.2	49.2	N/A	N/A	N/A	N/A
Concrete Mixer Truck	53.2	49.2	N/A	N/A	N/A	N/A
Paver	51.6	48.6	N/A	N/A	N/A	N/A

All Other Equipment > 5 HP		59.4	56.4	N/A	N/A	N/A	N/A
All Other Equipment > 5 HP		59.4	56.4	N/A	N/A	N/A	N/A
Roller		54.4	47.4	N/A	N/A	N/A	N/A
Roller		54.4	47.4	N/A	N/A	N/A	N/A
Tractor		58.4	54.4	N/A	N/A	N/A	N/A
	Total	59.4	61.8	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #2 ----

		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
Typical Receiver 1300'	Residential	65	60	55

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Concrete Mixer Truck	No	40		78.8	1300	0
Concrete Mixer Truck	No	40		78.8	1300	0
Paver	No	50		77.2	1300	0
All Other Equipment > 5 HP	No	50	85		1300	0
All Other Equipment > 5 HP	No	50	85		1300	0
Roller	No	20		80	1300	0
Roller	No	20		80	1300	0
Tractor	No	40	84		1300	0

	Calculated (dBA)		Results Noise Limits (dBA)			
			Day		Evening	
Equipment	*Lmax	Leq	Lmax	Leq	Lmax	Leq
Concrete Mixer Truck	50.5	46.5	N/A	N/A	N/A	N/A
Concrete Mixer Truck	50.5	46.5	N/A	N/A	N/A	N/A
Paver	48.9	45.9	N/A	N/A	N/A	N/A
All Other Equipment > 5 HP	56.7	53.7	N/A	N/A	N/A	N/A
All Other Equipment > 5 HP	56.7	53.7	N/A	N/A	N/A	N/A
Roller	51.7	44.7	N/A	N/A	N/A	N/A
Roller	51.7	44.7	N/A	N/A	N/A	N/A
Tractor	55.7	51.7	N/A	N/A	N/A	N/A
Total	56.7	59.1	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #3 ----

		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
Nearest West Receivers 480'	Residential	65	60	55

Equipment

Description	Impact Device	Usage(%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Concrete Mixer Truck	No	40		78.8	480	0
Concrete Mixer Truck	No	40		78.8	480	0
Paver	No	50		77.2	480	0
All Other Equipment > 5 HP	No	50	85		480	0
All Other Equipment > 5 HP	No	50	85		480	0
Roller	No	20		80	480	0
Roller	No	20		80	480	0
Tractor	No	40	84		480	0

Results

	Calculated (dBA)		Noise Limits (dBA)			
			Day		Evening	
Equipment	*Lmax	Leq	Lmax	Leq	Lmax	Leq
Concrete Mixer Truck	59.2	55.2	N/A	N/A	N/A	N/A
Concrete Mixer Truck	59.2	55.2	N/A	N/A	N/A	N/A
Paver	57.6	54.6	N/A	N/A	N/A	N/A
All Other Equipment > 5 HP	65.4	62.3	N/A	N/A	N/A	N/A
All Other Equipment > 5 HP	65.4	62.3	N/A	N/A	N/A	N/A
Roller	60.4	53.4	N/A	N/A	N/A	N/A
Roller	60.4	53.4	N/A	N/A	N/A	N/A
Tractor	64.4	60.4	N/A	N/A	N/A	N/A
Total	65.4	67.7	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 11/30/2018
Case Description: Delano DMV_Earthwork and Site Preparation

---- Receptor #1 ----

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Nearest Receiver 950'	Residential	65	60	55

Equipment

Description	Impact Device	Usage(%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Dozer	No	40		81.7	950	0
Front End Loader	No	40		79.1	950	0
Flat Bed Truck	No	40		74.3	950	0
Compactor (ground)	No	20		83.2	950	0
Flat Bed Truck	No	40		74.3	950	0
Flat Bed Truck	No	40		74.3	950	0

Flat Bed Truck	No	40	74.3	950	0
Flat Bed Truck	No	40	74.3	950	0

			Results			
	Calculated (dBA)		Noise Limits (dBA)			
			Day		Evening	
Equipment	*Lmax	Leq	Lmax	Leq	Lmax	Leq
Dozer	56.1	52.1	N/A	N/A	N/A	N/A
Front End Loader	53.5	49.6	N/A	N/A	N/A	N/A
Flat Bed Truck	48.7	44.7	N/A	N/A	N/A	N/A
Compactor (ground)	57.7	50.7	N/A	N/A	N/A	N/A
Flat Bed Truck	48.7	44.7	N/A	N/A	N/A	N/A
Flat Bed Truck	48.7	44.7	N/A	N/A	N/A	N/A
Flat Bed Truck	48.7	44.7	N/A	N/A	N/A	N/A
Flat Bed Truck	48.7	44.7	N/A	N/A	N/A	N/A
Total	57.7	57.1	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #2 ----

		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
Typical Receiver 1300'	Residential	65	60	55

			Equipment			
			Spec	Actual	Receptor	Estimated
	Impact		Lmax	Lmax	Distance	Shielding
Description	Device	Usage(%)	(dBA)	(dBA)	(feet)	(dBA)
Dozer	No	40	81.7		1300	0
Front End Loader	No	40	79.1		1300	0
Flat Bed Truck	No	40	74.3		1300	0
Compactor (ground)	No	20	83.2		1300	0
Flat Bed Truck	No	40	74.3		1300	0
Flat Bed Truck	No	40	74.3		1300	0
Flat Bed Truck	No	40	74.3		1300	0
Flat Bed Truck	No	40	74.3		1300	0

			Results			
	Calculated (dBA)		Noise Limits (dBA)			
			Day		Evening	
Equipment	*Lmax	Leq	Lmax	Leq	Lmax	Leq
Dozer	53.4	49.4	N/A	N/A	N/A	N/A
Front End Loader	50.8	46.8	N/A	N/A	N/A	N/A
Flat Bed Truck	46	42	N/A	N/A	N/A	N/A
Compactor (ground)	54.9	47.9	N/A	N/A	N/A	N/A
Flat Bed Truck	46	42	N/A	N/A	N/A	N/A
Flat Bed Truck	46	42	N/A	N/A	N/A	N/A
Flat Bed Truck	46	42	N/A	N/A	N/A	N/A

Flat Bed Truck		46	42	N/A	N/A	N/A	N/A
	Total	54.9	54.4	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #3 ----

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Nearest West Receivers 480'	Residential	65	60	55

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Dozer	No	40		81.7	480	0
Front End Loader	No	40		79.1	480	0
Flat Bed Truck	No	40		74.3	480	0
Compactor (ground)	No	20		83.2	480	0
Flat Bed Truck	No	40		74.3	480	0
Flat Bed Truck	No	40		74.3	480	0
Flat Bed Truck	No	40		74.3	480	0
Flat Bed Truck	No	40		74.3	480	0

Equipment	Calculated (dBA) *Lmax	Leq	Results Noise Limits (dBA) Day Lmax	Day Leq	Evening Lmax	Evening Leq
Dozer	62	58	N/A	N/A	N/A	N/A
Front End Loader	59.5	55.5	N/A	N/A	N/A	N/A
Flat Bed Truck	54.6	50.6	N/A	N/A	N/A	N/A
Compactor (ground)	63.6	56.6	N/A	N/A	N/A	N/A
Flat Bed Truck	54.6	50.6	N/A	N/A	N/A	N/A
Flat Bed Truck	54.6	50.6	N/A	N/A	N/A	N/A
Flat Bed Truck	54.6	50.6	N/A	N/A	N/A	N/A
Flat Bed Truck	54.6	50.6	N/A	N/A	N/A	N/A
Total	63.6	63.1	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 11/30/2018
Case Description: Delano DMV_Trenching (off-site utilities)

---- Receptor #1 ----

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Nearest Receiver 950'	Residential	65	60	55

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Excavator	No	40		80.7	950	0
Front End Loader	No	40		79.1	950	0
Flat Bed Truck	No	40		74.3	950	0
Flat Bed Truck	No	40		74.3	950	0
Flat Bed Truck	No	40		74.3	950	0
Flat Bed Truck	No	40		74.3	950	0
Flat Bed Truck	No	40		74.3	950	0
All Other Equipment > 5 HP	No	50	85		950	0
Flat Bed Truck	No	40		74.3	950	0

	Calculated (dBA)		Results	Noise Limits (dBA)		
			Day		Evening	
Equipment	*Lmax	Leq	Lmax	Leq	Lmax	Leq
Excavator	55.1	51.2	N/A	N/A	N/A	N/A
Front End Loader	53.5	49.6	N/A	N/A	N/A	N/A
Flat Bed Truck	48.7	44.7	N/A	N/A	N/A	N/A
Flat Bed Truck	48.7	44.7	N/A	N/A	N/A	N/A
Flat Bed Truck	48.7	44.7	N/A	N/A	N/A	N/A
Flat Bed Truck	48.7	44.7	N/A	N/A	N/A	N/A
Flat Bed Truck	48.7	44.7	N/A	N/A	N/A	N/A
All Other Equipment > 5 HP	59.4	56.4	N/A	N/A	N/A	N/A
Flat Bed Truck	48.7	44.7	N/A	N/A	N/A	N/A
Total	59.4	59.2	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #2 ----

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Typical Receiver 1300'	Residential	65	60	55

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Excavator	No	40		80.7	1300	0
Front End Loader	No	40		79.1	1300	0
Flat Bed Truck	No	40		74.3	1300	0
Flat Bed Truck	No	40		74.3	1300	0
Flat Bed Truck	No	40		74.3	1300	0
Flat Bed Truck	No	40		74.3	1300	0
Flat Bed Truck	No	40		74.3	1300	0
All Other Equipment > 5 HP	No	50	85		1300	0

Flat Bed Truck	No	40	74.3	1300	0	

			Results			
	Calculated (dBA)		Noise Limits (dBA)			
			Day		Evening	
Equipment	*Lmax	Leq	Lmax	Leq	Lmax	Leq
Excavator	52.4	48.4	N/A	N/A	N/A	N/A
Front End Loader	50.8	46.8	N/A	N/A	N/A	N/A
Flat Bed Truck	46	42	N/A	N/A	N/A	N/A
Flat Bed Truck	46	42	N/A	N/A	N/A	N/A
Flat Bed Truck	46	42	N/A	N/A	N/A	N/A
Flat Bed Truck	46	42	N/A	N/A	N/A	N/A
Flat Bed Truck	46	42	N/A	N/A	N/A	N/A
All Other Equipment > 5 HP	56.7	53.7	N/A	N/A	N/A	N/A
Flat Bed Truck	46	42	N/A	N/A	N/A	N/A
Total	56.7	56.5	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #3 ----

		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
Nearest West Receivers 480'	Residential	65	60	55

			Equipment			
			Spec	Actual	Receptor	Estimated
	Impact		Lmax	Lmax	Distance	Shielding
Description	Device	Usage(%)	(dBA)	(dBA)	(feet)	(dBA)
Excavator	No	40		80.7	480	0
Front End Loader	No	40		79.1	480	0
Flat Bed Truck	No	40		74.3	480	0
Flat Bed Truck	No	40		74.3	480	0
Flat Bed Truck	No	40		74.3	480	0
Flat Bed Truck	No	40		74.3	480	0
Flat Bed Truck	No	40		74.3	480	0
All Other Equipment > 5 HP	No	50	85		480	0
Flat Bed Truck	No	40		74.3	480	0

			Results			
	Calculated (dBA)		Noise Limits (dBA)			
			Day		Evening	
Equipment	*Lmax	Leq	Lmax	Leq	Lmax	Leq
Excavator	61.1	57.1	N/A	N/A	N/A	N/A
Front End Loader	59.5	55.5	N/A	N/A	N/A	N/A
Flat Bed Truck	54.6	50.6	N/A	N/A	N/A	N/A
Flat Bed Truck	54.6	50.6	N/A	N/A	N/A	N/A
Flat Bed Truck	54.6	50.6	N/A	N/A	N/A	N/A
Flat Bed Truck	54.6	50.6	N/A	N/A	N/A	N/A

Flat Bed Truck		54.6	50.6	N/A	N/A	N/A	N/A
All Other Equipment > 5 HP		65.4	62.3	N/A	N/A	N/A	N/A
Flat Bed Truck		54.6	50.6	N/A	N/A	N/A	N/A
	Total	65.4	65.1	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 11/30/2018
Case Description: Delano DMV_Trenching (on-site utilities)

---- Receptor #1 ----

		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
Nearest Receiver 950'	Residential	65	60	55

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Excavator	No	40		80.7	950	0
Front End Loader	No	40		79.1	950	0
Flat Bed Truck	No	40		74.3	950	0
Flat Bed Truck	No	40		74.3	950	0
Flat Bed Truck	No	40		74.3	950	0
Flat Bed Truck	No	40		74.3	950	0
Flat Bed Truck	No	40		74.3	950	0
All Other Equipment > 5 HP	No	50	85		950	0
Flat Bed Truck	No	40		74.3	950	0
All Other Equipment > 5 HP	No	50	85		950	0
Concrete Mixer Truck	No	40		78.8	950	0
Concrete Mixer Truck	No	40		78.8	950	0
Concrete Mixer Truck	No	40		78.8	950	0
Concrete Mixer Truck	No	40		78.8	950	0
Concrete Mixer Truck	No	40		78.8	950	0
Concrete Mixer Truck	No	40		78.8	950	0
Concrete Mixer Truck	No	40		78.8	950	0
Concrete Mixer Truck	No	40		78.8	950	0
Concrete Mixer Truck	No	40		78.8	950	0
Concrete Mixer Truck	No	40		78.8	950	0

Results

	Calculated (dBA)		Noise Limits (dBA)			
			Day		Evening	
Equipment	*Lmax	Leq	Lmax	Leq	Lmax	Leq
Excavator	55.1	51.2	N/A	N/A	N/A	N/A
Front End Loader	53.5	49.6	N/A	N/A	N/A	N/A

Flat Bed Truck		48.7	44.7	N/A	N/A	N/A	N/A
Flat Bed Truck		48.7	44.7	N/A	N/A	N/A	N/A
Flat Bed Truck		48.7	44.7	N/A	N/A	N/A	N/A
Flat Bed Truck		48.7	44.7	N/A	N/A	N/A	N/A
Flat Bed Truck		48.7	44.7	N/A	N/A	N/A	N/A
All Other Equipment > 5 HP		59.4	56.4	N/A	N/A	N/A	N/A
Flat Bed Truck		48.7	44.7	N/A	N/A	N/A	N/A
All Other Equipment > 5 HP		59.4	56.4	N/A	N/A	N/A	N/A
Concrete Mixer Truck		53.2	49.2	N/A	N/A	N/A	N/A
Concrete Mixer Truck		53.2	49.2	N/A	N/A	N/A	N/A
Concrete Mixer Truck		53.2	49.2	N/A	N/A	N/A	N/A
Concrete Mixer Truck		53.2	49.2	N/A	N/A	N/A	N/A
Concrete Mixer Truck		53.2	49.2	N/A	N/A	N/A	N/A
Concrete Mixer Truck		53.2	49.2	N/A	N/A	N/A	N/A
Concrete Mixer Truck		53.2	49.2	N/A	N/A	N/A	N/A
Concrete Mixer Truck		53.2	49.2	N/A	N/A	N/A	N/A
Concrete Mixer Truck		53.2	49.2	N/A	N/A	N/A	N/A
Concrete Mixer Truck		53.2	49.2	N/A	N/A	N/A	N/A
	Total	59.4	63.3	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #2 ----

		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
Typical Receiver 1300'	Residential	65	60	55

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Excavator	No	40		80.7	1300	0
Front End Loader	No	40		79.1	1300	0
Flat Bed Truck	No	40		74.3	1300	0
Flat Bed Truck	No	40		74.3	1300	0
Flat Bed Truck	No	40		74.3	1300	0
Flat Bed Truck	No	40		74.3	1300	0
Flat Bed Truck	No	40		74.3	1300	0
All Other Equipment > 5 HP	No	50	85		1300	0
Flat Bed Truck	No	40		74.3	1300	0
All Other Equipment > 5 HP	No	50	85		1300	0
Concrete Mixer Truck	No	40		78.8	1300	0
Concrete Mixer Truck	No	40		78.8	1300	0
Concrete Mixer Truck	No	40		78.8	1300	0
Concrete Mixer Truck	No	40		78.8	1300	0
Concrete Mixer Truck	No	40		78.8	1300	0
Concrete Mixer Truck	No	40		78.8	1300	0
Concrete Mixer Truck	No	40		78.8	1300	0

Concrete Mixer Truck	No	40		78.8	1300	0
Concrete Mixer Truck	No	40		78.8	1300	0
Concrete Mixer Truck	No	40		78.8	1300	0

Results

	Calculated (dBA)		Noise Limits (dBA)			
			Day		Evening	
Equipment	*Lmax	Leq	Lmax	Leq	Lmax	Leq
Excavator	52.4	48.4	N/A	N/A	N/A	N/A
Front End Loader	50.8	46.8	N/A	N/A	N/A	N/A
Flat Bed Truck	46	42	N/A	N/A	N/A	N/A
Flat Bed Truck	46	42	N/A	N/A	N/A	N/A
Flat Bed Truck	46	42	N/A	N/A	N/A	N/A
Flat Bed Truck	46	42	N/A	N/A	N/A	N/A
Flat Bed Truck	46	42	N/A	N/A	N/A	N/A
All Other Equipment > 5 HP	56.7	53.7	N/A	N/A	N/A	N/A
Flat Bed Truck	46	42	N/A	N/A	N/A	N/A
All Other Equipment > 5 HP	56.7	53.7	N/A	N/A	N/A	N/A
Concrete Mixer Truck	50.5	46.5	N/A	N/A	N/A	N/A
Concrete Mixer Truck	50.5	46.5	N/A	N/A	N/A	N/A
Concrete Mixer Truck	50.5	46.5	N/A	N/A	N/A	N/A
Concrete Mixer Truck	50.5	46.5	N/A	N/A	N/A	N/A
Concrete Mixer Truck	50.5	46.5	N/A	N/A	N/A	N/A
Concrete Mixer Truck	50.5	46.5	N/A	N/A	N/A	N/A
Concrete Mixer Truck	50.5	46.5	N/A	N/A	N/A	N/A
Concrete Mixer Truck	50.5	46.5	N/A	N/A	N/A	N/A
Concrete Mixer Truck	50.5	46.5	N/A	N/A	N/A	N/A
Concrete Mixer Truck	50.5	46.5	N/A	N/A	N/A	N/A
Total	56.7	60.5	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #3 ----

		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
Nearest West Receivers 480'	Residential	65	60	55

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Excavator	No	40		80.7	480	0
Front End Loader	No	40		79.1	480	0
Flat Bed Truck	No	40		74.3	480	0
Flat Bed Truck	No	40		74.3	480	0
Flat Bed Truck	No	40		74.3	480	0
Flat Bed Truck	No	40		74.3	480	0
Flat Bed Truck	No	40		74.3	480	0

All Other Equipment > 5 HP	No	50	85		480	0
Flat Bed Truck	No	40		74.3	480	0
All Other Equipment > 5 HP	No	50	85		480	0
Concrete Mixer Truck	No	40		78.8	480	0
Concrete Mixer Truck	No	40		78.8	480	0
Concrete Mixer Truck	No	40		78.8	480	0
Concrete Mixer Truck	No	40		78.8	480	0
Concrete Mixer Truck	No	40		78.8	480	0
Concrete Mixer Truck	No	40		78.8	480	0
Concrete Mixer Truck	No	40		78.8	480	0
Concrete Mixer Truck	No	40		78.8	480	0
Concrete Mixer Truck	No	40		78.8	480	0
Concrete Mixer Truck	No	40		78.8	480	0

			Results			
	Calculated (dBA)			Noise Limits (dBA)		
			Day		Evening	
Equipment	*Lmax	Leq	Lmax	Leq	Lmax	Leq
Excavator	61.1	57.1	N/A	N/A	N/A	N/A
Front End Loader	59.5	55.5	N/A	N/A	N/A	N/A
Flat Bed Truck	54.6	50.6	N/A	N/A	N/A	N/A
Flat Bed Truck	54.6	50.6	N/A	N/A	N/A	N/A
Flat Bed Truck	54.6	50.6	N/A	N/A	N/A	N/A
Flat Bed Truck	54.6	50.6	N/A	N/A	N/A	N/A
Flat Bed Truck	54.6	50.6	N/A	N/A	N/A	N/A
All Other Equipment > 5 HP	65.4	62.3	N/A	N/A	N/A	N/A
Flat Bed Truck	54.6	50.6	N/A	N/A	N/A	N/A
All Other Equipment > 5 HP	65.4	62.3	N/A	N/A	N/A	N/A
Concrete Mixer Truck	59.2	55.2	N/A	N/A	N/A	N/A
Concrete Mixer Truck	59.2	55.2	N/A	N/A	N/A	N/A
Concrete Mixer Truck	59.2	55.2	N/A	N/A	N/A	N/A
Concrete Mixer Truck	59.2	55.2	N/A	N/A	N/A	N/A
Concrete Mixer Truck	59.2	55.2	N/A	N/A	N/A	N/A
Concrete Mixer Truck	59.2	55.2	N/A	N/A	N/A	N/A
Concrete Mixer Truck	59.2	55.2	N/A	N/A	N/A	N/A
Concrete Mixer Truck	59.2	55.2	N/A	N/A	N/A	N/A
Concrete Mixer Truck	59.2	55.2	N/A	N/A	N/A	N/A
Concrete Mixer Truck	59.2	55.2	N/A	N/A	N/A	N/A
Total	65.4	69.2	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

Dudek 27 November 2018
CB TNM 2.5
Calculated with TNM 2.5

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: Delano DMV
RUN: Existing
BARRIER DESIGN: INPUT HEIGHTS
ATMOSPHERICS: 68 deg F, 50% RH

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

Receiver Name	No.	#DUs	Existing LAeq1h	No Barrier LAeq1h Calculated	Crit'n	Increase over existing Calculated	Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Noise Reduction Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
LT1	1	1	0.0	59.2	66	59.2	10	----	59.2	0.0	8	-8.0
ST3	2	1	0.0	75.7	66	75.7	10	Snd Lvl	75.7	0.0	8	-8.0
ST1	3	1	0.0	60.0	66	60.0	10	----	60.0	0.0	8	-8.0
ST2	4	1	0.0	60.7	66	60.7	10	----	60.7	0.0	8	-8.0
ST4	5	1	0.0	50.4	66	50.4	10	----	50.4	0.0	8	-8.0
M1	8	1	0.0	48.2	66	48.2	10	----	48.2	0.0	8	-8.0
M2	9	1	0.0	49.2	66	49.2	10	----	49.2	0.0	8	-8.0
M3	10	1	0.0	64.5	66	64.5	10	----	64.5	0.0	8	-8.0
M4	11	1	0.0	61.7	66	61.7	10	----	61.7	0.0	8	-8.0
M5	12	1	0.0	59.3	66	59.3	10	----	59.3	0.0	8	-8.0

Dwelling Units	# DUs	Noise Reduction Min	Avg	Max
		dB	dB	dB
All Selected	10	0.0	0.0	0.0
All Impacted	1	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

Dudek **27 November 2018**
CB **TNM 2.5**
Calculated with TNM 2.5

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: **Delano DMV**
RUN: **Existing + Project**
BARRIER DESIGN: **INPUT HEIGHTS**
ATMOSPHERICS: **68 deg F, 50% RH**

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

Receiver Name	No.	#DUs	Existing LAeq1h	No Barrier LAeq1h Calculated	Crit'n	Increase over existing Calculated	Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
LT1	1	1	0.0	59.8	66	59.8	10	----	59.8	0.0	8	-8.0
ST3	2	1	0.0	75.8	66	75.8	10	Snd Lvl	75.8	0.0	8	-8.0
ST1	3	1	0.0	60.6	66	60.6	10	----	60.6	0.0	8	-8.0
ST2	4	1	0.0	60.7	66	60.7	10	----	60.7	0.0	8	-8.0
ST4	5	1	0.0	50.5	66	50.5	10	----	50.5	0.0	8	-8.0
M1	8	1	0.0	48.4	66	48.4	10	----	48.4	0.0	8	-8.0
M2	9	1	0.0	49.3	66	49.3	10	----	49.3	0.0	8	-8.0
M3	10	1	0.0	64.5	66	64.5	10	----	64.5	0.0	8	-8.0
M4	11	1	0.0	62.1	66	62.1	10	----	62.1	0.0	8	-8.0
M5	12	1	0.0	59.7	66	59.7	10	----	59.7	0.0	8	-8.0

Dwelling Units	# DUs	Noise Reduction Min	Avg	Max
		dB	dB	dB
All Selected	10	0.0	0.0	0.0
All Impacted	1	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

Dudek **27 November 2018**
CB **TNM 2.5**
Calculated with TNM 2.5

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: **Delano DMV**
RUN: **Buildout w/o Project**
BARRIER DESIGN: **INPUT HEIGHTS**
ATMOSPHERICS: **68 deg F, 50% RH**

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

Receiver Name	No.	#DUs	Existing LAeq1h	No Barrier LAeq1h Calculated	Crit'n	Increase over existing Calculated	Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
LT1	1	1	0.0	58.0	66	58.0	10	----	58.0	0.0	8	-8.0
ST3	2	1	0.0	76.9	66	76.9	10	Snd Lvl	76.9	0.0	8	-8.0
ST1	3	1	0.0	58.6	66	58.6	10	----	58.6	0.0	8	-8.0
ST2	4	1	0.0	61.8	66	61.8	10	----	61.8	0.0	8	-8.0
ST4	5	1	0.0	51.5	66	51.5	10	----	51.5	0.0	8	-8.0
M1	8	1	0.0	52.9	66	52.9	10	----	52.9	0.0	8	-8.0
M2	9	1	0.0	50.1	66	50.1	10	----	50.1	0.0	8	-8.0
M3	10	1	0.0	65.7	66	65.7	10	----	65.7	0.0	8	-8.0
M4	11	1	0.0	62.0	66	62.0	10	----	62.0	0.0	8	-8.0
M5	12	1	0.0	58.9	66	58.9	10	----	58.9	0.0	8	-8.0

Dwelling Units	# DUs	Noise Reduction Min	Avg	Max
		dB	dB	dB
All Selected	10	0.0	0.0	0.0
All Impacted	1	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

Dudek 27 November 2018
CB TNM 2.5
Calculated with TNM 2.5

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: Delano DMV
RUN: Buildout + Project
BARRIER DESIGN: INPUT HEIGHTS
ATMOSPHERICS: 68 deg F, 50% RH

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

Receiver Name	No.	#DUs	Existing LAeq1h	No Barrier LAeq1h Calculated	Crit'n	Increase over existing Calculated	Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
LT1	1	1	0.0	63.0	66	63.0	10	----	63.0	0.0	8	-8.0
ST3	2	1	0.0	76.9	66	76.9	10	Snd Lvl	76.9	0.0	8	-8.0
ST1	3	1	0.0	63.9	66	63.9	10	----	63.9	0.0	8	-8.0
ST2	4	1	0.0	61.9	66	61.9	10	----	61.9	0.0	8	-8.0
ST4	5	1	0.0	51.8	66	51.8	10	----	51.8	0.0	8	-8.0
M1	8	1	0.0	53.7	66	53.7	10	----	53.7	0.0	8	-8.0
M2	9	1	0.0	51.1	66	51.1	10	----	51.1	0.0	8	-8.0
M3	10	1	0.0	65.8	66	65.8	10	----	65.8	0.0	8	-8.0
M4	11	1	0.0	64.5	66	64.5	10	----	64.5	0.0	8	-8.0
M5	12	1	0.0	62.4	66	62.4	10	----	62.4	0.0	8	-8.0

Dwelling Units	# DUs	Noise Reduction Min	Avg	Max
		dB	dB	dB
All Selected	10	0.0	0.0	0.0
All Impacted	1	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

APPENDIX 3.16-1

Traffic Data

- Average Daily Traffic Counts – Dover Parkway

Saturday, November 3, 2018 CITY: Delano PROJECT: SC1995

ADT Dover between Woollomes and Diaz **PREPARED BY: AimTD LLC. tel: 714 253 7888**

AM Period	NB		SB			PM Period	NB		SB		
0:00	3		9			12:00	34		35		
0:15	1		5			12:15	34		35		
0:30	0		7			12:30	36		38		
0:45	0	4	3	24	28	12:45	34	138	30	138	276
1:00	0		2			13:00	37		46		
1:15	0		2			13:15	28		35		
1:30	0		0			13:30	41		31		
1:45	1	1	5	9	10	13:45	35	141	38	150	291
2:00	1		1			14:00	32		28		
2:15	2		1			14:15	29		47		
2:30	0		3			14:30	23		35		
2:45	3	6	3	8	14	14:45	24	108	30	140	248
3:00	2		2			15:00	30		37		
3:15	0		3			15:15	40		36		
3:30	1		1			15:30	26		40		
3:45	3	6	3	9	15	15:45	29	125	40	153	278
4:00	1		1			16:00	25		46		
4:15	2		0			16:15	20		47		
4:30	6		4			16:30	27		53		
4:45	4	13	2	7	20	16:45	30	102	40	186	288
5:00	1		3			17:00	29		29		
5:15	1		2			17:15	30		35		
5:30	3		3			17:30	32		33		
5:45	7	12	4	12	24	17:45	27	118	38	135	253
6:00	2		10			18:00	23		26		
6:15	6		5			18:15	19		38		
6:30	8		6			18:30	22		32		
6:45	11	27	9	30	57	18:45	29	93	38	134	227
7:00	11		4			19:00	31		31		
7:15	9		3			19:15	25		40		
7:30	9		6			19:30	24		27		
7:45	9	38	10	23	61	19:45	21	101	26	124	225
8:00	10		13			20:00	22		33		
8:15	15		9			20:15	13		37		
8:30	15		9			20:30	21		38		
8:45	22	62	10	41	103	20:45	9	65	31	139	204
9:00	26		15			21:00	8		21		
9:15	15		16			21:15	10		24		
9:30	34		22			21:30	6		18		
9:45	28	103	21	74	177	21:45	18	42	19	82	124
10:00	40		37			22:00	23		20		
10:15	27		25			22:15	10		13		
10:30	28		32			22:30	8		21		
10:45	35	130	24	118	248	22:45	5	46	17	71	117
11:00	25		26			23:00	3		13		
11:15	29		33			23:15	5		15		
11:30	27		31			23:30	5		9		
11:45	24	105	33	123	228	23:45	3	16	8	45	61
Total Vol.		507		478	**985**		1095		1497		**2592**

Daily Totals

NB	SB	**Combined**
1602	1975	**3577**

	AM			**PM**		
Split %	51.5%	48.5%	**27.5%**	42.2%	57.8%	**72.5%**
Peak Hour	10:00	11:45	**11:45**	12:15	15:45	**13:00**
Volume	130	141	**269**	141	186	**291**
P.H.F.	0.81	0.93	**0.91**	0.96	0.88	**0.88**

Sunday, November 04, 2018 CITY: Delano PROJECT: 0

ADT Dover between Woollomes and Diaz **PREPARED BY: AimTD LLC. tel: 714 253 7888**

AM Period	NB		SB			PM Period	NB		SB		
0:00	1		10			12:00	29		36		
0:15	4		11			12:15	23		37		
0:30	3		7			12:30	34		31		
0:45	1	9	1	29	38	12:45	41	127	44	148	275
1:00	1		4			13:00	25		33		
1:15	1		1			13:15	38		29		
1:30	0		1			13:30	25		25		
1:45	0	2	5	11	13	13:45	36	124	46	133	257
2:00	0		3			14:00	41		41		
2:15	0		3			14:15	42		48		
2:30	0		4			14:30	42		37		
2:45	1	1	1	11	12	14:45	24	149	38	164	313
3:00	0		2			15:00	27		40		
3:15	0		3			15:15	38		40		
3:30	1		4			15:30	28		41		
3:45	0	1	1	10	11	15:45	33	126	51	172	298
4:00	0		0			16:00	25		42		
4:15	1		1			16:15	26		38		
4:30	0		0			16:30	28		29		
4:45	2	3	1	2	5	16:45	32	111	37	146	257
5:00	1		2			17:00	36		41		
5:15	0		1			17:15	33		41		
5:30	0		1			17:30	31		46		
5:45	3	4	0	4	8	17:45	36	136	42	170	306
6:00	2		0			18:00	34		50		
6:15	3		3			18:15	31		39		
6:30	1		0			18:30	26		38		
6:45	8	14	2	5	19	18:45	28	119	48	175	294
7:00	4		3			19:00	23		42		
7:15	2		2			19:15	24		44		
7:30	4		2			19:30	19		32		
7:45	13	23	4	11	34	19:45	21	87	35	153	240
8:00	12		4			20:00	23		33		
8:15	9		9			20:15	20		29		
8:30	8		8			20:30	17		23		
8:45	8	37	4	25	62	20:45	12	72	24	109	181
9:00	10		15			21:00	22		25		
9:15	11		12			21:15	18		21		
9:30	16		15			21:30	15		25		
9:45	22	59	10	52	111	21:45	13	68	22	93	161
10:00	21		23			22:00	11		18		
10:15	25		25			22:15	7		26		
10:30	13		32			22:30	4		22		
10:45	29	88	22	102	190	22:45	7	29	18	84	113
11:00	23		20			23:00	6		18		
11:15	22		36			23:15	5		10		
11:30	28		26			23:30	4		14		
11:45	26	99	27	109	208	23:45	2	17	11	53	70
Total Vol.		340		371	**711**			1165		1600	**2765**

Daily Totals

NB	SB	**Combined**
1505	1971	**3476**

	AM			**PM**		
Split %	47.8%	52.2%	**20.5%**	42.1%	57.9%	**79.5%**
Peak Hour	11:45	11:45	**11:45**	13:45	17:15	**13:45**
Volume	112	131	**243**	161	179	**333**
P.H.F.	0.82	0.89	**0.93**	0.96	0.90	**0.93**

Monday, November 05, 2018 CITY: Delano PROJECT: 0

ADT Dover between Woollomes and Diaz **PREPARED BY: AimTD LLC. tel: 714 253 7888**

AM Period	NB		SB			PM Period	NB		SB		
0:00	0		9			12:00	17		25		
0:15	3		6			12:15	17		33		
0:30	3		8			12:30	17		14		
0:45	1	7	1	24	31	12:45	32	83	28	100	183
1:00	0		6			13:00	31		33		
1:15	0		2			13:15	28		28		
1:30	0		1			13:30	32		34		
1:45	2	2	0	9	11	13:45	25	116	39	134	250
2:00	0		4			14:00	23		34		
2:15	0		1			14:15	25		29		
2:30	0		2			14:30	25		29		
2:45	0	0	3	10	10	14:45	32	105	25	117	222
3:00	1		1			15:00	24		26		
3:15	3		4			15:15	16		24		
3:30	3		3			15:30	24		37		
3:45	1	8	1	9	17	15:45	19	83	28	115	198
4:00	0		0			16:00	11		37		
4:15	2		1			16:15	26		47		
4:30	2		0			16:30	21		60		
4:45	5	9	1	2	11	16:45	24	82	35	179	261
5:00	2		1			17:00	28		28		
5:15	0		1			17:15	32		42		
5:30	0		3			17:30	38		46		
5:45	4	6	0	5	11	17:45	28	126	45	161	287
6:00	4		3			18:00	39		43		
6:15	4		6			18:15	48		50		
6:30	6		5			18:30	41		44		
6:45	11	25	6	20	45	18:45	31	159	54	191	350
7:00	11		6			19:00	32		29		
7:15	16		4			19:15	35		51		
7:30	9		8			19:30	23		37		
7:45	22	58	16	34	92	19:45	24	114	32	149	263
8:00	9		12			20:00	28		40		
8:15	4		17			20:15	28		30		
8:30	18		14			20:30	25		27		
8:45	16	47	14	57	104	20:45	15	96	31	128	224
9:00	22		17			21:00	18		31		
9:15	20		25			21:15	12		30		
9:30	15		15			21:30	17		24		
9:45	18	75	21	78	153	21:45	13	60	20	105	165
10:00	20		12			22:00	3		28		
10:15	22		7			22:15	8		11		
10:30	26		15			22:30	12		14		
10:45	27	95	17	51	146	22:45	10	33	16	69	102
11:00	24		27			23:00	5		9		
11:15	23		31			23:15	5		14		
11:30	19		25			23:30	2		16		
11:45	31	97	25	108	205	23:45	5	17	7	46	63
Total Vol.		429		407	**836**			1074		1494	**2568**

Daily Totals

NB	SB	**Combined**
1503	1901	**3404**

	AM			**PM**		
Split %	51.3%	48.7%	**24.6%**	41.8%	58.2%	**75.4%**
Peak Hour	10:30	11:00	**11:00**	18:00	18:00	**18:00**
Volume	100	108	**205**	159	191	**350**
P.H.F.	0.93	0.87	**0.92**	0.88	0.88	**0.89**

Tuesday, November 06, 2018 CITY: Delano PROJECT: 0

ADT Dover between Woollomes and Diaz **PREPARED BY: AimTD LLC. tel: 714 253 7888**

AM Period	NB		SB			PM Period	NB		SB		
0:00	2		1			12:00	14		24		
0:15	3		4			12:15	15		21		
0:30	2		4			12:30	28		10		
0:45	1	8	3	12	20	12:45	22	79	27	82	161
1:00	2		7			13:00	29		33		
1:15	1		1			13:15	29		29		
1:30	0		3			13:30	22		30		
1:45	0	3	5	16	19	13:45	26	106	35	127	233
2:00	0		1			14:00	26		29		
2:15	1		1			14:15	27		23		
2:30	1		5			14:30	24		28		
2:45	0	2	2	9	11	14:45	20	97	26	106	203
3:00	0		1			15:00	17		22		
3:15	1		0			15:15	22		28		
3:30	0		2			15:30	18		38		
3:45	0	1	0	3	4	15:45	21	78	27	115	193
4:00	0		2			16:00	20		35		
4:15	1		1			16:15	29		44		
4:30	1		2			16:30	29		38		
4:45	4	6	1	6	12	16:45	31	109	45	162	271
5:00	2		3			17:00	25		38		
5:15	3		2			17:15	22		56		
5:30	3		7			17:30	32		39		
5:45	2	10	1	13	23	17:45	38	117	45	178	295
6:00	6		2			18:00	28		44		
6:15	7		4			18:15	31		47		
6:30	16		3			18:30	35		37		
6:45	9	38	8	17	55	18:45	31	125	46	174	299
7:00	3		9			19:00	25		41		
7:15	10		5			19:15	19		39		
7:30	9		7			19:30	26		34		
7:45	13	35	10	31	66	19:45	40	110	27	141	251
8:00	12		5			20:00	23		31		
8:15	6		17			20:15	23		23		
8:30	17		19			20:30	16		32		
8:45	19	54	15	56	110	20:45	19	81	25	111	192
9:00	20		17			21:00	10		24		
9:15	13		21			21:15	16		36		
9:30	24		23			21:30	7		24		
9:45	18	75	15	76	151	21:45	10	43	20	104	147
10:00	11		24			22:00	5		20		
10:15	16		19			22:15	9		17		
10:30	17		14			22:30	6		18		
10:45	20	64	15	72	136	22:45	5	25	14	69	94
11:00	17		11			23:00	3		10		
11:15	19		14			23:15	7		8		
11:30	28		16			23:30	6		7		
11:45	20	84	26	67	151	23:45	6	22	4	29	51
Total Vol.		380		378	**758**			992		1398	**2390**

Daily Totals

NB	SB	Combined
1372	1776	**3148**

	AM			PM		
Split %	50.1%	49.9%	**24.1%**	41.5%	58.5%	**75.9%**
Peak Hour	10:45	11:30	**11:30**	17:45	17:15	**17:45**
Volume	84	87	**164**	132	184	**305**
P.H.F.	0.75	0.84	**0.89**	0.84	0.82	**0.92**

- Level of Service Synchro Worksheets – Buildout Project Access Analysis

Intersection	
Int Delay, s/veh	0.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	4	4	173	4	4	242
Future Vol, veh/h	4	4	173	4	4	242
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	4	4	188	4	4	263

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	461	190	0	0	192	0
Stage 1	190	-	-	-	-	-
Stage 2	271	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	559	852	-	-	1381	-
Stage 1	842	-	-	-	-	-
Stage 2	775	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	557	852	-	-	1381	-
Mov Cap-2 Maneuver	557	-	-	-	-	-
Stage 1	839	-	-	-	-	-
Stage 2	775	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10.4	0	0.1
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	674	1381	-
HCM Lane V/C Ratio	-	-	0.013	0.003	-
HCM Control Delay (s)	-	-	10.4	7.6	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	0	0	-

Intersection	
Int Delay, s/veh	0.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	5	5	399	3	3	516
Future Vol, veh/h	5	5	399	3	3	516
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	5	5	434	3	3	561

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1003	436	0	0	437	0
Stage 1	436	-	-	-	-	-
Stage 2	567	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	268	620	-	-	1123	-
Stage 1	652	-	-	-	-	-
Stage 2	568	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	267	620	-	-	1123	-
Mov Cap-2 Maneuver	267	-	-	-	-	-
Stage 1	649	-	-	-	-	-
Stage 2	568	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	14.9	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	373	1123	-
HCM Lane V/C Ratio	-	-	0.029	0.003	-
HCM Control Delay (s)	-	-	14.9	8.2	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	0.1	0	-

Intersection	
Int Delay, s/veh	1.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	11	18	159	13	22	224
Future Vol, veh/h	11	18	159	13	22	224
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	12	20	173	14	24	243

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	471	180	0	0	187	0
Stage 1	180	-	-	-	-	-
Stage 2	291	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	551	863	-	-	1387	-
Stage 1	851	-	-	-	-	-
Stage 2	759	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	540	863	-	-	1387	-
Mov Cap-2 Maneuver	540	-	-	-	-	-
Stage 1	834	-	-	-	-	-
Stage 2	759	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10.4	0	0.7
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	703	1387	-
HCM Lane V/C Ratio	-	-	0.045	0.017	-
HCM Control Delay (s)	-	-	10.4	7.6	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	0.1	0.1	-

Intersection	
Int Delay, s/veh	0.8

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	15	24	378	9	16	505
Future Vol, veh/h	15	24	378	9	16	505
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	16	26	411	10	17	549

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	999	416	0	0	421	0
Stage 1	416	-	-	-	-	-
Stage 2	583	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	270	637	-	-	1138	-
Stage 1	666	-	-	-	-	-
Stage 2	558	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	264	637	-	-	1138	-
Mov Cap-2 Maneuver	264	-	-	-	-	-
Stage 1	652	-	-	-	-	-
Stage 2	558	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	14.7	0	0.3
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	413	1138	-
HCM Lane V/C Ratio	-	-	0.103	0.015	-
HCM Control Delay (s)	-	-	14.7	8.2	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	0.3	0	-