# **CITY OF CARSON**

# PLANNING COMMISSION STAFF REPORT

PUBLIC HEARING:	November 24, 2015
SUBJECT:	Design Overlay Review No. 1585-15 and Conditional Use Permit No. 986-15
APPLICANT:	Robert E. Stenson 2014 Rosecrans Avenue, Suite 380 El Segundo, CA 90245
REQUEST:	To construct a two-story, 13-unit garden styl apartment building within the MU-CS (Mixed-Us – Carson Street) zoning district.
PROPERTY INVOLVED:	21721 Moneta Avenue
C	OMMISSION ACTION
Concurred with staff	
Did not concur with staff	
Other	
CO	MMISSIONERS' VOTE

AYE	NO	AYE	NO	

# I. Introduction

Property Owner:

Equassure - Moneta LLC, 2041 Rosecrans Ave., Suite 380, El Segundo, CA 90245

Applicant

Robert E. Stenson, 2041 Rosecrans Ave., Suite 380, El Segundo, CA 90245

Project Address/Location

21721 Moneta Avenue (On Moneta Avenue just south of Carson Street)

Project Description

The applicant requests the approval of Design Overlay Review (DOR) No. 1585-15, and Conditional Use Permit (CUP) No. 986-15 to allow the development of a two-story, 13-unit garden style apartment building on a site.

Previously Approved Discretionary Permits None.

Public Safety Issues None.

# II. Project Site and Surrounding Land Uses

The following provides a summary of the site information, refer to Exhibit 1.

Site Information					
General Plan	Mixed-Use Residential				
Land Use	Wilder Goo Trooldontial				
Zone District	MU-CS (Mixed-Use - Carson Street)				
Site Size	0.45 acres				
Present Use and	Three (3) single-family dwellings and one (1) mobile home				
Development	(nonconforming)				
Surrounding	North: 76 Gas Station zoned MU-CS				
Uses/Zoning	South: Single-Family Dwellings zoned RS				
Ü	East: Commercial/Retail Center and an Apartment Building zoned				
	MU-CS; Single-Family Dwellings zoned RA				
	West: Commercial/Retail Center and a Church zoned MU-CS				
Access	Ingress/Egress: Moneta Avenue				

Planning Commission Staff Report November 24, 2015 DOR No. 1585-15 and CUP No. 986-15

# III. Analysis

# Site Plan

The 0.45-acre site is proposed to be developed with a two-story, 13-unit multi-family garden style apartment clustered around a central courtyard accessible to all residents. The site design places the parking areas and the drive aisle between the proposed building and the existing 76 gas station. This design provides a transition between the existing gas station and the proposed building. In addition, the proposed building provides a land use transition between the gas station and the existing single family homes. Two single family homes are directly adjacent to the site and have rear setbacks of 18 feet and 29 feet in addition to the 10-foot setback for the proposed building. The project provides approximately 4,332 square feet of useable open space that includes the courtyard, private patios, and roof decks.

Access to the project site is provided by a driveway on Moneta Avenue. A total of twenty-five (25) parking spaces are provided on-site including twenty-two (22) covered spaces for residents, one (1) guest/disabled space, and two (2) uncovered guest spaces. No vehicle parking will be permitted in the drive aisle to facilitate Fire Department emergency vehicle response access.

# Architecture

The project is designed in a contemporary architectural style consisting of multi-level roof lines, wrought iron railing and decorative front doors. The building facades incorporate a variety of architectural features including variation in window size and type and placement of doors and windows. Primary exterior building materials consist of stucco, with metal accent finish incorporated as a secondary building material, and suspended metal awnings which are consistent with the proposed architectural style.

## Unit Mix and Sizes

The proposed building includes four (4) studio flats, three (3) one-bedroom, and six (6) two-bedroom units with private patios for the first floor units and private roof decks accessible by only the second story units. The total livable area is 9,932 square feet:

Units A-1and A-2	Studio Flat	506 sq. ft. x 3 = 1,518
Unit A-3	Studio Flat	485 sq. ft. x 1 = 485
Units B-1 and B-2	1-Bedroom, 1-Bath	770 sq. ft. x 2 = 1,540
Unit B-3	1-Bedroom, 1-Bath	785 sq. ft. x 1 = 785
Unit C	2-Bedroom, 2-Bath	860 sq. ft. x 2 = 1,720
Unit D	2-Bedroom, 2-Bath	971 sq. ft. x 4 = 3,884
	Total Units/Livable Space	13 Units/9,932 sq. feet

# Landscaping and Fencing

The proposed landscape plan features water efficient design that includes three species of trees, seventeen species of shrubs, and ground cover. In addition, vines are proposed to cover the south exterior building wall to soften the view from the adjacent single story homes. New parkway trees will be planted on Moneta Avenue. All planting and irrigation will comply with applicable water conservation limits.

The project also includes a six-foot high wrought iron fence along a portion of the southern property line to provide additional privacy for the side and rear units. A decorative 8-foot metal wall with matching metal accent as the building is proposed on a portion of the northerly property facing Moneta Avenue. A 15-foot landscape and patio open space buffer the units from the street.

### Lot Size

Pursuant to CMC Section 9138.17.D, the minimum lot size for new residential development is 30,000 square feet. The proposed project is located in a 19,828-square-foot lot. The intent this section of the CMC is to promote consolidation of small lots into larger lots to allow construction of large and cohesive developments with integrated design. However, staff has determined the subject property is not a good candidate for consolidation with other properties immediately adjacent to it since:

- The properties to the north are existing detached single family dwellings outside of the MU-CS zone.
- The property to the north is a gas station site has recently been remodeled and is considered a viable use.
- The property to the west is a parking lot for the Samoan Congregational Church that was recently built.

However, the most important factor in staff's determination is that the site is not along Carson Street. In addition, the traffic counts on Moneta Avenue are limited and do not support other developments such as commercial and mixed use. Therefore, staff has determined that the property is deemed to have the required lot size to meet the intent of the code.

# Phase 2 Assessment

Odic Environmental has prepared a Phase II environmental assessment for this property to investigate the soil vapor conditions on the property and to determine the potential impact, if any, from the adjacent gas station to the north, refer to Exhibit 3. To determine the absence or presence of contaminants of concern associated with the gas station, twelve borings to a maximum of 12 feet below the ground surface were conducted on the site for the installation of soil vapor probes. The only contaminant of concern that was detected was Benzene which was present in two boring samples. Odic compared their laboratory results with California Human Health Screening Levels to determine if the benzene concentrations in soil vapor represent a potential risk to human health via vapor intrusion. The survey found that trace level

Planning Commission Staff Report November 24, 2015 DOR No. 1585-15 and CUP No. 986-15 of benzene in the subsurface soil vapor beneath the property are emanating from the gas station which continues to go through corrective actions (active site remediation and monitoring). Therefore, the levels of residual contamination and any associated site risk are expected to reduce with time.

The Phase II environmental assessment concluded that a significant environmental risk of vapor intrusion from the gas station is not expected and further investigation or corrective action is not recommended at this time. The Phase II study recommends the project to prepare a soil management plan to address the handling of soil that may contain petroleum hydrocarbons prior to the issuance of grading permits. Additional subsurface investigation and special disposal considerations may be required if the impacted soil is encountered and excavated from the site. Finally, the Phase II study concludes that no definitive data exists that presence of fuel VOCs, particularly benzene, in the subsurface beneath the property represents a significant threat to future building occupants through the vapor intrusion pathway. Therefore, adverse impacts are not anticipated with the continued use of the site for residential purposes, refer to Conditions of Approval No. 41.

# IV. Environmental Review

The proposed project is categorically exempt from the provisions of the California Environmental Quality Act (CEQA) pursuant to CEQA Guidelines Section 15332, Class 32 – In-Fill Development Projects. The supporting factors for this CEQA exemption are as follows:

- The project occurs on a project site of no more than five acres
- The project site has no value as habitat for endangered, rare or threatened species
- The project is located within a high quality transit corridor

# V. <u>Public Notice</u>

Public notice was posted to the project site on November 4, 2015. Notices were mailed to property owners and occupants within 500 feet on November 5, 2015. The agenda was posted at City Hall 72 hours prior to the Planning Commission meeting.

# VI. Recommendation

That the Planning Commission:

- APPROVE Design Overlay Review No. 1585-15 and Conditional Use Permit No. 986-15; and
- WAIVE further reading and ADOPT Resolution No. 15-\_\_\_, entitled "A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF CARSON APPROVING DESIGN OVERLAY REVIEW NO. 1585-15 AND CONDITIONAL USE PERMIT NO. 986-15 FOR DEVELOPMENT OF A TWO-STORY, 13-UNIT APARTMENT BUILDING LOCATED AT 21721 MONETA AVENUE."

15

# VII. Exhibits

- 1. Site Map
- 2. Draft Resolution
- 3. Phase II Environmental Assessment Report
- 4. Development plans

Prepared by:

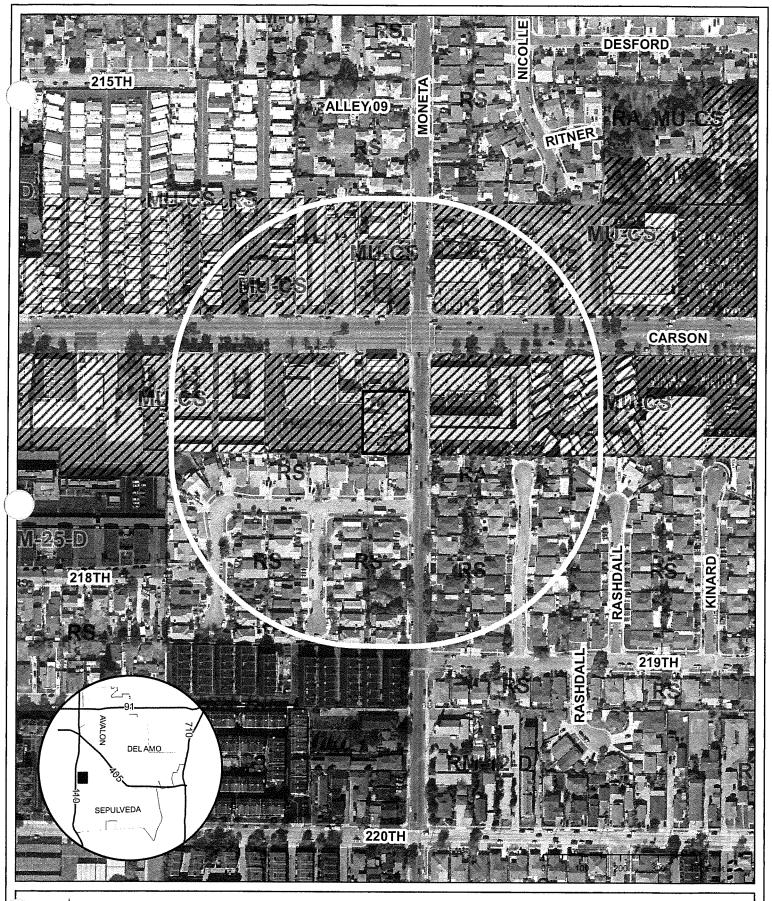
McKina Alexander, Associate Planner

Reviewed by:

Richard Rojas, AICP, Senior Planner

Approved by:

Saied Naaseh, Planning Manager





City of Carson 500 Foot Radius Map 21721 Moneta Avenue

EXHIBIT NO.01

Date Printed: Wednesday, November 04, 2015

## CITY OF CARSON

# **PLANNING COMMISSION**

# **RESOLUTION NO.**

A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF CARSON APPROVING DESIGN OVERLAY REVIEW NO. 1585-15 AND CONDITIONAL USE PERMIT NO. 986-15 FOR DEVELOPMENT OF A TWO-STORY, 13-UNIT APARTMENT BUILDING LOCATED AT 21721 MONETA AVENUE.

THE PLANNING COMMISSION OF THE CITY OF CARSON, CALIFORNIA, HEREBY FINDS, RESOLVES AND ORDERS AS FOLLOWS:

**Section 1.** An application was duly filed by the applicant Robert E. Stenson and property owner Equassure – Moneta LLC with respect to real property located at 21721 Moneta Avenue and described in Exhibit "A" attached hereto, requesting the approval to construct a two-story, 13-unit garden style apartment building at 21721 Moneta Avenue within the MU-CS (Mixed-Use – Carson Street) zoning district. The request includes:

- Design Overlay Review (DOR) No. 1585-15 for construction of new multiple-family dwellings; and
- Conditional Use Permit (CUP) No. 986-15 for multiple-family residential within the Mixed-Use Carson Street district.

A public hearing was duly held on November 24, 2015, at 6:30 P.M. at City Hall, Helen Kawagoe Council Chambers, 701 East Carson Street, Carson, California. A notice of time, place and purpose of the aforesaid meeting was duly given.

**Section 2**. Evidence, both written and oral, was duly presented to and considered by the Planning Commission at the aforesaid meeting.

**Section 3.** In regards to CMC Section 9172.23 Site Plan and Design Review, the Planning Commission finds that:

- a) The proposed project is compatible with the General Plan and surrounding uses. The proposed project is identified in the zoning code as a permitted use for this zoning designation subject to Conditional Use Permit approval. There is no specific plan for this area. The surrounding properties are developed with multi-tenant commercial, religious institution, single-family and multiple-family dwellings and the proposed project is compatible with the neighborhood.
- b) The proposed project is compatible in design with existing and anticipated development in the vicinity, including the aspects of site planning, land coverage, landscaping, appearance and scale of structures, open spaces, and other features relative to a harmonious and attractive development of the area.
- c) There will be adequate street access and traffic capacity for the proposed multiple-family residential use. Interior circulation and street access is not anticipated to generate significant adverse effects to adjacent public streets based on the city's Traffic Engineer review. The subject property is located on Moneta Avenue adjacent to a residential neighborhood. Public right-of-way improvements modifying the driveway approaches are provided to comply with current American Disabilities Act (ADA) accessibility standards.

EXHIBIT NO. 02

- d) The proposed project conforms to applicable design standards and guidelines for the MU-CS. The project is designed in a contemporary architectural style consisting of varying roof lines, wrought iron railing and decorative front doors. The building facades incorporate a variety of architectural features including variation in window size and type and placement of doors and windows. Primary exterior building materials consist of stucco, with metal accent finish incorporated as a secondary building material, and suspended metal awnings which are consistent with the proposed architectural style.
- e) The proposed DOR application to permit multiple-family residential units meets the goals and objectives of the General Plan and would be consistent with applicable zoning and design regulations. Therefore, all of the required findings pursuant to Site Plan and Design Review Section 9172.23 (D) can be made in the affirmative.

**Section 4**. In regards to CMC Section 9172.21 Conditional Use Permit, the Planning Commission finds that:

- a) The proposed project is compatible with the General Plan and surrounding uses. The proposed project is identified in the zoning code as a permitted use for this zoning designation. The surrounding properties are developed with multi-tenant commercial, religious institution, single-family and multiple-family dwellings and the proposed project is compatible with the neighborhood.
- b) The site is adequate in size, shape, topography, location, utilities, and other factors to accommodate the proposed use and development.
- c) Pursuant to CMC Section 9138.17.D, the minimum lot size for new residential development is 30,000 square feet. The proposed project is located in a 19,828square-foot lot. The intent this section of the CMC is to promote consolidation of small lots into larger lots to allow construction of large and cohesive developments with integrated design. The subject property is not a good candidate for consolidation with other properties immediately adjacent to it since:
  - The properties to the north are existing detached single family dwellings outside of the MU-CS zone.
  - The property to the north is a gas station site has recently been remodeled and is considered a viable use.
  - The property to the west is a parking lot for the Samoan Congregational Church that was recently built.
  - The site is not along Carson Street.
  - The traffic counts on Moneta Avenue are limited and do not support other developments such as commercial and mixed use.

Therefore, the property is deemed to have the required lot size to meet the intent of the code.

d) There will be adequate street access and traffic capacity for the proposed multiplefamily residential use. Interior circulation and street access is not anticipated to generate significant adverse effects to adjacent public streets based on the city's Traffic Engineer review. The subject property is located on Moneta Avenue adjacent to a residential neighborhood. Public right-of-way improvements modifying the driveway approaches are provided to comply with current American Disabilities Act (ADA) accessibility standards.

- e) There will be adequate water supply for fire protection for the proposed use, as confirmed by the local water utility provider.
- f) The proposed use is compatible in design with existing and anticipated development in the vicinity, including the aspects of site planning, land coverage, landscaping, appearance and scale of structures, open spaces, and other features relative to a harmonious and attractive development of the area.
- g) The proposed CUP application to permit multiple-family residential units meets the goals and objectives of the General Plan and would be consistent with applicable zoning and design regulations. Therefore all of the required findings pursuant to Conditional Use Permit Section 9172.21 (D) can be made in the affirmative.

**Section 5.** The Planning Commission further finds that the proposed project will not have a significant effect on the environment pursuant to Section 15332, Class 32 (In-Fill Development Projects) of the California Environmental Quality Act (CEQA) Guidelines and is therefore categorically exempt.

**Section 6**. Based on the aforementioned findings, the Commission hereby approves Design Overlay Review No. 1585-15 and Conditional Use Permit No. 986-15 with respect to the property described in Section 1 hereof, subject to the conditions set forth in Exhibit "B" attached hereto.

**Section 7**. The Secretary shall certify to the adoption of the Resolution and shall transmit copies of the same to the applicant.

**Section 8**. This action shall become final and effective fifteen days after the adoption of this Resolution unless within such time an appeal is filed with the City Clerk in accordance with the provisions of the Carson Zoning Ordinance.

PASSED, APPROVED AND ADOPTED THIS 24<sup>th</sup> DAY OF NOVEMBER 2015.

	CHAIRMAN
ATTEST:	
SECRETARY	

## CITY OF CARSON

## **ECONOMIC DEVELOPMENT**

# **PLANNING DIVISION**

# **EXHIBIT "B"**

# CONDITIONS OF APPROVAL

# **DESIGN OVERLAY REVIEW NO. 1585-15**

# **CONDITIONAL USE PERMIT NO. 986-15**

# **GENERAL CONDITIONS**

- 1. If building permits for Design Overlay Review No. 1585-15 and Conditional Use Permit No. 986-15, are not issued within one year of their effective date, said permit shall be declared null and void unless an extension of time is requested prior to expiration and approved by the Planning Commission.
- 2. The approved Resolution, including the Conditions of Approval contained herein, and signed Affidavit of Acceptance, shall be copied in their entirety and placed directly onto a separate plan sheet behind the cover sheet of the development plans prior to Building and Safety plan check submittal. Said copies shall be included in all development plan submittals, including any revisions and the final working drawings.
- 3. The applicant shall submit two complete sets of plans that conform to all the Conditions of Approval to be reviewed and approved by the Planning Division prior to the issuance of a building permit.
- 4. The applicant shall comply with all city, county, state and federal regulations applicable to this project.
- 5. The applicant shall make any necessary site plan and design revisions to the site plan and elevations approved by the Planning Commission in order to comply with all the conditions of approval and applicable Zoning Ordinance provisions. Substantial revisions will require review and approval by the Planning Commission. Any revisions shall be approved by the Planning Division prior to Building and Safety plan check submittal.
- 6. The applicant and property owner shall sign an Affidavit of Acceptance form and submit the document to the Planning Division within 30 days of receipt of the Planning Commission Resolution.
- 7. Decision of the Planning Commission shall become effective and final 15 days after the date of its action unless an appeal is filed in accordance with Section 9173.4 of the Zoning Ordinance.



- 8. A modification of the conditions of this permit, including additions or deletions, may be considered upon filing of an application by the owner of the subject property or his/her authorized representative in accordance with Section 9173.1 of the Zoning Ordinance.
- 9. It is further made a condition of this approval that if any condition is violated or if any law, statute ordinance is violated, this permit may be revoked by the Planning Commission or City Council, as may be applicable; provided the applicant has been given written notice to cease such violation and has failed to do so for a period of thirty days.
- 10. Precedence of Conditions. If any of the Conditions of Approval alter a commitment made by the applicant in another document, the conditions enumerated herein shall take precedence unless superseded by a Development Agreement, which shall govern over any conflicting provisions of any other approval.
- 11. City Approvals. All approvals by City, unless otherwise specified, shall be by the department head of the department requiring the condition. All agreements, covenants, easements, deposits and other documents required herein where City is a party shall be in a form approved by the City Attorney. The Developer shall pay the cost for review and approval of such agreements and deposit necessary funds pursuant to a deposit agreement.
- 12. Covenant, Conditions, and Restrictions (CC&Rs). Covenants, Conditions and Restrictions (CC&Rs) shall be established for the project. The applicant or successor in interest shall pay for the cost of review and approval of the CC&Rs by the City Attorney. The CC&Rs shall provide for proper maintenance of the property and include other necessary conditions to carry out the terms herein, and shall be enforceable by the City, and recorded prior to development of any parcels. An initial deposit of \$5,000.00 is required to cover processing costs. The applicant shall pay the cost for review and approval of such agreements and deposit necessary funds pursuant to a deposit agreement.
- 13. Deposit Account. A trust deposit account shall be established for all deposits and fees required in all applicable conditions of approval of the project. The trust deposit shall be maintained with no deficits. The trust deposit shall be governed by a deposit agreement. The trust deposit account shall be maintained separate from other City funds and shall be non-interest bearing. City my make demands for additional deposits to cover all expenses over a period of 60 days and funds shall be deposited within 10 days of the request therefore, or work may cease on the Project.
- 14. Indemnification. The Applicant shall defend, indemnify and hold harmless the City of Carson, its agents, officers, or employees from any claims, damages, action, or proceedings against the City or its agents, officers, or employees to



attack, set aside, void or annul, or in any way related to the approval of the City, its advisory agencies, appeal boards, or legislative body concerning Design Overlay Review No. 1556-15 and Conditional Use Permit No. 972-15. The applicant shall provide a deposit in the amount of 100% of the City's estimate, in its sole and absolute discretion, of the cost of litigation, including the cost of any award of attorney's fees, and shall make additional deposits as requested by the City to keep the deposit at such level. The City may ask for further security in the form of a deed of trust to land of equivalent value. If the applicant fails to provide or maintain the deposit, the City may abandon the action and the applicant shall pay all costs resulting therefrom and City shall have no liability to the applicant.

# **AESTHETICS**

- 15. Texture treatment, such as stucco paint and stone veneer shall be incorporated into building facades, subject to the Planning Division approval.
- 16. There shall be no deviation of architectural design or details from the approved set of plans. Any alteration shall be first approved by the Planning Division.
- 17. Down spouts shall be interior to the structure or architecturally integrated into the structure to the satisfaction of the Planning Division.
- 18. Any roof-mounted equipment shall be screened to the satisfaction of the Planning Division.
- 19. Prior to Issuance of Building Permit, the specification of all colors and materials must be submitted and approved by the Planning Division.

# LANDSCAPE/IRRIGATION

- 20. Comply with the provisions of Section 9168 of the Zoning Ordinance, "Water Efficient Landscaping."
- 21. Landscaping shall be provided with a permanently installed, automatic irrigation system and operated by an electrically-timed controller station set for early morning or late evening irrigation.
- 22. Installation of 6" x 6" concrete curbs are required around all landscaped planter areas, except for areas determined by National Pollutant Discharge Elimination System (NPDES) permit or other applicable condition of approval that requires certain landscaped areas to remain clear of concrete curbs for more efficient storm water runoff flow and percolation. Revised landscaping and irrigation plans shall be reviewed and approved by the Planning Division should subsequent modifications be required by other concerned agencies regarding the removal of concrete curbs.



- 23. Installation, maintenance, and repair of all landscaping shall be the responsibility of the property owner.
- 24. The proposed irrigation system shall include best water conservation practices.
- 25. Incorporate additional landscaping to screen and block specific project areas that could be subject to graffiti as determined by the Planning Division.

# PARKWAY LANDSCAPE/IRRIGATION

- 26. Prior to Issuance of building permit, select a tree specimen from the approved list of Parkway trees in the Carson Municipal Code and obtain approval from Public Works for the proposed new trees within the existing parkways adjacent to Moneta Avenue located in front of the proposed project site.
- 27. Plant new trees within the parkways adjacent to Moneta Avenue.
- 28. No synthetic lawn, gravel or stone within the parkway. Utilize organic mulch.
- 29. Plant materials shall not be poisonous, grow taller than 18 inches and have no protruding stiff spines, thorns, or needles.
- 30. The parkway must include low ground cover to allow pedestrians to pass through.
- 31. Install automated water efficient drip or subsurface irrigation system that does not spray water into the street or cause water to run into the street.

# **LIGHTING**

- 32. All exterior lighting shall be provided in compliance with the standards pursuant to Section 9127.1 of the Zoning Ordinance.
- 33. Such lights are to be directed on-site in such a manner as to not create a nuisance or hazard to adjacent street and properties, subject to the approval of the Planning Division.

# <u>PARKING</u>

34. All parking areas and driveways shall remain clear. No encroachment into parking areas and/or driveways shall be permitted.

# **TRASH**

35. Trash collection shall comply with the requirements of the City's trash collection company.



36. Trash and recycling areas shall be provided in accordance with Sections 9164.2 and 9164.4 of the Zoning Ordinance. The number and size of recycling facilities are subject to the Planning Division.

# **UTILITIES**

- 37. All utilities and aboveground equipment shall be constructed and located pursuant to Section 9126.8 of the Zoning Ordinance, unless otherwise provided for in these conditions.
- 38. Public utility easements shall be provided in the locations as required by all utility companies with easements free and clear of obstructions, and electrical utilities shall be installed underground.
- 39. The applicant shall remove at his/her own expense any obstructions within the utility easements that would interfere with the use for which the easements are intended.
- 40. Any aboveground utility cabinet or equipment cabinet shall be screened from the public right-of-way by a decorative block wall or landscaping, to the satisfaction of the Planning Division.

# **ENVIRONMENTAL**

- 41. Prior to issuance of grading permits, the project shall comply with all recommendations included in the Phase II Environmental Assessment Study prepared by Odic Environmental dated 1-26-15 including but not limited to:
  - a. The project shall prepare a soil management plan to address the handling of soil that may contain petroleum hydrocarbons.
  - b. Additional subsurface investigation and special disposal considerations may be required if the impacted soil is encountered and excavated from the site.

# **BUILDING AND SAFETY DIVISION**

42. Submit application to update the address assignment for all residential structures on-site.

# **ENGINEERING SERVICES DEPARTMENT - CITY OF CARSON**

# **General Conditions**

- 43. Any existing off-site improvements damaged during the construction shall be removed and reconstructed per City of Carson standard plan and to the satisfaction of the City Engineer.
- 44. A construction permit is required for any work to be done in the public right-of-way.



45. Compliance with the applicable National Pollutant Discharge Elimination System (NPDES) requirements including best management practices to control storm water pollution from construction activities and facility operations.

# Prior to Issuance of Grading Permit

- 46. Submit a copy of approved grading plans on bond paper for review and obtain approval from the City of Carson Engineering Division.
- 47. Show any improvements within the public right-of-way (e.g. driveways, sidewalk, parkway drains, trees, curb/gutter) on the grading plan for review and obtain approval from the City of Carson Engineering Division.

# Prior to Issuance of Building Permit

- 48. Soils report, sewer area study, drainage concept, hydrology study and storm water quality plan shall be reviewed and approved. The building permit will not be granted until the required soils, sewer, drainage concept, hydrology study and storm water information have been received and found satisfactory.
  - a) Comply with mitigation measures recommended in the approved soils, sewer area study, drainage concept, hydrology study and storm water quality plan.
- 49. The Developer shall submit a sewer area study to the Los Angeles County Department of Public Works (LACDPW) to determine if capacity is adequate in the sewerage system to be used as the outlet for the sewer of this development. If the system is found to have insufficient capacity, the problem must be addressed and resolved to the satisfaction of the L.A. County Sewer Department.
- 50. Quitclaim or relocate any easements interfering with building locations to the satisfaction of the City, appropriate agency or entity.
- 51. The Developer shall comply with applicable LID requirements (CMC 5809) and shall include Best Management Practices necessary to control storm water pollution from construction activities and facility operations to the satisfaction of Building and Safety.
- 52. The Developer shall submit improvement plans to the Development Services Group Engineering Division showing all required improvements in the public right-of-way for review and approval by the City Engineer. A copy of the approved conditions of approval must be attached to the plans when submitted.
  - a) Sewer main improvements (if any) along Moneta Avenue as determined by the aforementioned sewer area study.



- b) Storm drain improvements (if any) along Moneta Avenue as determined by the aforementioned requirement.
- 53. Construction bond for all work to be done within the public right-of-way shall be submitted and approved by Engineering Services prior to approval of the Final Map.
- 54. Submit improvement plans showing all the required improvements in the public right-of-way for review and approval of the City Engineer. A copy of the approved conditions of approval shall be attached to the plans submitted.
- 55. Provide proof of Worker's Compensation and Liability Insurance.

# Prior to Issuance of Certificate of Occupancy

- 56. Submit the approved off-site improvement plans electronically stored on a CD in AutoCAD format that is prepared by a licensed engineer.
- 57. The Developer shall install separate sewer laterals to individually serve each building in the development. Installation and dedication of main line sewers may be necessary to meet this requirement.
- 58. The Developer shall comply with all requirements from L.A. County Sewer Maintenance Division for maintenance of new and/or existing sewer main, relating to this development, prior to release of all improvement bonds.
- 59. The Developer shall execute and provide to the City Engineer, a written statement from the water purveyor indicating that the water system will be operated by the purveyor and that under normal conditions, the system will meet the requirements for the development and that water service will be provided to each building.
  - a) Comply with mitigation measures recommended by the water purveyor.
- 60. The Developer shall construct and guarantee the construction of all required drainage infrastructures in accordance with the requirements and recommendations of the hydrology study, subject to the approval of the City Engineer.
- 61. Repair any broken or raised/sagged sidewalk, curb and gutter within the public right of way along Moneta Avenue abutting this proposed development per City of Carson Standard and to the satisfaction of the City Engineer.
- 62. Remove and replace any broken/damaged driveway approach within the public right of way along Moneta Avenue abutting this proposed development per City of Carson Standard and to the satisfaction of the City Engineer.
- 63. Remove unused driveway approach, if any, within the public right of way along Moneta Avenue abutting the proposed development site and replace it



- with full height curb and gutter and sidewalk per City of Carson Standard and to the satisfaction of the City Engineer.
- 64. Modify existing driveways within the public right of way along Moneta Avenue abutting this proposed development per City of Carson Standard to comply with the American Disability Act (ADA) requirements and to the satisfaction of the City Engineer.
- 65. Construct new driveway approaches per City of Carson Standard and in compliance with the American Disability Act (ADA) requirements. The Developer shall protect or relocate any facilities to accommodate the proposed driveway approach. The maximum driveway approach width allowed for the site is 30 feet.
- 66. Install, modify existing wheelchair ramp at the corner of Moneta Avenue and 220<sup>th</sup> Street per City of Carson Standard, and in compliance with the American Disability Act (ADA) requirements.
- 67. Plant approved parkway trees on locations where trees in the public right of way along Moneta Avenue abutting this proposed development are missing per City of Carson Standard Nos. 117, 132, 133 and 134.
- 68. Install irrigation system for the purpose of maintaining the parkway trees to be planted within the public right of way along Moneta Avenue abutting this proposed development.
- 69. Install streetlights on concrete poles with underground wiring in the public right of way along Moneta Avenue abutting this proposed development to the satisfaction of the Los Angeles County Street Lighting Division, Department of Public Works. Contact LACDPW Traffic Lighting Jeff Chow at 310-300-4753.
- 70. All new utility lines, servicing the proposed development shall be underground to the satisfaction of the City Engineer.
- 71. Comply with any additional requirements, if any, as means of mitigating any traffic impacts as identified in a traffic study approved by the City Traffic Engineer.
- 72. Install striping and pavement legend per City of Carson standard.
- 73. Paint curbs red along Moneta Avenue within or abutting this proposed development. Plans showing the proposed red curbs shall be submitted to the Traffic Engineer for review and approval.
- 74. If needed, easements shall be granted to the City, appropriate agency, or entity for the purpose of ingress, egress, constructions, and maintenance of all infrastructures constructed and American Disability Act (ADA) accessibility



- for this development to the satisfaction of the City Engineer and/or appropriate agency or entity.
- 75. Streets abutting the development, with new utility trench cuts to serve the development, shall be slurry sealed from curb-to-curb when medians are existing or as approved by the City Engineer. Slurry seal materials shall be rubberized emulsion aggregate slurry (REAS).
- 76. All infrastructures necessary to service the proposed development (water, sewer, storm drain, and street improvements) shall be in operation.

# **PUBLIC WORKS – WATER QUALITY**

77. The Developer shall record a maintenance covenant for any structure and/or treatment control device installed in the public right of way pursuant to Section 106.4.3 of the Los Angeles County Building Code and Title 12, Chapter 12.80 of the Los Angeles County Code relating to the control of pollutants carried by storm water runoff.

# **FIRE DEPARTMENT**

- 78. Approved building address numbers, building numbers or approved building identification shall be provided and maintained so as to be plainly visible and legible from the street fronting the property. The numbers shall contrast with their background, be Arabic numerals or alphabet letters, and be a minimum of 4 inches high with a minimum stroke width of 0.5 inch.
- 79. Submit three copies of the final map to the County of Los Angeles Fire Department Fire prevention Land Development Unit for review and approval prior to recordation.

# **BUSINESS LICENSE DEPARTMENT – CITY OF CARSON**

80. All parties involved in the subject project located at 21721 Moneta Avenue including to but not limited to contractors and subcontractors are required to obtain a city business license per Section 6310 of the Carson Municipal Code.



# PHASE II ENVIRONMENTAL SITE ASSESSMENT

Subject Property Address

21721 Moneta Avenue Carson, CA 90745

Odic Project Number

6358212ESAII

Report Date

1/26/2015

Prepared for

**Gregory Rickard** 

Equassure-Moneta, LLC

2041 Rosecrans Avenue, Suite 380

El Segundo, CA 90245

**Odic Environmental** 

Environmental Consulting and Real Estate Due Diligence 3255 Wilshire Blvd. Suite 1510, Los Angeles, CA 90010 888.634.2368, 888.ODICENV, Fax 213-380-0505



#### **Odic Environmental**

#### Environmental Consulting and Real Estate Due Diligence

3255 Wilshire Blvd. Suite 1510, Los Angeles, CA 90010 888.634.2368, 888.ODICENV, Fax 213-380-0505

1/26/2015 Gregory Rickard Equassure-Moneta, LLC 2041 Rosecrans Avenue, Suite 380 El Segundo, CA 90245

Phone: 310-335-9343 Fax: 310-469-0118

Attached please find our PHASE II ENVIRONMENTAL SITE ASSESSMENT, ("the Report") for the above-mentioned Subject Property. This report has been prepared by Odic for the Client under the professional supervision of the principal and/or senior staff whose seal(s) and signatures appear hereon. Neither Odic, nor any staff member assigned to this investigation has any interest or contemplated interest, financial or otherwise, in the subject or surrounding properties, or in any entity which owns, leases, or occupies the subject or surrounding properties , and has no personal bias with respect to the parties involved.

The assessment was conducted in a manner consistent with the level of care and skill ordinarily exercised by members of the profession, and in accordance with generally accepted practices of other consultants currently practicing in the same locality under similar conditions. No other representation, expressed or implied, and no warranty or guarantee is included or intended. The Report speaks only as of its date, in the absence of a specific written update of the Report, signed and delivered by Odic.

There are no intended or unintended third party beneficiaries to this Report, unless specifically named. Odic is an independent contractor, not an employee of either the issuer or the borrower, and its compensation was not based on the findings or recommendations made in the Report or on the closing of any business transaction. Thank you for the opportunity to prepare this Report, and assist you with this project. Please call us if you have any questions or if we may be of further assistance.

By signing below, Odic declares that, to the best of our professional knowledge and belief, the undersigned meet the definition of an Environmental Professional as defined in §312.10 of 40 CFR 312 and have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the Subject Property. Odic has developed and performed the all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312.

Respectfully Submitted,

Hyung K. Kim, P.E., LEED-AP, QSD Principal Engineer







# **CERTIFICATE OF LIABILITY INSURANCE**

DATE (MM/DD/YYYY) 10/24/2014

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER		contact NAME: Bobbi J. McGee-Zavala		
Van Oppen & Co. 2, Inc. IPO Box 793		PHONE (A/C, No. Ext):800-746-0048	FAX (A/C, No):	
Teton Village WY 83025		E-MAIL ADDRESS:Service@vanoppenco2.com		
		INSURER(S) AFFORDING COVERAGE		NAIC#
		INSURER A: Westchester Surplus Lines		10172
INSURED	ODICE-1	INSURER B :Hartford Fire Insurance Co.		19682
ODIC Environmental		INSURER C :SCIF		35076
3255 Wilshire Blvd., #1510 Los Angeles CA 90010		INSURER D :		
Los Angeles CA 30010		INSURER E :		
		INSURER F:		

COVERAGES CERTIFICATE NUMBER: 108260992 REVISION NUMBER:

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL	SUBR		POLICY EFF (MM/DD/YYYY)	POLICY EXP	LIMIT	S
Α	GENERAL LIABILITY		Υ	G27165357 001	10/21/2013	10/21/2015	EACH OCCURRENCE DAMAGE TO RENTED	\$1,000,000
	X COMMERCIAL GENERAL LIABILITY						PREMISES (Ea occurrence)	\$300,000
	CLAIMS-MADE X OCCUR						MED EXP (Any one person)	\$10,000
	X CPL(Pollution)						PERSONAL & ADV INJURY	\$1,000,000
							GENERAL AGGREGATE	\$2,000,000
	GEN'L AGGREGATE LIMIT APPLIES PER:				LOOGE BEAGES		PRODUCTS - COMP/OP AGG	\$2,000,000
	X POLICY PRO- JECT LOC							\$
B A	AUTOMOBILE LIABILITY	Y	Υ	34UECVT5982	10/24/2014 10/21/2013	10/24/2015 10/21/2015	COMBINED SINGLE LIMIT (Ea accident)	\$1,000,000
,	ANY AUTO			G27165357 001	10/21/2013	10/21/2015	BODILY INJURY (Per person)	\$
	ALL OWNED X SCHEDULED AUTOS					and the second	BODILY INJURY (Per accident)	\$
	X HIRED AUTOS X NON-OWNED AUTOS						PROPERTY DAMAGE (Per accident)	\$
								\$
١.	UMBRELLA LIAB X OCCUR			G27165473 001	10/21/2013	10/21/2015	EACH OCCURRENCE	\$4,000,000
	X EXCESS LIAB CLAIMS-MADE						AGGREGATE	\$4,00,000
	DED X RETENTION \$0						XS GL/CPL/EO/AL/EL	\$
0	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY Y/N		Υ	9095492-2014	4/1/2014	4/1/2015	X WC STATU- OTH- TORY LIMITS ER	
	ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED?	N/A				aan	E.L. EACH ACCIDENT	\$1000000
	(Mandatory in NH)					handa a desperada de la composição de la	E.L. DISEASE - EA EMPLOYEE	\$1000000
	If yes, describe under DESCRIPTION OF OPERATIONS below						E.L. DISEASE - POLICY LIMIT	\$1000000
Α	Professional Liability "Claims Made"	ATTENDED AND ADDRESS OF THE PERSONNEL PROPERTY OF THE PERSONNEL PROPER		G27165357 001	10/21/2013			1,000,000 2,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (Attach ACORD 101, Additional Remarks Schedule, if more space is required)

CERTIFICATE HOLDER	CANCELLATION
General Information	SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.
	AUTHORIZED REPRESENTATIVE

© 1988-2010 ACORD CORPORATION. All rights reserved.

# TABLE OF CONTENTS

1.0 LIMITATIONS	2
2.0 INTRODUCTION	
2.1 Project Information	
2.2 Objective	5
2.3 Scope of Work	5
3.0 SUBJECT PROPERTY CHARACTERISTICS	6
3.1 Site Description	<i>6</i>
3.2 Background History & Former site Investigation	6
3.3 Physical Setting	6
4.0 FIELD INVESTIGATION	8
4.1 Field Investigation / Methodology	8
4.2 Backfill	9
5.0 FINDINGS AND RESULTS	10
5.1 Surface/Subsurface Conditions	10
5.2 Analytical Results of Soil Vapor Samples	10
5.3 Geophysical Survey	10
6.0 RECOMMENDATIONS AND OPINIONS	12
7.0 References	14

# **ATTACHMENTS**

FIGURE 1 - SOIL VAPOR LOCATION MAP

APPENDIX  $\mathbf{A}$  – SITE PHOTOGRAPHS APPENDIX  $\mathbf{B}$  – SOIL VAPOR LABORATORY ANALYSIS REPORT

#### 1.0 LIMITATIONS

The opinion expressed herein is based on the information collected during our study, our present understanding of the site conditions and our professional judgment in light of such information at the time of preparation of this report. No warranty is either expressed, implied or made as to the conclusions, advice and recommendations offered in this report.

Our investigation was performed using the degree of care and skill ordinarily exercised, under similar circumstances, by reputable Engineers and Geologists practicing in this or similar localities. The samples taken and used for testing and the observations made are believed representative of the study area; however, soil and/or groundwater samples can vary significantly between borings, test pits, and/or test sample locations.

The interpretations and conclusions contained in this report are based on the results of laboratory tests and analysis intended to detect the presence and concentration of certain chemical constituents in samples taken from the subject property. Such testing and analysis have been conducted by an independent laboratory which is certified by the State of California to conduct such test analyses and which used methodologies mandated by the Environmental Protection Agency or the State Department of Health Services in the performance of such test and analyses. The consultant has no involvement in, or control over, such testing and analysis, and has no non-laboratory means of confirming the accuracy of such laboratory results. The consultant, therefore, disclaims any responsibility for any inaccuracy in such laboratory results.

The findings, conclusions and recommendations in this report are considered valid as of the present date. However, changes in the conditions of the property can occur with the passage of time, due to natural process or the works of man on this or adjacent properties. In addition, changes in applicable or appropriate standards may occur. Accordingly, portions of this report may be invalidated wholly or partially by the changes beyond our control.

### INDEPENDANT CONTRACTOR STATUS

In performing Services under the scope of work contained in this Report and agreed Contract/Agreement, ODIC shall operate as, and have the status of, an independent contractor.

## PROFESSIONAL RESPONSIBILITY

ODIC shall perform the Services consistent with that level of care and skill ordinarily exercised by other professional consultants under similar circumstances at the time the Services are performed. Client hereby acknowledges that whenever a Project involves hazardous or toxic materials there are certain inherent risk factors involved (such as limitations on laboratory analytical methods, variations in subsurface conditions, economic loss to Client or property owner, a potential obligation for disclosure to regulatory agencies, a potential for a decrease in market value of real property, and the like) that may adversely affect the results of the Project, even though the Services are performed with such skill and care. No other representation, warranty, or guarantee, express or implied, is included or intended by the scope of work contained in this Report and agreed Contract/Agreement.

### LIMITATION OF LIABILITY

Client agrees that the liability of ODIC and all officers, employees, agents, and subcontractors of ODIC (the "ODIC Parties") to Client for all claims, suits, arbitration, or other proceedings arising from the performance of the Services under the scope of work contained in this Report and agreed Contract/Agreement, including, but not limited to, ODIC's professional negligence, errors and omissions, or other professional acts, shall be limited to the Fee amount. ODIC Parties are not liable for any indirect, incidental or consequential damages, lost profits, lost revenue, or loss of property value based on the Services provided as part of the scope of work contained in this Report and agreed Contract/Agreement.



#### - 3 --

#### HAZARDOUS OR UNSAFE CONDITIONS

Client has fully informed ODIC of the type, quantity, and location of any hazardous, toxic, or dangerous materials or unsafe or unhealthy conditions that may affect the Project which Client knows to exist. If Client hereafter becomes aware of any such information, Client shall immediately inform ODIC. The discovery of unanticipated hazardous, toxic, or dangerous materials or unsafe or unhealthy conditions constitutes a Changed Condition that may justify a revision to Services and/or Fees. If ODIC takes emergency measures to protect the health and safety of ODIC Parties and/or the public or to prevent undue harm to the environment, the Fee shall be appropriately adjusted to compensate ODIC for the cost of such emergency measures.

#### RIGHT OF ENTRY

Client agrees to grant or arrange permission for right of entry from time to time by ODIC Parties upon all real property included in the Project Site(s) where the Services are to be performed, whether or not the Project Site(s) is owned by Client. Client recognizes that the use of investigative equipment and practice may unavoidable alter conditions or affect the environment at the existing Project Site(s). ODIC will operate with reasonable care to minimize damage to the Project Site(s). The cost of repairing such damage will be borne by Client, and in not included in the Fee unless otherwise stated.

#### **UNDERGROUND UTILITIES**

Client shall correctly designate on plans to be furnished to ODIC, the location of all subsurface structures, such as pipes, tanks, cables, and utilities within the property lines of the Project Site(s) and shall be responsible for any damage inadvertently cause by ODIC to any such structure or utility not so designated.

#### REPORTING AND DISPOSAL REQUIREMENTS

Nothing contained in this Report shall be construed or interpreted as requiring ODIC to assume the status of an owner, operator, generator, person who arranges for disposal, transportation, storage, treatment, or a disposal facility as those terms appear within any federal or state statute governing the treatment, storage, and disposal of hazardous substances or wastes. Client shall be solely responsible for notifying all appropriate federal, state, municipal, or other governmental agencies of the existence of any hazardous, toxic, or dangerous materials located on or in the Project Site(s), or discovered during the performance of the scope of work contained in this Report and agreed Contract/Agreement. Client agrees that ODIC is not responsible for disclosures, notifications, or reports that may be required to be made to third parties. Client shall be responsible for making and paying for all necessary arrangements to lawfully store, treat, recycle, dispose of, or otherwise handle hazardous or toxic substances or wastes, including but not limited to, samples and cuttings, to be handled in connection with the Project.

#### SAMPLES AND CUTTINGS

ODIC shall not be obligated to preserve samples such as oil, rock, water, building materials, fluids and other samples obtained from the Project Site(s) for a longer period of time than a laboratory will store the samples for no additional fee. If sample storage is requested by Client beyond standard laboratory time, Client will be responsible for any storage fee for those samples.

#### **HEALTH AND SAFETY**

ODIC shall not be responsible for the health and safety of any persons other than ODIC Parties, nor shall it have any responsibility for the operations, procedures, or practices of persons or entities other than ODIC Parties.



#### - 4 -

#### Disclaimer

All information, conclusions and professional opinion on soil vapor survey presented in this report are based solely on the information collected by the soil vapor survey and mobile lab contractor, Optimal Technology. Soil vapor testing is only a subsurface screening tool and does not represent actual contaminant concentrations in either the soil matrix and/or groundwater.



#### 2.0 INTRODUCTION

#### 2.1 PROJECT INFORMATION

Project Information					
ITEM					
ODIC Project Number	6358212ESAII				
Subject Property Address	21721 Moneta Avenue, Carson, California				
Drilling & Sampling Date	January 8, 2015				
Field Technician Danny Lightle, Environmental Consultant					
Report Author	Parviz Mobayen, Environmental Consultant				
QAQC/Project Manager	Hyung Kim, California Licensed Professional Civil Engineer				
Property Location	The Property is located on the west side of Moneta Avenue, approximately 125 feet south of Carson Street in a residential and commercial area of Carson.				
General Setting	Residential/commercial				
Property Type	Residential				

#### 2.2 **OBJECTIVE**

The objective of our investigation was to perform a limited soil vapor survey at the Property to investigate the soil vapor conditions at the Propertyand to determine the potential impact, if any, from the north adjacent gas station.

This Phase II is a preliminary investigation at shallow depth soil, thus this investigation is intended for screening purposes only. This report presents the results of the limited soil vapor investigation. Optimal Technology (Optimal) was hired as our drilling and soil vapor contractor who performed the field activities under ODIC's supervision and oversight for this investigation.

#### 2.3 Scope of Work

To accomplish this objective, ODIC performed the following tasks:

#### Pre-Field Activities:

Performed Site Visit to verify existing conditions and pre-mark boring locations and notified Underground Service Alert (USA) of the intent to excavate or drill, and used standard care to avoid potential damage to subsurface utilities. Also, ODIC contracted Pacific Coast Locators (PCL) to conduct a geophysical survey to clear utility lines and search for any subsurface anomalies on January 5th, 2015. Additionally, a Sitespecific Health and Safety Plan (Level D Health & Safety according to OSHA CFR 1910.120), Boring Plan, and Work-Schedule were prepared. Notified the owner and tenants of the proposed work schedule.

#### Field Investigation:

To determine the absence or presence of contaminants of concern associated with the north adjacent gas station at the Property, a total of 12 borings were advanced for the installation of soil vapor probes. SV-1through SV-12 to a maximum depth of approximately 12 feet below ground surface (bgs). All the collected vapor samples were analyzed using onsite Optimal's mobile laboratory.

# 3.0 SUBJECT PROPERTY CHARACTERISTICS

#### 3.1 SITE DESCRIPTION

The Property address is 21721 Moneta Avenue; it is located on the west side of Moneta Avenue, south of Carson Street. The Propertyis an approximately 19,837-square-foot parcel improved with three single-family dwellings totaling 2,904 square feet that were built in 1949 and 1959. In addition, there is one vacant small mobile trailer onsite.

#### 3.2 BACKGROUND HISTORY & FORMER SITE INVESTIGATION

The Property consists of three single-family dwellings. There are plans for the site to be re-developed with a 13-unit apartment building upon demolition of the existing homes. Construction is planned to commence in late 2015.

The northern adjacent Conoco gas station known as United Oil Station (UOS) at 300 West Carson Street was identified to pose a potential environmental concern to the Property. Based on elevated concentration of contaminants in the groundwater, free product, soil, and possibly soil vapor, continued soil vapor extraction, groundwater treatment and groundwater monitoring are expected at this north adjacent site.

Groundwater in the site vicinity is estimated at 50 feet below ground surface (bgs).

### 3.3 PHYSICAL SETTING

The Property's physical location was researched employing a United States Geological Survey (USGS) 7.5 Minute Topographic Quadrangle (Quad) Map relevant to the Property. The USGS 7.5 Minute Quad Map has an approximate scale of 1 inch to 2,000 feet, and may show physical features with environmental significance such as wetlands, water bodies, roadways, mines, and buildings. The elevation of the Property is approximately 39 feet above mean sea level. There is a regional downslope to the southeast.

Geologic and hydrogeologic information was obtained from site assessment documents prepared for a property located at 101 W. Carson Street (Comet Gas Station), by Atlas Environmental Engineering, Inc. (Atlas), located approximately 1,300 feet east of the Property.

The site is located in Torrance Plain northeast of Palos Verdes Hills and west of Newport-Inglewood Fault in Los Angeles County. Basin sediments can range up to 1200 feet in thickness and consist of recent to Pliocene age sediments of the Pico Formation and Recent Alluvium. Recent age sediments are typically thin and range from floodplain, beach and lagoonal deposits to dune sand. Pleistocene deposits of the Lakewood and San Pedro Formations are described as marine and continental gravel, sand, sandy silt, silt and clay with shale, schist and granitic fragments. The greatest thickness of the San Pedro Formation is northeast of the Palos Verdes Hills and can be on the order of 1,000 feet thick. Subsurface materials generally consist of the sand, sandy silt, silt and clay extending from the ground surface to 75 feet bgs, maximum depth explored.

The site is located within the West Coast Groundwater Basin west of the Dominguez Channel and north of the Dominguez Gap Barrier Project. The basin is characterized by complex series of



water bearing zones and aquitards. Major water bearing strata consist of the "200 and 400 sand/gravel", underlain by the Silverado and Pico water bearing zones.

The most recent quarterly sampling event, 4<sup>th</sup> Quarter 2010, was conducted on October 26, 2010. Based on a level survey of the wellheads, depth to groundwater beneath the site ranged from 46.68 to 48.68 below the top of the casings. Using the level survey from the top of the well casings, the groundwater flow direction was determined to be variable at the site, but appears to flow generally to the northwest, at a gradient of approximately 0.003 ft/ft.

While groundwater flow direction at the Property cannot be confirmed without survey measurement of static groundwater level at triangulated points, it is expected to flow in the direction of surface topographical contour, or toward the wetland or nearest water body or discharge basin (percolation channel).

It is important to note that groundwater flow direction can be influenced locally and regionally by the presence of local wetland features, surface topography, recharge and discharge areas, horizontal and vertical inconsistencies in the types and location of subsurface soils, and proximity to water pumping wells. Depth and gradient of the water table can change seasonally in response to variation in precipitation and recharge, and over time, in response to urban development such as storm water controls, impervious surfaces, pumping wells, cleanup activities, dewatering, seawater intrusion barrier projects near the coast, and other factors.

#### SOURCES OF DATA

http://geotracker.waterboards.ca.gov/esi/uploads/geo\_report/8519053161/T0603705491.
 PDF

#### 4.0 FIELD INVESTIGATION

## 4.1 FIELD INVESTIGATION / METHODOLOGY

Prior to advancing the borings, the Site representative, property owner and tenants of business units where drilling would be performed were notified of the work schedule. ODIC performed a Site Visit to verify the existing conditions and pre-mark boring locations and notified Underground Service Alert (USA) of the intent to excavate. A Site-specific Health and Safety Plan was prepared and field safety meeting was held among field personnel and drilling crew prior to the start of drilling.

On January 5, 2015, Pacific Coast Locators (PCL) conducted a geophysical survey to search for any subsurface anomalies and to clear utility lines and proposed boring locations.

On January 8, 2015, Optimal Technology (Optimal) conducted a soil vapor investigation toscreen the Property for possible chlorinated solvents and aromatic hydrocarbons.

## **Gas Sampling Method**

Gas sampling was performed by hydraulically pushing soil gas probes to a depth of approximately 4.0 to 12.0 feet bgs. An electric rotary hammer drill was used to drill a 1.0-inch diameter hole through the overlying concrete/asphalt to allow probe placement when required. The same electric hammer drill was used to push probes in areas of resistance during placement.

At each sampling location an electric vacuum pump (able to draw 0.2 liters per minute (L/min) of soil vapor at a maximum vacuum of 150 inches of water) was attached to the probe and purged prior to sample collection. Vapor samples were obtained in Hamilton gas-tight syringes by puncturing silicone tubing which connects the sampling probe and the vacuum pump. New silicone tubing was used at each sampling point to prevent cross contamination.

Samples were immediately injected into the gas chromatograph after collection. Clean sampling probes were used after each sample with detectable analytes. Equipment blanks using ambient air were collected throughout the day.

All analyses were performed on a laboratory grade Hewlett Packard model 5890 Series II gas chromatograph equipped with a Flame Ionization Detector (FID) and an Electron Capture Detector (ECD). Restec wide bore capillary columns using hydrogen as the carrier gases were used to perform all analysis. All results were collected on a personal computer utilizing Hewlett Packard's PC based chromatographic data collection and handling system.

### **Quality Assurance**

5-Point Calibration

The initial five point calibration consisted of 20, 50, 100, 200 and 500 ul injections of the calibration standard. A calibration factor on each analyte was generated using a best fit line method using the HP data system. If the r2 factor generated from this line was not greater than 0.990, an additional five point calibration would have been performed. Method reporting limits were calculated to be 0.01-1.0 micrograms per Liter (ug/L) for the individual compounds.

A daily calibration check and end of run calibration check was performed by preparing a calibration solution from a pre-mixed standard supplied by CPI International. The standard contained common halogenated solvents and aromatic hydrocarbons (see Table 1). The individual compound concentrations in the standards ranged between 0.025 nanograms per microliter (ng/ul) and 0.25 ng/ul.

# Common Halogenated Solvents and Aromatic Hydrocarbons

- Dichlorodifluoromethane
- · Carbon Tetrachloride

30

- Chloroethane
- Trichlorofluoromethane
- 1,2-Dichloroethane
- Benzene
- 1,1-Dichloroethene
- Trichloroethene
- Toluene
- Methylene Chloride
- 1,1,2-Trichloroethane
- Ethylbenzene
- trans-1,2-Dichloroethene
- Tetrachloroethene
- m-/p-Xylene
- 1,1-Dichloroethane
- Chloroform
- o-Xylene
- cis-1,2-Dichloroethene
- 1,1,1,2-Tetrachloroethane
- Vinyl Chloride
- 1,1,1-Trichloroethane
- 1,1,2,2-Tetrachloroethane
- Freon 113
- 4-Methyl-2-Pentanone
- Cyclohexane
- Acetone
- Chlorobenzene
- 2-Butanone
- Isobutane

### Sample Replicates

A replicate analysis (duplicate) was run to evaluate the reproducibility of the sampling system and instrument. The difference between samples did not vary more than 20%.

## **Equipment Blanks**

Blanks were run at the beginning of each workday and after calibrations. The blanks were collected using an ambient air sample. These blanks checked the septum, syringe, GC column, GC detector and the ambient air. Contamination was not found in any of the blanks analyzed during this investigation. Blank results are given along with the sample results.

#### Tracer Gas

A tracer gas was applied to the soil gas probes at each point of connection in which ambient air could enter the sampling system. These points include the top of the sampling probe where the tubing meets the probe connection and the surface bentonite seals. Isobutane was used as the tracer gas, found in common shaving cream. No Isobutane was found in any of the samples collected.

#### 4.2 BACKFILL

Upon completion of soil gas sampling, Optimal backfilled each boring with hydrated granular bentonite pellets and the soil core removed from the boring by simply dumping the material down hole. Each borehole was abandoned/filled with hydrated granular bentonite, and restored to pre-drilling condition via applying patching materials.

#### 5.0 FINDINGS AND RESULTS

## 5.1 SURFACE/SUBSURFACE CONDITIONS

The subsurface soil conditions at this site were predominantly silty sand to silty clay sandy from the ground surface to approximately 12 feet bgs, the maximum depth explored. No groundwater was encountered during the investigation. No boring logs were prepared since this investigation was conducted as a limited soil gas survey.

### 5.2 ANALYTICAL RESULTS OF SOIL VAPOR SAMPLES

During this soil vapor investigation, benzene was detected in two of the samples SV-2 and SV-3 at 0.06 ug/L and 0.07 ug/L, respectively. None of the other compounds listed in Table 1 below were detected above the listed reporting limits. A complete table of analytical results is included with this report.

Table 1 Common Halogenated Solvents and Aromatic Hydrocarbons									
Dichlorodifluoromethane	Carbon Tetrachloride	Chloroethane							
Trichlorofluoromethane	1,2-Dichloroethane	Benzene							
1,1-Dichloroethene	Trichloroethene	Toluene							
Methylene Chloride	1,1,2-Trichloroethane	Ethylbenzene							
trans-1,2-Dichloroethene	Tetrachloroethene	m-/p-Xylene							
1,1-Dichloroethane	Chloroform	o-Xylene							
cis-1,2-Dichloroethene	1,1,1,2-Tetrachloroethane	Vinyl Chloride							
1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	Freon 113							
4-Methyl-2-Pentanone	Cyclohexane	Acetone							
Chlorobenzene	2-Butanone	Isobutane							

				Con		able 2 ions of	benzene	)				
	SV-1-	SV-2- 11	SV-3- 10	SV-4- 5	SV-5-	SV-6- 5	SV-7- 12	SV-8- 4	SV-9-	SV- 10-10	SV- 11-4	SV- 12-4
Benzene	ND	0.06 ug/L	0.07 ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND

## 5.3 GEOPHYSICAL SURVEY

The Geophysical Survey Systems SIR 3000 Utility Scan Ground Penetrating Radar (GPR) system, RD4000 Electro-Magnetic Transmitter & Receiver and Schonstedt GA-52Cx Magnetometer were used to survey the areas of concern on-site, as applicable, to locate the presence of Underground Storage Tanks and other buried features on-site and to locate any utility conflicts near 9 proposed soil boring locations on-site.

The GPR survey scan sends a dielectric signal into the earth, which registers with the density of the soil that it is penetrating. Any other material of varied density will either speed up the signal creating an inverted hyperbola or slow it down leaving a hyperbola trail. This is similar to a rock in a creek. The water bends around the rock leaving a tail wake. The GPR signal is not bending however; it is sending back a continuous signal of the curvature of the anomaly it encounters.

The RD4000 Electro-Magnetic Transmitter & Receiver has Inductive & Conductive capability to locate buried conductive underground utilities, such as copper, steel and galvanized metal water pipes, electrical lines, power lines, tele-communication lines, metal and steel gas lines, and metal and steel pipelines. The RD4000 features include multiple active frequencies to delineate actively the depth and location of the target utility or pipe. The RD4000 receiver has a peak and null gain feature that pinpoints the target utility or pipe in congested areas. The audible signal to noise feature makes it easy for the locating technician to determine accurately the location of a directly connected utility or pipe by sound.

The Schonstedt GA-52Cx Magnetic Locator detects iron and steel objects underground, such as USTs, buried oil wells and buried metal monitoring well lids. The Schonstedt GA-52Cx Magnetometer provides audio detection signals with frequencies that vary with gradient field intensity. The signals peak in frequency when the locator's tip is held directly over the target.

PCL's technician performed a Subsurface Utility & UST Investigation using Ground Penetrating Radar and Electro-Magnetic locating equipment to determine the absence or presence of possible USTs or other buried features in the areas of concern on-site. PCL's technician also cleared & marked-out any utility conflicts near 9 proposed soil boring locations on-site.

PCL performed a Subsurface Utility Investigation using a Geophysical Survey Systems SIR 3000 Utility Scan Ground Penetrating Radar (GPR) system, RD4000 Electro-Magnetic Transmitter & Receiver and Schonstedt GA-52Cx Magnetometer.

Two unknown anomalies near proposed boring location 1, a buried gas line near proposed boring location 2, and one unknown anomaly near boring location 8 were identified. The proposed boring locations were slightly moved to avoid damage to subsurface features. No conflicts were identified near the remaining proposed locations.

#### 6.0 RECOMMENDATIONS AND OPINIONS

During this soil vapor investigation, benzene was detected in two of the samples SV-2 and SV-3 at 0.06 ug/L and 0.07 ug/L, respectively. None of the other compounds listed in Table 1 were detected above the listed reporting limits.

Table 2 Concentrations of benzene												
	SV-1-	SV-2- 11	SV-3- 10	SV-4-	SV-5-	SV-6- 5	SV-7- 12	SV-8-	SV-9- 5	SV- 10-10	SV- 11-4	SV- 12-4
Benzene	ND	0.06 ug/L	0.07 ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND

ODIC compared the laboratory results with California Human Health Screening Levels (CHHSLs) to determine if the benzene concentrations in soil vapor represent a potential risk to human health via vapor intrusion. CHHSLs are used for screening purposes to evaluate the risk of vapor intrusion. Commercial CHHSL (OEHHA, 2010) for benzene at 5' bgs for engineered fill is 0.28/L. Residential screening level for benzene is 0.085 ug/L for engineered fill soil (OEHHA Table 2 Soil Gas Screening Number for Volatile Chemicals below building constructed with engineered fill).

Source: http://oehha.ca.gov/risk/chhsltable.html

Screening level for benzene for commercial land use is 0.122ug/L (California Human Health Screening Levels, California EPA, Jan 2005 (Screening Levels based on soil gas data collected at 5' below a building foundation or the ground surface)).

The CHHSL screening levels are based on soil gas data collected at 5' below a building foundation or the ground surface. Detected benzene concentrations at 10' and 11' depth are below CHHSL for both commercial and residential site use. Since benzene concentration detected at 10' and 11' depth is 0.06ug/L and 0.07ug/L, lower concentrations are expected at shallower depth.

Trace level of contamination with benzene in the subsurface soil vapor beneath the Property is found to be emanating from the north adjacent gas station site which is identified as an open LUST case where active site remediation and monitoring are ongoing.

Source: http://geotracker.waterboards.ca.gov/profile\_report.asp?global\_id=T0603705540

As corrective action continues at the source of contamination at the north adjacent LUST site at 300 W. Carson Street (United Oil Station), the levels of residual contamination and any associated site risk are expected to reduce with time.

The Property is proposed for redevelopment of a 13-unit apartment. In the event that the Property is redeveloped for new construction, soil excavation and grading activities would change the exposure pathway of the subsurface contaminants. Prior to site redevelopment or soil excavation, a soil management plan should be prepared and implemented to address the handling of soil that may contain petroleum hydrocarbons. Additional subsurface investigation and special disposal considerations may be required if the impacted soil is encountered and excavated from the site as part of redevelopment or maintenance of the site.

Since groundwater underlying the site is not currently used as a drinking water source, the groundwater ingestion exposure pathway is typically not of potential relevance. Nonetheless, the Property owner is advised to be aware of a potential risk associated with potential contamination in soil vapor and ongoing corrective action at the northern adjacent United Oil Station site.



Upon completion of new construction and site development, asphalt, concrete and other paving on the site should be maintained to prevent exposure of contaminants in the subsurface to building occupants. In the future, should changes in land use occur, the existing data set may need to be re-evaluated with respect to the new land use and additional investigation may be required.

No definitive data exists to conclude that the presence of fuel VOCs, particularly benzene, in the subsurface beneath the Property represents a significant threat to future building occupants through the vapor intrusion pathway, thus adverse impacts are not anticipated with the continued use of the site for residential purposes. However, the application of certain presumptive remedies can be implemented to significantly minimize or even eliminate the potential threat of vapor intrusion.

Depth to groundwater is estimated to be over 46', further reducing an environmental risk to the groundwater as receptor as well as to the occupants through exposure pathways such as groundwater ingestion. Since detected benzene concentrations in the northern portion of the Property non-detect to trace levels less than CHHSLs, ODIC concludes that a significant environmental risk of vapor intrusion is not expected, and further investigation or corrective action is not recommended at this time, other than development/implementation of soil management plan and monitoring of soil excavation during construction activities.

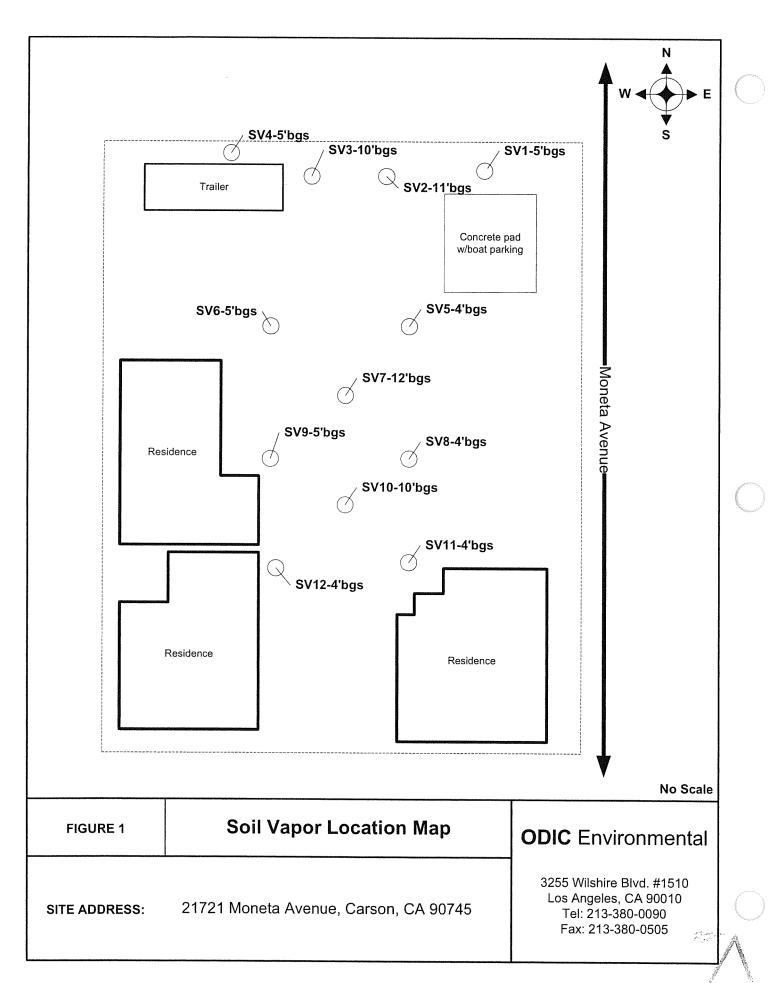
### 7.0 REFERENCES

Reference sources for site-specific information, hydro-geologic setting, technical data, historical research data, environmental reports and other records used are identified throughout this Report in corresponding sections. Any additional reference sources not cited in the preceding sections in this report are disclosed in this section.

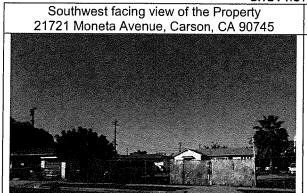
- DTSC/CalEPA, 2005. Interim Final Guidance for the Evaluation and Mitigation of Subsurface Vapor Intrusion to Indoor Air, revised February 7, 2005.
- Guidance for the evaluation and mitigation of subsurface vapor intrusion to indoor air (vapor intrusion guidance), Department of Toxic Substances Control, California Environmental Protection Agency, October 2011
- The California Human Health Screening Levels (CHHSLs) in Evaluation of Contaminated Properties, January 2005, California Environmental Protection Agency
- California EPA, California Human Health Screening Levels, 2009



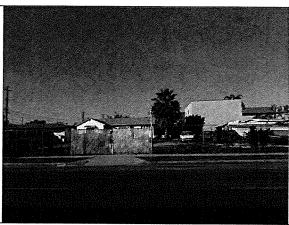
# **F**IGURES



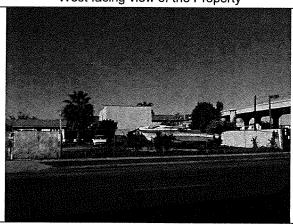
# APPENDIX A SITE PHOTOGRAPHS



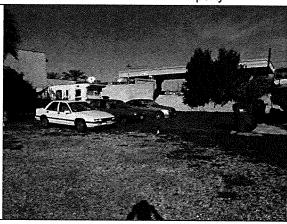




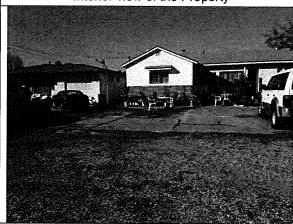
West facing view of the Property



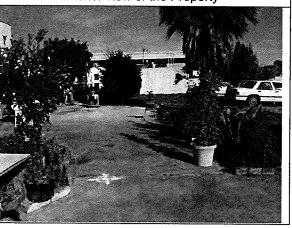
Interior view of the Property

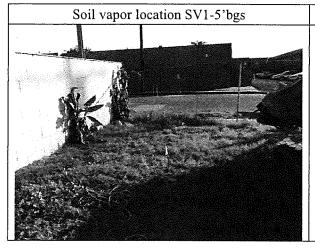


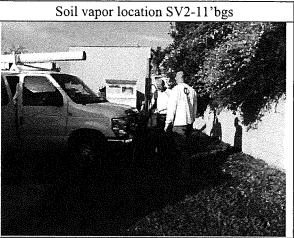
Interior view of the Property

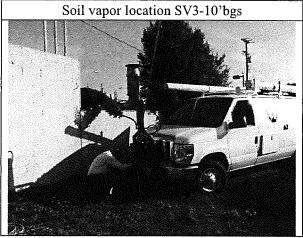


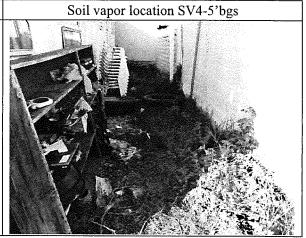
Interior view of the Property

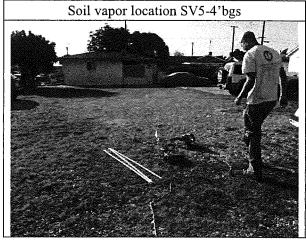


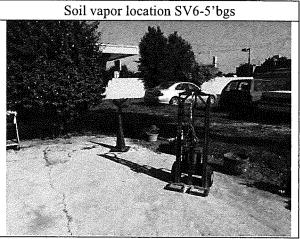


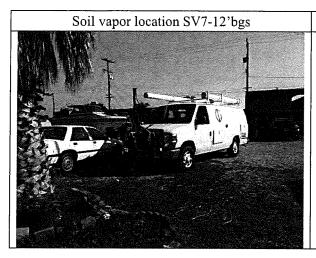


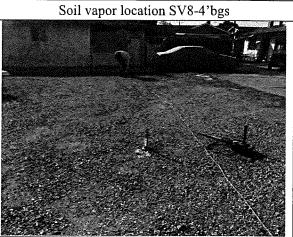


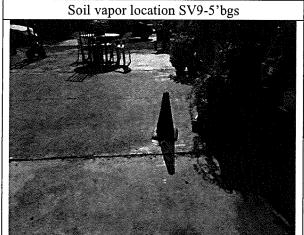


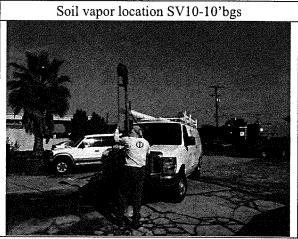


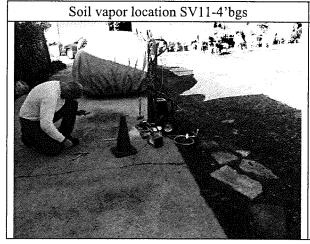


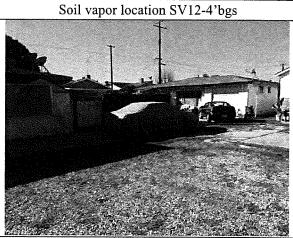












# APPENDIX B SOIL VAPOR LABORATORY ANALYSIS REPORT



January 9, 2015

Mr. Danny Lightle Odic Environmental 3255 Wilshire Blvd., Suite 1510 Los Angeles, CA 90010

Dear Mr. Lightle:

This letter presents the results of the soil vapor investigation conducted by Optimal Technology (Optimal), for Odic Environmental on January 8, 2015. The study was performed at 21712 Moneta Ave., Carson, California.

Optimal was contracted to perform a soil vapor survey at this site to screen for possible chlorinated solvents and aromatic hydrocarbons. The primary objective of this soil vapor investigation was to determine if soil vapor contamination is present in the subsurface soil.

## Gas Sampling Method

Gas sampling was performed by hydraulically pushing soil gas probes to a depth of 4.0-12.0 feet below ground surface (bgs). When necessary one-quarter inch Nylaflow tubing was installed at depth in a one-foot sand pack. Hydrated bentonite filled the hole from the top of the sand pack to the surface. An electric rotary hammer drill was used to drill a 1.0-inch diameter hole through the overlying surface to allow probe placement when required. The same electric hammer drill was used to push probes in areas of resistance during placement.

At each sampling location an electric vacuum pump set to draw 0.2 liters per minute (L/min) of soil vapor was attached to the probe and purged prior to sample collection. Vapor samples were obtained in SGE gas-tight syringes by drawing the sample through a luer-lock connection which connects the sampling probe and the vacuum pump. Samples were immediately injected into the gas chromatograph/purge and trap after collection. New tubing was used at each sampling point to prevent cross contamination.

All analyses were performed on a laboratory grade Hewlett Packard model 5890 Series II gas chromatograph equipped with a Hewlett Packard model 5971 Mass Spectra Detector and Tekmar LSC 2000 Purge and Trap. An SGE capillary column using helium as the carrier gas was used to perform all analysis. All results were collected on a personal computer utilizing Hewlett Packard's 5971 MS and chromatographic data collection and handling system.

## **Quality Assurance**

#### 5-Point Calibration

The initial five point calibration consisted of 20, 50, 100, 200 and 500 ul injections of the calibration standard. A calibration factor on each analyte was generated using a best fit line method using the HP data system. If the r<sup>2</sup> factor generated from this line was not greater than 0.990, an additional five point calibration would have been performed. Method reporting limits were calculated to be 0.01-1.0 micrograms per Liter (ug/L) for the individual compounds.

A daily calibration check and end of run calibration check was performed using a pre-mixed standard supplied by Scotty Analyzed Gases. The standard contained common halogenated solvents and aromatic hydrocarbons (see Table 1). The individual compound concentrations in the standards ranged between 0.025 nanograms per microliter (ng/ul) and 0.25 ng/ul.

TADIE 1

	I ABLE 1	
Dichlorodifluoromethane	Carbon Tetrachloride	Chloroethane
Trichlorofluoromethane	1,2-Dichloroethane	Benzene
1,1-Dichloroethene	Trichloroethene	Toluene
Methylene Chloride	1,1,2-Trichloroethane	Ethylbenzene
trans-1,2-Dichloroethene	Tetrachloroethene	m-/p-Xylene
1,1-Dichloroethane	Chloroform	o-Xylene
cis-1,2-Dichloroethene	1,1,1,2-Tetrachloroethane	Vinyl Chloride
1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	Freon 113
4-Methyl-2-Pentanone	Cyclohexane	Acetone
Chlorobenzene	2-Butanone	Isobutane

#### Sample Replicates

A replicate analysis (duplicate) was run to evaluate the reproducibility of the sampling system and instrument. The difference between samples did not vary more than 20%.

#### Equipment Blanks

Blanks were run at the beginning of each workday and after calibrations. The blanks were collected using an ambient air sample. These blanks checked the septum, syringe, GC column, GC detector and the ambient air. Contamination was not found in any of the blanks analyzed during this investigation. Blank results are given along with the sample results.

#### Tracer Gas

A tracer gas was applied to the soil gas probes at each point of connection in which ambient air could enter the sampling system. These points include the top of the sampling probe where the tubing meets the probe connection and the surface bentonite seals. Isobutane was used as the tracer gas, found in common shaving cream. No Isobutane was found in any of the samples collected.



Purge Volume Test

"Purge volume" is the total internal volume of the sampling probe. Three separate purge volumes were tested: 1, 3, and 10 volumes. It was found that 3 volumes were best for this soil vapor survey.

## Scope of Work

To achieve the objective of this investigation a total of 15 vapor samples were collected from 12 locations at the site. Sampling depths, vacuum readings, purge volume and sampling volumes are given on the analytical results page. All the collected vapor samples were analyzed on-site using Optimal's mobile laboratory.

#### **Subsurface Conditions**

Subsurface soil conditions at this site varied from silty-sand to silty-clay from ground surface to 12.0 feet bgs. These soil conditions offered sampling flows at 0-25" water vacuum. Depth to groundwater was unknown at the time of the investigation.

#### Results

During this vapor investigation two samples contained levels of Benzene. Benzene levels were 0.06 ug/L at SV-2 and 0.07 ug/L at SV-3. None of the other compounds listed in Table 1 above were detected above the listed reporting limits. A complete table of analytical results is included with this report.

#### Disclaimer

All conclusions presented in this letter are based solely on the information collected by the soil vapor survey conducted by Optimal Technology. Soil vapor testing is only a subsurface screening tool and does not represent actual contaminant concentrations in either the soil and/or groundwater. We enjoyed working with you on this project and look forward to future projects. If you have any questions please contact me at (877) 764-5427.

Sincerely,

Attila Baly

Project Manager



# **SOIL VAPOR RESULTS**

Site Name: 21712 Moneta Ave., Carson, CA

Lab Name: Optimal Technology

Date: 1/8/15

Analyst: A. Baly

Collector: A. Baly

Inst. ID: HP-5890 Series II

Method: Modified EPA 8260B

Detector: HP-5971 Mass Spectrometer

Page: 1 of 2

SAMPLE ID	
Sampling Depth (Ft.)	
Purge Volume (ml)	
Vacuum (in. of Water)	
Injection Volume (ul)	
Dilution Factor	

BLANK-1	SV-1 PT1V	SV-1 PT3V	SV-1 PT10V	SV-2	SV-3	SV-4	SV-5
N/A	5.0	5.0	5.0	11.0	10.0	5.0	4.0
N/A	500	1,500	5,000	275	260	1,500	1,500
N/A	0	0	0	0	0	0	0
50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000
1	1	1	1	1	1	1	1

COMPOUND	REP. LIMIT
Dichlorodifluoromethane	1.00
Chloroethane	1.00
Trichlorofluoromethane	1.00
Freon 113	1.00
Methylene Chloride	1.00
1,1-Dichloroethane	1.00
Chloroform	1.00
1,1,1-Trichloroethane	1.00
Carbon Tetrachloride	0.02
1,2-Dichloroethane	0.04
Trichloroethene (TCE)	0.10
1,1,2-Trichloroethane	1.00
Tetrachloroethene (PCE)	0.10
1,1,1,2-Tetrachloroethane	1.00
1,1,2,2-Tetrachloroethane	1.00
Vinyl Chloride	0.01
Acetone	1.00
1,1-Dichloroethene	1.00
trans-1,2-Dichloroethene	1.00
2-Butanone (MEK)	1.00
cis-1,2-Dichloroethene	1.00
Cyclohexane	1.00
Benzene	0.03
4-Methyl-2-Pentanone	1.00
Toluene	1.00
Chlorobenzene	1.00
Ethylbenzene	0.40
m/p-Xylene	1.00
o-Xylene	1.00
Isobutane (Tracer Gas)	1.00

| CONC (ug/L) |
|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| ND          |
| ND          |
| ND          |
| ND          |
| ND          |
| ND          |
| ND          |
| ND          |
| ND ND       | ND          | ND          | ND          | ND          | ND          | ND          | ND          |
| ND          |
| ND          |
| ND          |
| ND          |
| ND          |
| ND          |
| ND          |
| ND          |
| ND          |
| ND          |
| ND          |
| ND          |
| ND          |
| ND          | ND          | ND          | ND          | 0.06        | 0.07        | ND          | ND          |
| ND          |
| ND          |
| ND          |
| ND          |
| ND          |
| ND          |
| ND          |

Note: ND = Below Listed Reporting Limit; PT3V = Purge Test Volume



## **SOIL VAPOR RESULTS**

Site Name: 21712 Moneta Ave., Carson, CA Lab Name: Optimal Technology Date: 1/8/15

Analyst: A. Baly Collector: A. Baly Inst. ID: HP-5890 Series II

Method: Modified EPA 8260B Detector: HP-5971 Mass Spectrometer Page: 2 of 2

SAMPLE ID				
Sampling Depth (Ft.)				
Purge Volume (ml)				
Vacuum (in. of Water)				
Injection Volume (ul)				
Dilution Factor				

SV-6	SV-7	SV-8	SV-9	SV-10	SV-11	SV-12	SV-12 Dup
5.0	12.0	4.0	5.0	10.0	4.0	4.0	4.0
1,500	2,250	1,500	180	260	1,500	1,500	1,500
0	25	15	0	0	20	0	0
50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000
1	1	1	1	1	1	1	1

COMPOUND	REP. LIMIT
Dichlorodifluoromethane	1.00
Chloroethane	1.00
Trichlorofluoromethane	1.00
Freon 113	1.00
Methylene Chloride	1.00
1,1-Dichloroethane	1.00
Chloroform	1.00
1,1-Trichloroethane	1.00
Carbon Tetrachloride	0.02
1,2-Dichloroethane	0.04
Trichloroethene (TCE)	0.10
1,1,2-Trichloroethane	1.00
Tetrachloroethene (PCE)	0.10
1,1,1,2-Tetrachloroethane	1.00
1,1,2,2-Tetrachloroethane	1.00
Vinyl Chloride	0.01
Acetone	1.00
1,1-Dichloroethene	1.00
trans-1,2-Dichloroethene	1.00
2-Butanone (MEK)	1.00
cis-1,2-Dichloroethene	1.00
Cyclohexane	1.00
Benzene	0.03
4-Methyl-2-Pentanone	1.00
Toluene	1.00
Chlorobenzene	1.00
Ethylbenzene	0.40
m/p-Xylene	1.00
o-Xylene	1.00
Isobutane (Tracer Gas)	1.00

	<del></del>						
CONC (ug/L)							
ND							
ND							
ND							
ND							
ND							
ND							
ND							
ND	ND	ND ·	ND	ND	ND	ND	ND
ND							
ND							
ND							
ND							
ND							
ND							
ND							
ND							
ND							
ND							
ND							
ND							
ND							
ND							
ND							
ND							
ND							
ND							
ND							
ND							
ND							
ND							

Note: ND = Below Listed Reporting Limit