

July 16, 2019

Ms. Shannon George
DAVID J. POWERS AND ASSOCIATES
1871 The Alameda, Suite 200
San Jose, California 95126

Re: HUD Explosive and Fire Hazards Review
Meridian Avenue Residential Project
961 & 971 Meridian Avenue
San Jose, California

Dear Ms. George:

This HUD Explosive and Fire Hazards Review was performed for David J. Powers and Associates, who is conducting work in connection with the proposed Meridian Avenue Residential Project. The project is planned on the adjoining properties located at 961 and 971 Meridian Avenue in San Jose, California.

Purpose

The purpose of this HUD Explosive and Fire Hazards Review was to identify facilities in the vicinity of the project site having significant observed or reported Specific Hazardous Substances (per 24 CFR Part 51 C, Appendix I) storage, and to evaluate the "acceptable separation distance (ASD)" for the storage containers with respect to their proximity to the project site. This letter was prepared in accordance with the Agreement for Professional Services dated June 25, 2019.

Scope of Work

This survey was conducted in general accordance with 24 CFR Part 51 Subpart C, Siting of HUD-Assisted Projects Near Hazardous Operations Handling Conventional Fuels or Chemicals of an Explosive or Flammable Nature. The scope of work performed included the tasks on the following page.

Running Moose Environmental Consulting, LLC
1355 Poe Lane, San Jose, CA 95130
Phone: 408-307-0129



- ◆ Performed a visual survey of the site vicinity in an attempt to identify readily observable names and addresses of businesses located within an approximate 1-mile radius of the project site appearing to have the potential to store significant quantities of Specific Hazardous Substances (list appended to this letter) in stationary aboveground containers.
- ◆ Requested the most recent available Santa Clara County Environmental Health Department (SCCEHD) hazardous materials inventory for each of the identified facilities and reviewed the California EPA Regulated Site Portal on-line database for identified facilities without an inventory at the SCCEHD.
- ◆ Reviewed available/provided inventories.
- ◆ Calculated ASDs for facilities with reported storage of qualifying quantities of Specific Hazardous Substances stored in aboveground containers.

Identified Potentially Significant Vicinity Facilities

On July 15, 2019, a visual survey of the businesses within approximately 1 mile of the project site was performed in an attempt to identify those appearing likely to store significant quantities of Specific Hazardous Substances. Subsequently, a drive-by survey of the businesses identified as potentially significant was performed, in order to identify readily observable names and addresses. Current hazardous materials/waste inventories for two identified businesses were requested from the SCCEHD.

One of the identified businesses, Willow Glen Unocal at 1104 Meridian Avenue, had a hazardous materials inventory on file which the SCCEHD provided via email. The SCCEHD-provided documentation reported storage of one Specific Hazardous Substance (per 24 CFR Part 51 C, Appendix I) at a quantity determined to warrant calculation of the ASD, in general accordance with the procedures outlined in 24 CFR Part 51 C.

The second business, Chevron #9-6336 at 900 Meridian Avenue, had no hazardous materials inventory on file with the SCCEHD and none available on the California EPA Regulated Site Portal. Visual observation of the Chevron station revealed no apparent automotive repair facility; a storage cage of 20-pound (4.7-gallon) Blue Rhino propane cylinders and a car wash were observed, however. Calculation of the ASD for the propane cylinders is required under 24 CFR Part 51 C. Fuels in underground storage and detergents and waxes in the car wash do not require calculation of ASDs under 24 CFR Part 51 C.

A summary of the businesses with storage of Specific Hazardous Substances, and the most conservative calculated ASD for each, is presented in the table on the following page. The complete ASD calculations are included as an attachment to this letter.

IDENTIFIED POTENTIALLY SIGNIFICANT FACILITIES AND ASSOCIATED ASDs

Facility Name	Facility Address	Approximate Distance from Site* (feet)	Calculated ASD (feet)
Chevron #9-6336	900 Meridian Ave.	505	4.7 gallons propane = 38
Willow Glen Unocal 76	1104 Meridian Ave.	1,645	182 cubic feet LPG = 39

* Distance from anticipated storage location of explosive and/or flammable material to nearest property line of the project site measured using ruler feature of Google Earth.

Conclusions

Based on the calculated values, the ASD for each of the identified Specific Hazardous Substances reported at vicinity facilities is satisfied for the project site.

Limitations

The conclusions and recommendations made in this letter regarding potentially significant Specific Hazardous Substances users within the site vicinity were based on business names/addresses readily observable from accessible public right-of-ways and review of provided readily available documents containing data collected and/or reported by others at the time this study was performed. Other businesses using Specific Hazardous Substances may have been located within a 1-mile radius of the site but were not observable or readily identifiable at the time this study was performed; data collected and/or reported by others may or may not have been accurate. The accuracy and completeness of hazardous materials information provided by the SCCEHD is unknown. More accurate information on types, quantities, and storage conditions of explosive and/or flammable materials used at vicinity facilities could be obtained through performance of a site reconnaissance and/or interview with the business operators.

The data and conclusions presented in this letter are applicable only to the time this study was performed. Businesses and materials used within the site vicinity likely will change over time and this study should be updated as appropriate, to ensure that the most currently available data has been included. As with all HUD Explosive and Fire Hazard Reviews, the extent of information obtained was a function of client demands, time limitations, access limitations, and budgetary constraints.

This letter was prepared for the sole use of David J. Powers and Associates. No warranty, expressed or implied, has been made, except that the services have been performed in accordance with environmental principles generally accepted at this time and location.

Thank you for allowing Running Moose Environmental Consulting, LLC to assist you with this project. If you have any questions, please do not hesitate to call.

Sincerely,

Running Moose Environmental Consulting, LLC



Belinda P. Blackie, P.E.
P.E. Number C56448
Principal Environmental Engineer

References

California Environmental Reporting System (CERS). *Hazardous Materials and Wastes Inventory Matrix Report, Willow Glen Unocal 76, 1104 Meridian Av., San Jose 95125.* March 5, 2018.

Cornell Law School, Legal Information Institute. *Appendix I to Subpart C of Part 51 – Specific Hazardous Substances.* Undated. [https://www.law.cornell.edu/cfr/text/24/appendix-I to subpart C of part 51](https://www.law.cornell.edu/cfr/text/24/appendix-I%20to%20subpart%20C%20of%20part%2051)

HUD. *24 CFR Part 51 Subpart C, Siting of HUD-Assisted Projects Near Hazardous Operations Handling Conventional Fuels or Chemicals of an Explosive or Flammable Nature, Acceptable Separation Distance (ASD) Electronic Assessment Tool.* 2018.
<https://www.hudexchange.info/environmental-review/asd-calculator/>

HUD Exchange. *Explosive and Flammable Facilities.* 2018.
<https://www.hudexchange.info/environmental-review/explosive-and-flammable-facilities/>

Specific Hazardous Substances
(per Appendix I to Subpart C of Part 51)

Hazardous Liquids	Hazardous Gases
Acetic Acid	Acetaldehyde
Acetic Anhydride	Butadiene
Acetone	Butane
Acrylonitrile	Ethene
Amyl Acetate	Ethylene
Amyl Alcohol	Ethylene Oxide
Benzene	Hydrogen
Butyl Acetate	Liquefied Natural Gas (LNG)
Butyl Acrylate	Liquefied Petroleum Gas (LPG)
Butyl Alcohol	Propane
Carbon Bisulfide	Propylene
Carbon Disulfide	Vinyl Chloride
Cellosolve	
Cresols	
Crude Oil (Petroleum)	
Cumene	
Cyclohexane	
No. 2 Diesel Fuel	
Ethyl Acetate	
Ethyl Acrylate	
Ethyl Alcohol	
Ethyl Benzene	
Ethyl Dichloride	
Ethyl Ether	
Gasoline	
Heptane	
Hexane	
Isobutyl Acetate	
Isobutyl Alcohol	
Isopropyl Acetate	
Isopropyl Alcohol	
Jet Fuel and Kerosene	
Methyl Alcohol	
Methyl Amyl Alcohol	
Methyl Cellosolve	
Methyl Ethyl Ketone	
Naptha	
Pentane	
Propylene Oxide	
Toluene	
Vinyl Acetate	
Xylene	

ASD Calculations

All ASDs were calculated using the program at:
<https://www.hudexchange.info/environmental-review/asd-calculator/>

Values listed in summary table within the letter were rounded to the nearest whole foot.

Chevron #9-6336 – 900 Meridian Avenue

- 4.7 gallons propane (presumed stored under pressure)
ASD for Blast Overpressure = 37.23 feet
ASD for Thermal Radiation for People = 29.65 feet
ASD for Thermal Radiation for Buildings = 4.22 feet

Willow Glen Unocal 76 – 1104 Meridian Avenue

- 182 cubic foot LPG (stated at ambient pressure in inventory but presumed stored under pressure)
1 cubic foot propane = 0.029 gallon LPG (as propane)
5.28 gallons LPG (as propane)
ASD for Blast Overpressure = 38.69 feet
ASD for Thermal Radiation for People = 31.12 feet
ASD for Thermal Radiation for Buildings = 4.45 feet

WILLOW GLEN UNOCAL 76 (CERSID: 10344493)**Facility Information Accepted Mar 6, 2018**

Submitted on 3/5/2018 11:41:08 AM by *CHARLEEN ZOUMALAN* of WILLOW GLEN UNOCAL 76 (SAN JOSE, CA)

Submittal was **Accepted** on 3/6/2018 4:31:49 PM by Xavier Dupree

Comments by regulator: Accepted as administratively complete. A technical review may be conducted subsequently as part of your next facility inspection.

- Business Activities
- Business Owner/Operator Identification

Hazardous Materials Inventory Accepted Mar 6, 2018

Submitted on 3/5/2018 11:41:08 AM by *CHARLEEN ZOUMALAN* of WILLOW GLEN UNOCAL 76 (SAN JOSE, CA)

Submittal was **Accepted** on 3/6/2018 4:31:59 PM by Xavier Dupree

Comments by regulator: Accepted as administratively complete. A technical review may be conducted subsequently as part of your next facility inspection.

- Hazardous Material Inventory (10)
- Site Map (Official Use Only)
 - *Annotated Site Map (Official Use Only)* (Adobe PDF, 14098KB)

Site Identification**WILLOW GLEN UNOCAL 76**1104 MERIDIAN AV
SAN JOSE, CA 95125County
Santa ClaraCERS ID
10344493EPA ID Number
CAL000030520**Submittal Status**

Submitted on 3/5/2018 by CHARLEEN ZOUMALAN of WILLOW GLEN UNOCAL 76 (SAN JOSE, CA)

Submittal was **Accepted**; Processed on 3/6/2018 by Xavier Dupree for Santa Clara County Environmental Health

Comments by regulator: Accepted as administratively complete. A technical review may be conducted subsequently as part of your next facility inspection.

Hazardous Materials

Does your facility have on site (for any purpose) at any one time, hazardous materials at or above 55 gallons for liquids, 500 pounds for solids, or 200 cubic feet for compressed gases (include liquids in ASTs and USTs); or is regulated under more restrictive inventory local reporting requirements (shown below if present); or the applicable Federal threshold quantity for an extremely hazardous substance specified in 40 CFR Part 355, Appendix A or B; or handle radiological materials in quantities for which an emergency plan is required pursuant to 10 CFR Parts 30, 40 or 70?

Yes**Underground Storage Tank(s) (UST)**

Does your facility own or operate underground storage tanks?

Yes**Hazardous Waste**

Is your facility a Hazardous Waste Generator?

Yes

Does your facility treat hazardous waste on-site?

No

Is your facility's treatment subject to financial assurance requirements (for Permit by Rule and Conditional Authorization)?

No

Does your facility consolidate hazardous waste generated at a remote site?

No

Does your facility need to report the closure/removal of a tank that was classified as hazardous waste and cleaned on-site?

No

Does your facility generate in any single calendar month 1,000 kilograms (kg) (2,200 pounds) or more of federal RCRA hazardous waste, or generate in any single calendar month, or accumulate at any time, 1 kg (2.2 pounds) of RCRA acute hazardous waste; or generate or accumulate at any time more than 100 kg (220 pounds) of spill cleanup materials contaminated with RCRA acute hazardous waste.

No

Is your facility a Household Hazardous Waste (HHW) Collection site?

No**Excluded and/or Exempted Materials**

Does your facility recycle more than 100 kg/month of excluded or exempted recyclable materials (per HSC 25143.2)?

No

Does your facility own or operate ASTs above these thresholds? Store greater than 1,320 gallons of petroleum products (new or used) in aboveground tanks or containers.

No

Does your facility have Regulated Substances stored onsite in quantities greater than the threshold quantities established by the California Accidental Release prevention Program (CalARP)?

No**Additional Information**

No additional comments provided.

Facility/Site**WILLOW GLEN UNOCAL 76**1104 MERIDIAN AV
SAN JOSE, CA 95125CERS ID
10344493**Submittal Status**

Submitted on 3/5/2018 by CHARLEEN ZOUMALAN of WILLOW GLEN UNOCAL 76 (SAN JOSE, CA)

Submittal was **Accepted**; Processed on 3/6/2018 by Xavier Dupree for Santa Clara County Environmental Health

Comments by regulator: Accepted as administratively complete. A technical review may be conducted subsequently as part of your next facility inspection.

Identification

WILLOW GLEN UNOCAL 76, INC

Operator Phone
(408) 267-1222Business Phone
(408) 267-1222

Business Fax

Beginning Date

Ending Date

Dun & Bradstreet

SIC Code
5541

Primary NAICS

Facility/Site Mailing Address1104 MERIDIAN AV
SAN JOSE, CA 95125**Primary Emergency Contact**

MATTHEW E. HORTON

Title

OWNER

Business Phone
(408) 267-122224-Hour Phone
(408) 832-7616

Pager Number

Owner

WILLOW GLEN UNOCAL 76 INC

(408) 267-1222

1104 MERIDIAN AV
SAN JOSE, CA 95125**Secondary Emergency Contact**

MICHELLE HORTON

Title

MANAGER

Business Phone
(408) 267-122224-Hour Phone
(408) 832-3171

Pager Number

Billing Contact

WILLOW GLEN UNOCAL 76, INC

(408) 267-1222

wg76@sbcglobal.net

1104 MERIDIAN AV
SAN JOSE, CA 95125**Environmental Contact**

MATTHEW E. HORTON

(408) 832-7616

wg76@sbcglobal.net

1104 MERIDIAN AV
SAN JOSE, CA 95125**Name of Signer**

WILLOW GLEN UNOCAL 76, INC

Signer Title

OWNER

Document Preparer

RAMTOX CORP.

Additional Information

Locally-collected Fields

Some or all of the following fields may be required by your local regulator(s).

Property Owner

Phone

Mailing Address

Assessor Parcel Number (APN)

Number of Employees

Facility ID

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org. WILLOW GLEN UNOCAL 76	Chemical Location OUTSIDE AREA	CERS ID 10344493
Facility Name WILLOW GLEN UNOCAL 76 1104 MERIDIAN AV, SAN JOSE 95125		Facility ID Status Submitted on 3/5/2018 11:41 AM

DOT Code/Fire Haz. Class	Common Name	Unit	Quantities			Annual Waste Amount	Federal Hazard Categories	Hazardous Components (For mixture only)		
			Max. Daily	Largest Cont.	Avg. Daily			Component Name	% Wt	EHS CAS No.
DOT: 8 - Corrosives (Liquids and Solids) Corrosive, Water Reactive, Class 2, Oxidizing, Class 1	Lead Acid Batteries	Gallons	20	1	10	5	- Physical Corrosive To Metal	Sulfuric Acid	34 %	7664-93-9
	<u>CAS No</u>	<u>State</u>	<u>Storage Container</u>		<u>Pressue</u>	<u>Waste Code</u>		lead	34 %	7439-92-1
	7664-93-9	Liquid	Other		Ambient			lead dioxide	31 %	1309-60-0
		<u>Type</u>	Pure	Days on Site: 365		Ambient		lead sulfate	1 %	7446-14-2
DOT: 3 - Flammable and Combustible Liquids Flammable Liquid, Class I-B	USED OIL FILTERS	Pounds	400	400	200	55	- Physical Flammable	USED OIL FILTERS	85 %	8002-05-9
	<u>CAS No</u>	<u>State</u>	<u>Storage Container</u>		<u>Pressue</u>	<u>Waste Code</u>		USED OIL	15 %	8002-05-9
		Solid	Steel Drum		Ambient	221				
		<u>Type</u>	Waste	Days on Site: 365		Ambient				
Toxic	Used Ethylene Glycol	Gallons	50	55	30	5	- Health Acute Toxicity - Health Skin Corrosion Irritation - Health Respiratory Skin Sensitization - Health Serious Eye Damage Eye Irritation	ETHYLENE GLYCOL WATER	50 % 50 %	107-21-1 7732-18-5
	<u>CAS No</u>	<u>State</u>	<u>Storage Container</u>		<u>Pressue</u>	<u>Waste Code</u>				
	107-21-1	Liquid	Plastic/Non-metalic Drum		Ambient					
		<u>Type</u>	Waste	Days on Site: 365		Ambient				
Corrosive	Lead Acid Batteries	Pounds	10	1	5	5	- Physical Corrosive To Metal	Sulfuric Acid lead lead dioxide lead sulfate	35 % 34 % 1 % 1 %	7664-93-9 7439-92-1 1309-60-0 7446-14-2
	<u>CAS No</u>	<u>State</u>	<u>Storage Container</u>		<u>Pressue</u>	<u>Waste Code</u>				
	747439-92-1	Solid	Other		Ambient	181				
		<u>Type</u>	Waste	Days on Site: 365		Ambient				
Flammable Liquid, Class I-B	WASTE WATER (MAY CONTAIN TRACES OF GASOLINE)	Gallons	55	55	25	55	- Physical Flammable - Health Acute Toxicity - Health Skin Corrosion Irritation - Health Respiratory Skin Sensitization - Health Serious Eye Damage Eye Irritation	water GASOLINE	99 % 1 %	7732-18-5 8006-61-9
	<u>CAS No</u>	<u>State</u>	<u>Storage Container</u>		<u>Pressue</u>	<u>Waste Code</u>				
		Liquid	Steel Drum		Ambient	134				
		<u>Type</u>	Waste	Days on Site: 365		Ambient				
Flammable Solid	solid waste	Gallons	55	55	25	55	- Physical Flammable	absorbents & fuel filters	100 %	
	<u>CAS No</u>	<u>State</u>	<u>Storage Container</u>		<u>Pressue</u>	<u>Waste Code</u>				
		Solid	Steel Drum		Ambient	352				
		<u>Type</u>	Waste	Days on Site: 365		Ambient				

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org. WILLOW GLEN UNOCAL 76	Chemical Location OUTSIDE AREA	CERS ID 10344493
Facility Name WILLOW GLEN UNOCAL 76		Facility ID
1104 MERIDIAN AV, SAN JOSE 95125		Status Submitted on 3/5/2018 11:41 AM

DOT Code/Fire Haz. Class	Common Name	Unit	Quantities			Annual Waste Amount	Federal Hazard Categories	Hazardous Components (For mixture only)		
			Max. Daily	Largest Cont.	Avg. Daily			Component Name	% Wt	EHS CAS No.
DOT: 3 - Flammable and Combustible Liquids Flammable Liquid, Class I-B	Motor Oil	Gallons	550	550	250		- Physical	VARIOUS LUBRICATING BASE OILS	85 %	6474X-XX-X
	<u>CAS No</u>	<u>State</u>	<u>Storage Container</u>		<u>Pressue</u>	<u>Waste Code</u>	Flammable			
		Liquid	Belowground Tank		Ambient	221	- Health Acute	ADDITIVE PACKAGE, INCLUDING	15 %	MIXTURE
		<u>Type</u>	Mixture	Days on Site: 365			Toxicity	ZINC ALKYL DITHIOPHOSPHATE	2 %	68649-42-3
Toxic	Ethylene Glycol	Gallons	60	1	30	5	- Health Acute	ETHYLENE GLYCOL	50 %	107-21-1
	<u>CAS No</u>	<u>State</u>	<u>Storage Container</u>		<u>Pressue</u>	<u>Waste Code</u>	Toxicity	DIETHYLENE GLYCOL	5 %	111466
	107-21-1	Liquid	Plastic Bottle or Jug		Ambient		- Health Skin			
		<u>Type</u>	Pure	Days on Site: 365			Corrosion			
DOT: 2.1 - Flammable Gases Flammable Gas	Liquefied Petroleum Gas (lpg)	Cu. Feet	3274	182	1500		- Physical	PROPANE	85 %	74-98-6
	<u>CAS No</u>	<u>State</u>	<u>Storage Container</u>		<u>Pressue</u>	<u>Waste Code</u>	Flammable	ETHANE	2 %	74-84-0
	74-98-6	Gas	Cylinder		Ambient		- Physical Gas	PROPLYENE	1 %	115-07-1
		<u>Type</u>	Pure	Days on Site: 365			Under Pressure	BUTANES	1 %	106-97-8

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org. WILLOW GLEN UNOCAL 76	Chemical Location SERVICE BAY	CERS ID 10344493
Facility Name WILLOW GLEN UNOCAL 76		Facility ID
1104 MERIDIAN AV, SAN JOSE 95125		Status Submitted on 3/5/2018 11:41 AM

DOT Code/Fire Haz. Class	Common Name	Unit	Quantities			Annual Waste Amount	Federal Hazard Categories	Hazardous Components (For mixture only)		
			Max. Daily	Largest Cont.	Avg. Daily			Component Name	% Wt	EHS
DOT: 3 - Flammable and Combustible Liquids Flammable Liquid, Class I-B	Gasoline <u>CAS No</u> 86290-81-5	Gallons	24000	12000	12000	5	- Physical Flammable - Health Acute Toxicity - Health Skin Corrosion Irritation - Health Respiratory Skin Sensitization - Health Serious Eye Damage Eye Irritation			
		<u>State</u> Liquid <u>Type</u> Pure	<u>Storage Container</u> Belowground Tank Days on Site: 365		<u>Pressue</u> Ambient <u>Temperature</u> Ambient	<u>Waste Code</u>				