



✓ **Orion Environmental Inc.**  
3450 E. Spring St., Suite 212 562 988-2755 PHONE  
Long Beach, CA 90806 562 988-2759 FAX

○ **DBA Arctos Environmental**  
1332 Peralta Avenue 510 525-2180 PHONE  
Berkeley, CA 94702 510 525-2392 FAX

## **Environmental Site Assessment**

Rivermill Property  
Riverside Drive and Milliken Avenue  
Ontario, California

*prepared for:*

Centex Homes  
250 Commerce, Suite 100  
Irvine, California 92602

**May 2004**



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## EXECUTIVE SUMMARY

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Orion Environmental Inc. (Orion) performed a Phase I environmental site assessment (ESA) of the property at the northwest corner of Riverside Drive and Milliken Avenue in Ontario, California (the site). The ESA was conducted in general conformance with the American Society for Testing and Materials standard for ESAs (ASTM E1527-00). This assessment has revealed no evidence of recognized environmental conditions at the subject property.

A review of the available databases for the site and surrounding area indicated that several properties within 1/4 mile of the site have impacted soil from releases. Because these sites have not been shown to impact groundwater, releases from these properties would not likely impact the subject site.



## 1.0 INTRODUCTION

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Orion Environmental Inc. (Orion) has performed an environmental site assessment (ESA) for the property located at the northwest corner of Riverside Drive and Milliken Avenue in Ontario, California (the site). The ESA was conducted in accordance with Orion's 28 April 2004 proposal to Centex Homes (the Client).

### 1.1 Purpose and Objectives

The objectives of this ESA were to evaluate whether the site may have been impacted by releases of hazardous materials from (1) past or present activities on the site or (2) adjacent and nearby properties. This report presents the results of the ESA and was prepared using information from Orion's site reconnaissance, historical document review, and regulatory agency records and database review. The information contained in this report is confidential.

### 1.2 Scope of Work

The scope of work conducted for the ESA included the following tasks:

- Task 1 – Site Reconnaissance and Interviews
- Task 2 – Property History Review
- Task 3 – Regulatory Agency Records Review
- Task 4 – Report Preparation.

The scope of work was performed in general conformance with the American Society for Testing and Materials standard for ESAs (ASTM E1527-00).

## 2.0 SITE DESCRIPTION

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### 2.1 Site Location and Vicinity Characteristics

The site is a 20-acre property at the northwest corner of Riverside Drive and Milliken Avenue in Ontario, California (Figure 1). The subject property is in Range 7 West, Township 2 South, Section 1, as indicated on the U.S. Geological Survey topographic map (USGS, 1966). State Highway 60 lies approximately 1/4 mile to the north and Interstate 15 lies approximately 1/2 mile to the east. The Santa Ana River lies approximately 5 miles to the south.

The site is in an agricultural area of the city with residential and commercial areas being developed in the site vicinity. The adjacent properties were observed from curbside and include a plant nursery to the west, a winery to the north, and empty fields to the east and south (Figure 2).

### 2.2 Current Uses

The property is not currently developed or occupied.

### 2.3 Physical Setting

The physical setting was determined from the site reconnaissance and the historical documents.

#### 2.3.1 Topography, Vegetation, and Drainage

The site is approximately 800 feet above mean sea level (MSL; USGS, 1966). The ground surface in the area of the site is relatively flat, with a slope of approximately 60 feet per mile to the south. The property is unpaved and was graded for weed control.



### **2.3.2 Geology and Hydrogeology**

Geologic materials underlying the site are part of the Holocene Younger Alluvium under laid by the Pleistocene Older Alluvium. Soil underlying the site is interbedded, discontinuous layers of gravel, sand, silt, and clay (Wildermuth Environmental, Inc., 2003).

The groundwater flow direction is southwesterly toward the Santa Ana River and the first water is estimated to be 200 to 240 feet below grade in the Pleistocene Older Alluvium (Environmental Data Resources, Inc. [EDR], 2004). The site lies within the Chino Basin where groundwater production occurs in the Pleistocene Older Alluvium with an average thickness of 500 feet throughout the basin.



## **3.0 SITE RECONNAISSANCE, INTERVIEWS, AND SAMPLING**

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### **3.1 Physical Description and Observations**

On 6 May 2004, Mike Purchase of Orion conducted a reconnaissance of the site and adjacent areas. Because the site is currently undeveloped, Orion was not able to contact any tenants or owners of the properties during the site visit. Mr. Purchase walked through and drove around accessible areas of the property.

The site was observed for physical indications of possible usage, storage, spillage, or dumping of hazardous, toxic, or petroleum substances on site and, when possible, on contiguous sites. Three 55-gallon drums were sighted in the central portion of the site near the northern property line. The drums were empty, uncovered, and unlabeled; therefore, past contents could not be identified. A small dump area at the northeast corner of the property included used tires, a refrigerator, and green waste. Beehives were also spotted in the western portion of the property. There were no visible signs of subsurface structures such as tanks, sumps, or wells. Selected photographs are in Appendix A and site reconnaissance notes are in Appendix B. Figure 2 shows the approximate location of the drums, beehives, and dump area.

### **3.2 Interviews**

No interviews were conducted as part of this evaluation.

## **4.0 RECORDS REVIEW**

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Orion reviewed available regulatory agency records for the site and surrounding area between a 1/2- to 1-mile radius as specified by ASTM E1527-00. This review had three components: (1) reviewing federal, State, and, where available, local agency databases; (2) contacting individual agencies based on the results obtained from the database search and site visit; and (3) reviewing past land use information.

### **4.1 Property History Review**

Orion collected historical land use information from readily available public and private files. The following sections describe the records reviewed.

#### **4.1.1 Sanborn Map Review**

A search of the Sanborn Map collection was conducted for the site address. Sanborn maps are available for 12,000 communities in the United States from 1867 to present. They were initially produced for the insurance industry to provide fire risk information for buildings or other structures. No Sanborn maps were available for the site and surrounding area.

#### **4.1.2 Past Land Use Review**

Orion personnel contacted the City of Ontario Building Department on 4 May 2004 to request building records for past land use. No records were available for the property. City personnel identified the property and stated that no buildings had been present at the site.

#### **4.1.3 Aerial Photograph Review**

Historical aerial photographs from 1938 through 2002 were reviewed for the site and the surrounding properties. The following photographs were obtained from EDR of Milford, Connecticut, in electronic black-and-white format:



Year	Flyer	Approx. Scale	Summary
1938	Laval	1" = 555'	The site appears to be part of a large agricultural field. The surrounding areas are used for agriculture. The property to the south appears to be part of a drainage area. Riverside Drive is present south of the site and Milliken Avenue is present east of the site.
1949	Fairchild	1" = 500'	Same as the 1938 photograph. San Antonio winery is present to the north.
1953	Southwestern	1" = 555'	The site and surrounding areas are graded and still used for agriculture.
1968	Teledyne	1" = 480'	The site is vacant with no agricultural activities. The property to the south is also vacant with no activities. Surrounding properties are still agricultural.
1977	Teledyne	1" = 666'	The site is unchanged from the 1968 photograph. State Highway 60 is present to the north. Surrounding area is unchanged.
1989	USGS	1" = 666'	The site is unchanged from the 1968 photograph. Jack Pinheiro Dairy is present to the southwest. The property adjacent to the west of the site is developed with a nursery. The property further west is residential. The sites to the north, east, and south are predominantly agricultural. Interstate 15 is present to the east.
1994	USGS	1" = 666'	Same as the 1989 photograph.
2002	USGS	1" = 666'	The site is unchanged from the 1968 photograph. The property to the southeast is developed with commercial and industrial buildings. Jack Pinheiro Dairy is still present to the southwest. The nursery is still present to the west and San Antonio winery is still present to the north.

Indications of potential environmental concern at the site or the immediately adjacent properties were not apparent on the aerial photographs reviewed. However, chemicals commonly used such as petroleum products, motor oil, fuels, cleaning agents, or solvents may have been present though not visible in the photographs. Copies of the aerial photos reviewed are included in Appendix C.

#### 4.1.3 Historical Topographic Map Review

Historical topographic maps from 1941 through 1981 were reviewed for the site and the surrounding properties. The following maps were obtained from EDR as color copies:

Year	USGS Quadrangle	Approx. Scale	Summary
1941	Guasti	1: 31,680	The site and surrounding areas show no development.
1954	Ontario	1: 62,500	The site and surrounding areas are identified as agricultural.
1966	Guasti	1:24,000	The site is unchanged.
1966 Photorevised 1973	Guasti	1:24,000	Same as the 1966 map. State highway 60 is identified as "proposed" north of the site.
1966 Photorevised 1981	Guasti	1:24,000	Same as the 1973 photorevised map. State highway 60 is completed.

Copies of the topographic maps reviewed are included in Appendix C.

## 4.2 Database Review

Orion contracted with EDR to conduct the database records search. A copy of the database search report is included in Appendix D. A list of the databases reviewed and definitions of abbreviations used are presented in the database search report. Please refer to that report for specific information regarding the databases and their acronyms.

The subject property was not listed in any of the searched databases. Mapped sites were found within the search radii on the following databases: CERCLIS, RCRIS, LUST, UST, CA FID, HIST UST, DEHS Permit System. The maps included with the database search report show the site in relation to the listed properties (Appendix D). The properties in the immediate vicinity (1/8 mile) of the site or with significant environmental impacts are discussed below.

Two properties were listed within the immediate vicinity (1/8 mile) of the site or in an upgradient (northerly) direction. The San Antonio Winery at 2802 Milliken Avenue was identified in the DEHS Permit databases as having a San Bernardino County permit for a hazardous material handler and generator. No releases have been reported and no underground structures are permitted at this property. The Milliken Sanitary Landfill at Milliken Avenue and State Highway 60 is located 1/4-mile north of the site and is identified in the CERCLIS database as a non-NPL site with state-lead cleanup activities. A

site reassessment was completed in February 2003. There were no indications of releases to groundwater from this landfill in the regulatory agency database review.

Within 1/4 mile of the site, several sites were listed in databases searched. The following table provides a summary of these sites.

Site	Database	Summary
Cal Mold, Inc. 3900 Hamner Avenue	Small Quantity Generator FINDS HAZNET	Located downgradient (southeast) of the site and no releases to the environment have been reported.
Jack Pinheiro Dairy 11011 Riverside Drive	CA FID UST CA WDS HIST UST UST San Bern. Co. Permit	Located downgradient (southwest) of the site. Has a state waste discharge permit for storm water releases impacted with animal wastes and a permitted UST. Orion reviewed the file at Santa Ana Region, Regional Water Quality Control Board, and no releases from the UST have been reported.
Crossroads Truck 12421 Riverside Avenue	RCRIS-SQG FINDS LUST	Located cross gradient (east) of the site. Released gasoline to the soil. Conducting investigation of soil.

### 4.3 Local Agency Review

Orion sent out information requests to several local agencies regarding the subject site. No files were found for the site at the following agencies:

- San Bernardino County Fire Department
- City of Ontario, Building Department
- Regional Water Quality Control Board, Santa Ana Region.



## 5.0 CONCLUSIONS AND RECOMMENDATIONS

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Orion conducted an environmental site assessment of the property located at the northwest corner of Riverside Drive and Milliken Avenue in Ontario, California. The purpose of the ESA was to evaluate whether the site may have been impacted from releases of hazardous materials from past or present activities on the site or from other offsite sources. This assessment has revealed no evidence of recognized environmental conditions at the subject property.

A review of the available databases for the site and surrounding area indicated that several properties within 1/4 mile of the site have impacted soil from releases. Because these sites have not been shown to impact groundwater, releases from these properties would not likely impact the subject site.



## 6.0 REFERENCES

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### **Documents**

Environmental Data Resources, Inc. (EDR), 2004. The EDR Radius Map with GeoCheck, 4 May.

Wildermuth Environmental, Inc., 2003. "Optimum Basin Management Program, Chino Basin Dry-Year Yield Program Modeling Report, Volume III," prepared for Chino Basin Watermaster Inland Empire Utilities Agency, July.

### **Maps**

U.S. Geological Survey (USGS), 1966. *Gausti, California*, 7.5-minute quadrangle map, scale 1:24,000, photorevised 1981.

### **Personal Communications/Correspondence**

City of Ontario Building Department, 2004. Telephone conversation between Jan Lewallen and Mike Purchase of Orion regarding the existence of file for site, 4 May.

San Bernardino County Fire Department, 2004. Telephone conversation between Lisa Hernandez and Mike Purchase of Orion regarding the existence of file for site, 4 May.

Santa Ana Regional Water Quality Control Board, 2004. E-mail correspondence between Annette Subriar and Mike Purchase of Orion regarding the existence of file for site, 4 May.

### **Aerial Photographs and Topographic Maps**

Environmental Data Resources, Inc., 2004. The EDR Radius Map with GeoCheck, 6 May.

## 7.0 GENERAL LIMITATIONS

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This report has been prepared by Orion Environmental Inc. for the exclusive use of Centex Homes, as it pertains to the subject property located at northwest corner of Riverside Drive and Milliken Avenue in Ontario, California. Any use of or reliance on this report by a third party shall be at such party's sole risk. The scope of this environmental site assessment was limited to visual observation of surface conditions at the site, interviews with public agencies and other personnel with knowledge of the site, and a review of reasonably available relevant data. The data reviewed included reports and literature issued by federal, State, and local agencies. Orion has not conducted an independent investigation of the accuracy of these secondary sources and has assumed them to be accurate and complete. Sampling and analysis for asbestos, radon, lead-based paint, and lead in drinking water were not conducted. The following conditions were not revealed by the investigation:

- Naturally occurring toxics
- Toxicity of substances common in current habitable environments, such as stored household products, building materials, and consumables
- Biological pathogens
- A contaminant plume below the ground surface originating from an offsite source
- Contaminants or contaminant concentrations that do not violate present regulatory standards but that may violate future such standards
- Unknown site contamination, such as "midnight dumping" or accidental spillage.

No warranty or guarantee concerning the findings and conclusions of this ESA is offered or intended. Rather, it is represented that the scope and performance of the professional services rendered are in accordance with the current state of practice being conducted in the site region by similarly qualified practitioners.



## 8.0 ENVIRONMENTAL PROFESSIONAL QUALIFICATIONS AND SIGNATURE

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Orion Environmental Inc. of Long Beach, California, has prepared this Phase 1 ESA. Orion personnel have been conducting Phase 1 ESAs for over 15 years. This Phase 1 ESA was prepared under the supervision of a Registered Environmental Assessor in the State of California.

Harry J. Takach, PhD., R.E.A. 00237  
Senior Project Manager  
Orion Environmental Inc.