PHASE I ENVIRONMENTAL SITE ASSESSMENT

Otay Ranch Village 13 - West Residential Area Parcels A and B North of Otay Lakes Road Chula Vista, California 91914

C2C Project Number: 2009-082

Prepared for:

The Otay Ranch Company 1392 East Palomar Street, Suite 202 Chula Vista, California 91913

Prepared by:

Coast 2 Coast Environmental, Inc. 13964 Boquita Drive Del Mar, California 92014 (619) 889-6232 C2CEnvironmental@AOL.com

> September 11, 2009 Revised November 5, 2010

TABLE OF CONTENTS

1.1	EXECUTIVE SUMMARY	iii
2.0	INTRODUCTION	1
2.1	Purpose	1
2.2	Scope of Services	1
2.3	Significant Assumptions and Data Gaps	2
2.4	Limitations	
2.5	Exceptions to ASTM Standard Practice E1527-05	2
2.6	Special Terms and Conditions	2
2.7	User Reliance	2
3.0	PROPERTY DESCRIPTION AND OVERVIEW	3
3.1	Property Location and Legal Description	3
3.2	Site and Vicinity General Characteristics	
3.3	Current Use of the Property	3
3.4	Structures, Roads, Other Improvements and Utilities	4
3.5	Current Uses of Adjoining Sites	4
3.6	Area Reconnaissance	5
4.1	Title Records, Environmental Liens and Activity and Use Limitations	6
4.2	Specialized Knowledge	
4.3	Valuation Reduction for Environmental Issues	6
4.4	Owner, Property Manager and Occupant Information	
4.5	Other Information	6
5.0	RECORDS REVIEW	
5.1	Standard Environmental Record Sources	7
5.2	Additional Environmental Record Sources	
5.3	Physical Setting	
	.3.1 Topographical Characteristics	
	.3.2 Geological Setting	
	.3.3 Soil Characteristics	
	.3.4 Hydrogeological Characteristics	
5.4	1 3	
_	.4.1 Previous Environmental Reports	
	.4.2 Chronological Review	
	.4.3 Historical Sources Reviewed	
5.5	Historical Use of the Adjoining Sites	
6.0	SITE RECONNAISSANCE	
6.1	Methodology and Limiting Conditions	
6.2	General Site Setting	
6.3	Interior and Exterior Observations	
7.0	INTERVIEWS	
7.1	Interview with Owner	
7.2	Interview with the Property Manager	
7.3	Interviews with Occupants	
7.4	Interviews with Local Government Officials	26

7.5	Interviews	with Others	26
8.0	ADDITIONA	L SERVICES	27
8.1	Asbestos ar	nd Lead-Based Paint	27
8.3	Radon		27
9.0	FINDINGS A	ND CONCLUSIONS	28
10.0	RECOMMEN	IDATIONS	30
11.0	DEVIATION	S	31
12.0	REFERENCE	S	32
12.1	Published F	References	32
12.2	Agency Res	sources	32
12.3		l Resources	
13.0	SIGNATURE	OF ENVIRONMENTAL PROFESSIONAL	35
14.0	QUALIFICA?	ΓΙΟΝS OF ENVIRONMENTAL PROFESSIONAL	36
APPE	NDIX A:	FIGURES	
APPE	NDIX B:	PHOTOGRAPHS	
APPE	NDIX C:	HISTORICAL RESEARCH DOCUMENTATION	
APPE	NDIX D:	REGULATORY RECORDS DOCUMENTATION	
APPE	NDIX E:	INTERVIEW DOCUMENTATION	
APPE	NDIX F:	PREVIOUS REPORTS	
APPE	NDIX G:	SCOPE OF WORK	

Phase I Environmental Site Assessment Property: Otay Ranch Village 13 - West Residential Area Parcels A and B

C2C Project Number: 2009-082

1.1 EXECUTIVE SUMMARY

Coast 2 Coast Environmental, Inc. performed an environmental site assessment of an area described as Parcels A and B on the *Preliminary Title Report* dated August 3, 2009 included in Appendix E (Property). (On plat maps Parcels A and B are also referred to as Parcels 2 and 3, respectively.) The Property consists of 719.022 acres of undeveloped land at the base of the southwest flank of the Jamul Mountains. The Property location can be further described as being north of Otay Lakes Road, east of the Upper Otay Reservoir and north of the Lower Otay Reservoir within an unincorporated area of Chula Vista, San Diego County, California. During a site reconnaissance conducted on August 26, 2009, improvements to the Property were not observed other than several four-wheel drive dirt roads crossing through various portions of the Property.

Based upon information obtained from Coast 2 Coast's research and visual observations made during our site visit, we have reached the following conclusions:

• The Property, adjoining sites and nearby sites were not found on the Standard Environmental Record sources required to be reviewed under ASTM Standard E1527-05, including the following:

United States Environmental Protection Agency (U.S. EPA) National Priorities List (NPL) (including delisted sites)

State- and tribal-equivalent priorities list

U.S. EPA Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) (including sites requiring no further action)

State- and tribal-equivalent CERCLIS

U.S. EPA Resource Conservation and Recovery Act (RCRA) Treatment, Storage and Disposal Facilities (TSDF) and CORRACTS Facilities

U.S. EPA RCRA Generators

U.S. EPA Emergency Response Notification System (ERNS)

Federal Institutional Control (IC) or Engineering Control (EC) Registries

State- and tribal-equivalent IC and EC Registries

State Leaking Underground Storage Tank Program (LUST) and tribal equivalent

State Registered Underground Storage Tank (UST) and tribal equivalent

State Solid Waste Information System (SWIS) and tribal equivalent

State and tribal Voluntary Cleanup Program (VCP) sites

State and tribal Brownfields sites

• Structures were not observed on the Property.

- Solid waste, hazardous waste or illegally dumped debris was not observed on the Property.
 The gates to the Property appeared to be more secure than noted during previous
 assessments. Trash and debris observed in a few places next to the four wheel drive roads
 during previous site visits had been removed.
- A capped water well was observed in the center of the Property. Coast 2 Coast first observed the well in 2005. Evidence of illegal dumping into the well was not observed.
- During our review of historical resources, Frank Kimball was reported to have had several mines on Rancho Janal (also known as Rancho Otay Dominguez) in the 1870s and 1880s. The east portion of this rancho included most of the Property. No mention was made of the material that was being mined but it may have been for limestone which was found a few miles east at Rancho Jamul. Mr. Kimball sold Rancho Janal to the Babcock's in 1894. No other mention of mining on Rancho Janal was found and there are no mines marked on the U.S. Geological Survey topographic maps for Rancho Otay Dominguez and the Property. Based on this information, it is not likely that mining activities which may have occurred over 120 years ago are of environmental concern today.
- A 1960 aerial photograph depicted dry farming on a portion of the southern end of Parcel B
 and a portion of the south adjoining site. Dry farming was not observed on the 1953 or 1964
 photographs. However, dry farming is an inexpensive method of farming which uses
 minimal materials, such as chemical pesticides, and therefore pesticide use on the Property
 was likely to have been minimal.
- High voltage electrical transformers were not found on the Property.
- A review of a statewide radon study did not indicate the Property was within an area where radon is likely to be found in buildings in concentrations above the U.S. Environmental Protection Agency action limit of 4.0 picocuries per liter.
- Recognized environmental conditions were not found on the Property during this assessment.

Based upon Coast 2 Coast's review of the information presented in the report, and our resulting conclusions, we recommend the following:

• It is Coast 2 Coast's opinion that further environmental assessment of this Property is not warranted at this time.

2.0 INTRODUCTION

2.1 Purpose

Coast 2 Coast Environmental Inc. performed a Phase I Environmental Site Assessment of Parcels A and B of Otay Ranch Village 13 located north of Otay Lakes Road within an unincorporated area of Chula Vista, San Diego County, California (Property). This assessment was performed under contract with The Otay Ranch Company, at the direction of Mr. Robert Cameron, Executive Vice President. Coast 2 Coast's services were authorized by Mr. Cameron on August 26, 2009.

The assessment of this Property was performed at the direction of The Otay Ranch Company in conjunction with its efforts to conduct "all appropriate inquiry (AAI) into the previous ownership and uses of the Property consistent with good commercial or customary practice". The purpose of performing AAI is to identify "recognized environmental conditions (RECs)" associated with past and/or present operations at the Property or adjoining sites which may pose liability for The Otay Ranch Company. By completing this step in the due diligence process, The Otay Ranch Company satisfies one of the requirements to qualify for the "innocent landowner defense" under Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Section 101(35).

2.2 Scope of Services

The assessment was performed in conformance with all of the components of the ASTM E1527-05 Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process. The assessment included, but was not necessarily limited to, the activities listed below:

- A reconnaissance of the Property to observe and assess characteristics of potential environmental concern.
- Observation of adjoining sites and the surrounding area to observe and assess characteristics of
 potential environmental concern which may impact the Property.
- Interviews with current and past owners, operators and occupants of the Property for the purpose of gathering information regarding the potential for contamination at the Property.
- Review of regulatory agency files and interviews with government agency officials to identify
 and assess any listings of regulatory permits, registrations, enforcement actions, contaminated
 sites, etc. likely to affect the Property.
- Review of historical resources to identify previous uses and occupancies of the Property since the Property was first developed or 1940, whichever is earlier.
- Visual inspection or use of other documentation to render an opinion as to the existence of asbestos, lead-based paint (interior and exterior), lead in the drinking water, and the potential for radon exposure.

• Development of a report to include discussion of the findings of the above tasks.

2.3 Significant Assumptions and Data Gaps

Significant assumptions concerning the Property were not made during this assessment except for the following:

- Lacking Property-specific information on the ground water gradient at the Property, it is assumed that the gradient mimics the topographic gradient.
- Information supplied by others is assumed to be correct and accurate.

2.4 Limitations

The conclusions and recommendations presented in this report are based upon reasonable visual reconnaissance of the Property and research of available materials within the scope and budget of the contract. The information presented is relevant to the dates of Coast 2 Coast's Property visit and should not be relied upon to represent conditions at later dates.

The opinions expressed herein are based on information obtained during Coast 2 Coast's effort and on Coast 2 Coast's experience. If additional information becomes available, we request the opportunity to review the information and modify Coast 2 Coast's opinions, if necessary.

Coast 2 Coast's services have been provided using that degree of care and skill ordinarily exercised, under similar circumstances, by environmental consultants practicing in this or similar localities. No other warranty, expressed or implied, is made as to the professional opinions presented in this report.

Coast 2 Coast Environmental, Inc. is not responsible for the conclusions, opinions, or recommendations made by others based on this information.

2.5 Exceptions to ASTM Standard Practice E1527-05

Past owners and tenants were not interviewed because they had died or their whereabouts were unknown.

2.6 Special Terms and Conditions

Special terms and conditions which limited access to reasonably ascertainable information concerning the Property were not required by The Otay Ranch Company.

2.7 User Reliance

This report has been prepared on behalf of, and for the exclusive use of The Otay Ranch Company, Avanti Acquisition Company, LLC, Avanti Strategic Land Investors V, L.L.P., and Avanti Strategic Land Investors VI, L.L.P. The contents of this report may not be relied upon by any party other than these four parties without the express written consent of Coast 2 Coast Environmental, Inc.

3.0 PROPERTY DESCRIPTION AND OVERVIEW

3.1 Property Location and Legal Description

Name/Address: Otay Ranch Village 13 - West Residential Area

Parcels A and B

North of Otay Lakes Road Chula Vista, California 91914

County: San Diego

Assessor Parcel Number or Other Legal Description:

As listed on an August 3, 2009 *Preliminary Title Report* for the Property, assessor parcel numbers for the Property include 598-130-01, 598-130-03, 595-090-03, 598-140-01, 647-020-08 and 647-020-09. This report also includes the legal description of Parcels A and B. A copy of the title report is included in Appendix E.

On plat maps and in the legal description for the Property, Parcels A and B are also referred to as Parcels 2 and 3, respectively.

A Property Location Map (Figure 1) depicting the geographic location and topographic characteristics of the Property is located in Appendix A.

3.2 Site and Vicinity General Characteristics

Current Owner: Otay Project L.P.

Lot Size: 719.022 acres

Site Improvements: The Property is undeveloped land covered with native vegetation except

several four-wheel drive dirt roads in poor to good condition.

Current Zoning: The Property is within the County of San Diego's Otay Ranch Subregional

Planning Area. Specific zoning has not yet been established for the redevelopment of the Property. It is expected that land within the Property will be zoned for low- and medium-density residential use.

Historically, the Property was zoned under the County's Limited Control designation which was a code that was applied to land that was unzoned as of December 1, 1969. Uses which are permitted within Limited Control include agricultural crops or animal grazing, both of which are known to have occurred on the Property in the past.

3.3 Current Use of the Property

The Property consists of undeveloped land covered with native vegetation except for several four-wheel drive dirt roads which provide access to the Property. The Property is currently unoccupied but is regularly accessed by the United States Border Patrol.

A Property Plan (Figure 2) depicting the general configuration of the Property as well as pertinent site observations is included in Appendix A. Photographs of the Property are included in Appendix B.

3.4 Structures, Roads, Other Improvements and Utilities

Buildings: Buildings were not observed on the Property.

Other Structures: Sheds, awnings and other secondary structures were not observed on the

Property.

Hardscaped Areas: Pavement was not observed on the Property.

Landscaped Areas: Native vegetation covers the Property. The vegetation appeared to be in

good condition and did not appear to be damaged or stressed in a manner

which could be attributable to the presence of contamination.

Water Retention Areas: Pits, ponds, lagoons, swimming pools and other water retention

areas were not observed on the Property.

Roads: There are several 4-wheel drive dirt roads which cross the Property. Otay Lakes Road

borders the west boundary of the Property.

Utilities:

The Property is not currently served by water, sewer, gas or electric utilities.

Septic Systems and Wells: Septic systems were not observed on the Property.

One water well was observed at the top of a knoll in the center of the Property. During Coast 2 Coast's previous visit to the site in April 2005 and well cap had been observed but during the May 2006 visit the well cap was missing; however, someone had tried to pound the sides in on the top of the well. The Otay Ranch Company reported

that it recapped the well in July 2009.

3.5 Current Uses of Adjoining Sites

The present land usage of the adjoining sites was also observed to assess their potential to adversely impact the Property. These observations were made "off-site" and in most cases did not involve entering the adjoining site. The results of these observations are presented below:

North: The site adjoining the Property to the north is a continuous stretch of undeveloped, mountainous land that is not occupied. Surface drainage from this area appears to be to the south onto the Property. Visual observations of this area did not indicate that current activities on these adjoining parcels had adversely affected the Property nor did they reveal current activities that appear to represent an environmental threat to the Property.

East: The sites adjoining the Property to the east include mountainous open space on the northern end and Parcel 4 of Village 13 which is currently undeveloped land similar to the Property. Surface drainage from this site appears to be to the south. Visual observations of this adjoining area did not indicate that current activities on this area had adversely affected the Property nor did they reveal current activities that appear to represent an environmental threat to the Property.

South: The site adjoining the Property to the south is also part of Parcel 4 of Village 13. Currently, this area is undeveloped land similar to the Property. Surface drainage from this site appears to be to the south. Visual observations of this site did not indicate that current activities on this adjoining site had adversely affected the Property nor did they reveal current activities that appear to represent an environmental threat to the Property.

West: The site adjoining the Property to the west includes two parcels owned by the City of San Diego. The more northerly parcel is undeveloped and slopes west toward the Upper Otay Reservoir. The more southerly parcel includes the Upper Otay Reservoir. Visual observations of these parcels did not indicate that current activities on these adjoining parcels had adversely affected the Property nor did they reveal current activities that appear to represent an environmental threat to the Property.

3.6 Area Reconnaissance

A vehicular reconnaissance of the surrounding area in the immediate vicinity of the Property was conducted to observe, in very general terms, the current land use of the sites in the area and to assess if this use poses an environmental threat to the Property. Land usage in the general vicinity of the Property includes undeveloped land similar to the Property and the Otay Lakes Reservoirs. These uses did not appear to pose an environmental threat to the Property.

4.1 Title Records, Environmental Liens and Activity and Use Limitations

A search for reasonably ascertainable environmental lien records and activity and use limitations (AULs) for the Property was conducted by a Coast 2 Coast Environmental subcontractor on behalf of The Otay Ranch Company and Otay Project L.P. for this assessment. Coast 2 Coast subcontractor, NETR, prepared an Environmental Lien Search Report. A copy of the report is included in Appendix C. NETR reported that it did not find environmental liens or AULs on the Property. NETR included the most recent grant deed which lists Otay Project L.P. as the current owner of the Property.

A search of environmental records conducted by Environmental Data Resources, Inc. (EDR) did not find listings for the Property on the federal NPL Liens and CERCLIS liens or State Deed Restrictions databases. The federal databases track properties that the United States Environmental Protection Agency has filed liens against to recover remedial action costs or properties where an owner has been notified of potential liability. The State Deed Restrictions database list sites where AULs are in effect.

4.2 Specialized Knowledge

The Otay Ranch Company and Otay Project, L.P. were not aware of environmental liens, AULs or issues and events of further environmental concern on the Property.

4.3 Valuation Reduction for Environmental Issues

The Otay Ranch Company and Otay Project, L.P. believe the current value for the Property is within the fair market value range for the Property. The Otay Ranch Company and Otay Project, L.P. are not aware of environmental issues which may have affected the value of the Property.

4.4 Owner, Property Manager and Occupant Information

The current owner of the Property is Otay Project, L.P. The Property manager is The Otay Ranch Company. There are no tenants on the Property.

4.5 Other Information

The Otay Ranch Company and Otay Project, L.P. were not aware of other issues of environmental concern associated with the Property.

5.0 RECORDS REVIEW

5.1 Standard Environmental Record Sources

Coast 2 Coast Environmental reviewed a search of environmental records conducted by Environmental Data Resources, Inc. (EDR). A copy of EDR's report is located in Appendix D. The following standard environmental records sources were reviewed as specified for the Property, adjoining and nearby sites. Next to each source is its abbreviation as it appears in the database. An explanation of each record source is provided in EDR's beginning on Page GR-1 which immediately follows the Map Findings.

Database Reviewed	Responsible Agency	Search Distance (miles)
Federal ASTM Standard Databases		
National Priorities List (NPL, NPL Site Boundaries,	U.S. Environmental	1.0
Proposed NPL, DELISTED NPL)	Protection Agency (EPA)	
Superfund Liens (NPL Liens)	U.S. EPA	1.0
Comprehensive Environmental Response,	U.S. EPA	0.5
Compensation & Liability Information System (CERCLIS)		
CERCLIS No Further Action Planned (CERCLIS NFRAP)	U.S. EPA	0.5
CERCLIS Lien Information (LIENS 2)	U.S. EPA	0.5
Resource Conservation and Recovery Act (RCRA) Corrective Action Report (CORRACTS)	U.S. EPA	1.0
RCRA Non-CORRACTS Treatment, Storage and Disposal (TSD) Facilities List	U.S. EPA	0.5
RCRA Generators List including Small Quantity (RCRA-SQG), Large Quantity (RCRA-LQG), Conditionally Exempt SQG (RCRA-CESQG), and Non-Generators (RCRA-NonGen)	U.S. EPA	Property and Adjoining Sites
Emergency Response Notification System (ERNS)	U.S. EPA	Property
Engineering Controls Sites List (US ENG CONTROL)	U.S. EPA	Property
Institutional Controls Sites List (US INST CONTROL)	U.S. EPA	Property
State ASTM Standard Databases		
EnviroStor Database (ENVIROSTOR)	CalEPA DTSC	1.0
State Response Sites (RESPONSE)	CalEPA DTSC	1.0
Solid Waste Information System (SWIS or SWF/LF)	State Integrated Waste	0.5
(Active, Closed and Inactive Facilities and Landfills)	Management Board (IWMB)	

Database Reviewed	Responsible Agency	Search Distance (miles)
Leaking Underground Storage Tanks (LUST)	State Water Resources Control Board (SWRCB) and Regional Water Quality Control Boards (RWQCB)	0.5
Spills, Leaks, Investigations and Cleanup (SLIC) (Spills and leaks from non-UST sources or other regulation sites.)	SWRCB and RWQCB	0.5
County Records (SAM)	San Diego County Department of Environmental Health	0.5
Voluntary Cleanup Program (VCP) Properties	CalEPA DTSC	0.5
Active UST Facilities (UST)	SWRCB	Adjoining Sites
Aboveground Petroleum Storage Tanks (ASTs)	SWRCB	Adjoining Sites
Tribal Records		
Indian Lands UST	U.S. EPA Region IX	0.25
Indian Lands LUST	U.S. EPA Region IX	0.5

The Property, adjoining sites and nearby sites were not found within the search radii for the databases reviewed.

5.2 Additional Environmental Record Sources

EDR also researched the following databases to enhance and supplement the standard database sources listed in Section 5.1.

Database Reviewed	Responsible Agency	Search Distance (miles)
Federal Supplemental ASTM Standard Databases		
Superfund Consent Decrees (CONSENT)	U.S. EPA	1.0
Formerly Used Defense Sites (FUDS)	U.S. Army Corps of	1.0
	Engineers	
Records of Decision (RODS)	NTIS	1.0
Department of Defense Sites (DOD)	U.S. Geological Survey	1.0
U.S. Brownfields Sites (BROWNFIELDS)	U.S. EPA	1.0
Land Use Control Information System (LUCIS)	U.S. DOD Department of	
	the Navy	
Open Dump Inventory (ODI)	U.S. EPA	0.5

Database Reviewed	Responsible Agency	Search Distance
		(miles)
Uranium Mill Tailings Sites (UMTRA)	U.S. Department of Energy	0.5
Mines Master Index File (MINES)	U.S. Department of Labor,	0.25
	Mine Safety and Health	
	Administration	
Hazardous Materials Spill Incidents (HMIRS)	U.S. Department of	Property
	Transportation (DOT)	
Incident and Accident Report (DOT OPS)	DOT Office of Pipeline	Property
	Safety	
Clandestine Drug Labs (CDL)	U.S. Department of Justice	Property
Facility Index System (FINDS)	U.S. EPA/NTIS	Property
Material Licensing Tracking System (MLTS) for	Nuclear Regulatory	Property
Radioactive Materials	Commission	
PCB Activity Database (PADS)	U.S. EPA	Property
RCRA Administrative Action Tracking System	U.S. EPA	Property
(RAATS)		
Toxic Release Inventory System (TRIS)	U.S. EPA/NTIS	Property
Toxic Substances Control Act (TSCA) Chemical	U.S. EPA/NTIS	Property
Substance Inventory Control List		
FIFRA/TSCA Tracking System (FTTS) for	U.S. EPA Office of	Property
Administrative Cases and Pesticide Enforcement	Prevention, Pesticides and	
Actions and Compliance Activities Related to	Toxic Substances	
FIFRA, TSCA and EPCRA (Emergency Planning		
and Community Right-to-Know Act)		
FIFRA/TSCA Tracking System (FTTS INSP)	U.S. EPA	Property
FIFRA/TSCA Tracking System Administrative Case	U.S. EPA	Property
Listing (HIST FTTS)		
Section 7 Tracking Systems (SSTS) for Registered	U.S. EPA	Property
Pesticide-Producing Establishments		
Integrated Compliance Information System (ICIS)	U.S. EPA	Property
Radiation Information Database (RADINFO)	U. S. EPA	Property
Biennial Reporting System (BRS)	U. S. EPA	Property
State Coalition for Remediation of Drycleaners	U.S. EPA	
Listings (SCRD DRYCLEANERS)		
Clandestine Drug Labs (CDL)	Drug Enforcement Agency	Property
State Supplemental ASTM Standard Databases		1
Cal-Sites Database (HIST CAL-SITES)	California Environmental	1.0
	Protection Agency (CalEPA)	
	Department of Toxic	
	Substances Control (DTSC)	
Toxic Pits Cleanup Act Sites (TOXIC PITS)	SWRCB	1.0

Database Reviewed	Responsible Agency	Search Distance (miles)
CalSites Annual Work Plan [formerly State Bond Expenditure Plan maintained by the Department of Health Services] (CA BOND EXP PLAN)	CalEPA DTSC	0.5
List of Deed Restrictions (DEED)	CalEPA DTSC	0.5
State Proposition 65 (NOTIFY 65)	SWRCB	0.5 (LUST) Property (Other)
Waste Management Unit Database (WMUDS/SWAT) [Combination of other databases which track waste.]	SWRCB	0.5 (SWLs and SWAT) Property (Other)
Cortese List (Combined Report List for Leaking USTs, Solid Waste Facilities and Landfills [SWF/LF], Cal-Sites)	CalEPA	0.5 (LUSTs and SWLs) 1.0 (Cal- Sites)
Recycler Facilities (SWYCR)	Department of Conservation	0.5
Military Cleanup Sites Listing (MCS)	SWRCB	Property
SWEEPS UST Listing (Old UST database no longer updated.)	SWRCB	Adjoining Sites
Hazardous Substance Storage Container Database (HIST UST)	SWRCB	Adjoining Sites
Facility Inventory Database (Includes USTs)	CalEPA	Adjoining Sites
California Hazardous Material Incident Report System (CHMIRS)	Governor's Office of Emergency Services	Property
Incident and Accident Data (DOT OPS)	Department of Transportation, Office of Pipeline Safety, Incident and Accident Data	Property
Facility and Manifest Data (HAZNET)	CalEPA	Adjoining Sites
Drycleaner Facilities with Waste Generator Identification Numbers (DRYCLEANERS)	CalEPA DTSC	Adjoining Sites
School Property Evaluation Program (SCH)	CalEPA DTSC	Adjoining Sites
Waste Discharge System (WDS)	SWRCB	Property

Database Reviewed	Responsible Agency	Search Distance (miles)
Clandestine Drug Labs (CDL)	CalEPA DTSC	Property
Registered Waste Tire Haulers Listing (HAULERS)	State Integrated Waste	Property
	Management Board (IWMB)	
Emissions Inventory Data (EMI)	California Air Resources	Property
	Board	
County Records (HMMD)	San Diego County	Property
	Department of	
	Environmental Health	
Tribal Records		
Indian Lands UST	U.S. EPA Region IX	0.25
Indian Lands LUST	U.S. EPA Region IX	0.5
Indian ODI	U.S. EPA	0.5
Indian Reservations (INDIAN RESERV)	U.S. Geological Survey	1.0
Federal and Indian Lands (FEDLAND)	U.S. Geological Survey	1.0

The Property, adjoining sites and nearby sites were not found within the search radii for the databases reviewed.

A search for County records was limited because the Property is undeveloped land without a specific street address to use as a reference point. The Property is within an unincorporated area of the County of San Diego immediately east of the City of Chula Vista. As a result, there are no city records for the Property.

5.3 Physical Setting

5.3.1 Topographical Characteristics

The Property is located in the east ½ of the northeast ¼ of Section 36 of Township 17 South, Range 1 West; nearly all of Section 31, and the west ½ of the southwest ¼ of Section 32, Township 17 South, Range 1 East San Bernardino baseline and meridian on the Jamul Mountains, California 7.5 minute United States Geological Survey (USGS) Topographic Map, which was reviewed for surface hydrologic and topographic characteristics. The topography of the Property is mountainous on the north end and hilly on the south end with the regional topographic gradient tending to the south toward the Lower Otay Reservoir. Site elevation ranges from approximately 1,500 feet above mean sea level (amsl) on the northeast end of the Property to approximately 500 feet amsl by Otay Lakes Road.

Hydraulic flow is generally in a down-gradient direction, usually toward the nearest surface water body. Surface drainage on the Property is anticipated to flow to the south-southwest via three unnamed, seasonal creeks which are located on the Property and which then drain into the Lower Otay Reservoir located south of the road. Flood plain zoning for the Property is primarily Zone X, an area of minimal flooding.

5.3.2 Geological Setting

The Property is located in the Peninsular Ranges physiographic province of southern California. According to a geologic map of the area (Tan, 2002) the site area is underlain by metavolcanic rocks and Tertiary sedimentary rocks. The metavolcanic rocks are named the Santiago Peak Volcanics, a somewhat metamorphosed sequence of Upper Jurassic volcanic and volcaniclastic rocks underlain by the Southern California Batholith, which is of mostly Cretaceous age. The Tertiary sedimentary rocks, which overlie the older Santiago Peak volcanics, are classified as Otay formation (Oligocene to Miocene) and consist of sandstone, siltstone, claystone and fanglomerate. No ultramafic or similar rocks are mapped in the Jamul Mountains quadrangle or in other nearby areas; the potential for the presence of naturally-occurring asbestos (NOA), therefore, is very low.

5.3.3 Soil Characteristics

As described by the United States Department of Agriculture (USDA) Natural Resources Conservation Service there are at least seven types of surface soil on the Property (USDA, 1973). A brief description of these soils and their permeability classification are listed below.

Soil Type Permeability

Friant rocky fine sandy loam, 30 to 70% slopes (FxG)

Moderately rapid

Description same as previous soil.

Olivenhain cobbly loam, 9 to 30% slopes (OhE)

Moderate

This soil is found on dissected marine terraces and consists of deep cobbly loams formed in old gravel and cobbly alluvium.

San Miguel-Exchequer rock silt loams, 9 to 70% slopes (SnG)

Slow to moderate

This soil is found in mountainous areas and consists of Deep silt loams with a clay subsoil that are derived from metavolcanic rock.

5.3.4 Hydrogeological Characteristics

The Property is in the Savage Hydrologic Subarea of the Dulzura Hydrologic Area of the Otay Hydrologic Unit of the San Diego Hydrologic Basin (10.31). Beneficial uses of the groundwater within the Savage Subarea include agricultural, municipal and industrial. Depth to groundwater in this area is estimated to be approximately 300 feet or more below ground surface based on the estimated depth of the water well found on the Property during a previous site reconnaissance. Groundwater flow in the Property area is estimated to generally follow the topographic gradient which is to the south-southwest.

Potable water is not currently provided to the Property area. The Otay Water District will service the Property when development begins.

5.4 Historical Use of the Property

5.4.1 Previous Environmental Reports

Previous environmental reports for the Property were provided to Coast 2 Coast Environmental by Otay Project LP and P&D Consultants, Inc. A copy of the text and figures from each assessment are included in Appendix F. A summary of each report and its current relevance to environmental conditions at the Property is provided below:

• Phase I Environmental Site Assessment, Parcel 99, Otay Ranch, February 7, 2000, Snyder Consulting

The north portion of Parcel 99 was previously assessed in accordance with ASTM Standard E 1527 (version not specified but it was probably 1527-97). In terms of the current assessment, Snyder Consulting's report addressed APN 595-090-03 and approximately the north half of APN 598-130-01 or all of Parcel A and most of Parcel B. The assessed area included 340 acres and covered what was formerly the northeast corner of Rancho Otay.

The primary historical resources reviewed during this assessment included aerial photographs and an interview with a former ranch overseer. Aerial photography indicated that the assessed area had been undeveloped land since prior to 1928 up through the time of Snyder Consulting's assessment. An employee of Snyder Consulting interviewed Mr. Jerry Adams, Otay Ranch ranch overseer, who grazed longhorn cattle on this portion of the Property from 1989 through 1999. He was not aware of insecticides or herbicides having been applied to the assessed area.

During the assessment, the parcel was accessed by four-wheel drive dirt trails. Snyder Consulting did not observe chemicals, hazardous materials and waste or underground and aboveground storage tanks on the parcel. The parcel was undeveloped and not occupied.

Snyder Consulting did not find recognized environmental issues and did not recommend additional assessment of the assessed area.

• Phase I Environmental Site Assessment, Resort Site Open Space, May 29, 2003, P&D Environmental, A Division of P&D Consultants, Inc.

This assessment was conducted in accordance with ASTM E 1527-00. The assessed area included the same portion of the Property assessed by Snyder Consulting plus additional area to the east. All together the assessed area included 1,330 acres within Village 13.

The primary historical resources reviewed during this assessment included aerial photographs, a review of Snyder Consulting's assessment, research on ownership of the Property at the County Recorder/Assessor's office, and an interview with Mr. Robert Cameron, Executive Vice President of The Otay Ranch Company. Aerial photography indicated that the assessed area had been undeveloped land since prior to 1928 up

through the time of P&D's assessment. The Snyder Consulting report had summarized past grazing activities on the Property and Mr. Cameron stated that The Otay Ranch Company had not allowed grazing on the Property since 1999.

During the assessment, the assessed area was accessed by four-wheel drive dirt trails. The area appeared to be undeveloped and unoccupied at the time of the assessment. During P&D's site visit, they did not find chemicals, hazardous materials and waste, underground and aboveground storage tanks, wells, septic systems, pits, ponds, lagoons or transformers on the Property.

P&D did not find recognized environmental issues and did not recommend additional assessment of the assessed area.

• Phase I Environmental Site Assessment, Otay Ranch Village 13, January 25, 2007, Coast 2 Coast Environmental, Inc.

The assessed area included all of Village 13 (1,899.4 acres). This assessment was conducted in accordance with ASTM E 1527-05. One exception to the standard is that a search for environmental liens and activity and use limitations was not conducted. (This has been completed for the current assessment.)

The primary historical resources reviewed during this assessment included aerial photographs, topographic maps, a review of the two previous assessments, historical documents about the history of Otay Ranch and ownership of the Property by the Birch-Patrick Family/United Enterprises and the Baldwin's, and an interview with Mr. Robert Cameron, Executive Vice President of The Otay Ranch Company. The research indicated that the assessed area had been undeveloped land except for an approximately 200 acre area which appeared to have been cultivated for agricultural row crops in 1960. With respect to the Property currently being assessed, this former agricultural area appeared to include a portion of the south end of Parcel B.

During the assessment, the Property was visited twice. Once in April 2005 and again in May 2006, the assessed area was accessed by four-wheel drive dirt trails and by hiking. The area appeared to be undeveloped and unoccupied at the time of the assessment. During Coast 2 Coast's site reconnaissance, evidence of chemicals, hazardous materials and waste, underground and aboveground storage tanks, septic systems, pits, ponds, lagoons or transformers on the Property was not observed. A water well was observed in the middle of the current Property being assessed. The well was observed to be capped during the April 2005 visit and uncapped during the May 2006 visit. (The Otay Ranch Company has since recapped the well and the capped well was observed during the site reconnaissance for the current assessment.) Two trash piles were also observed within the area which is currently being assessed. (These were not observed during the site reconnaissance for the current assessment.)

Coast 2 Coast did not find Recognized Environmental Conditions during the 2007 assessment but did note the following three issues of possible environmental concern which have been summarized here in terms of the area currently being assessed:

- 1. A 1960 aerial photograph depicted dry farming on a portion of the southern end of Parcel B and a portion of the south adjoining site. Dry farming was not observed on the 1953 or 1964 photographs. The former usage of the Property for dry farming indicated a potential concern regarding historic use of chlorinated pesticides or herbicides. However, dry farming is an inexpensive method of farming which uses minimal materials, such as chemical pesticides, and therefore pesticide use on the Property was likely to have been minimal. However, since a school has been proposed on the current south adjoining site it is likely that the State Department of Toxic Substances Control will require a Preliminary Endangerment Assessment be conducted to assess for pesticides, herbicides and heavy metals.
- 2. A water well was observed approximately in the center of the Property currently being assessed. The well was observed to be capped during the April 2005 site visit but was uncapped during the May 2006 site visit. Someone had attempted to smash in the top of the well casing to prevent animals or small children from falling into the well but it was still a physical hazard as well as potentially providing a pathway for illegal dumping and groundwater contamination.
- 3. Access to the Property was not being restricted because gates were not kept locked (primarily because the United States Border Patrol uses the property frequently.) Minor amounts of illegal dumping of construction debris, household furniture and appliances and other household waste were observed on the Property during the site visits. Although this concern did not rise to the level of a Recognized Environmental Condition, it did create the possibility that illegal disposal of hazardous materials or hazardous waste could occur fairly easily.

Based upon Coast 2 Coast's review of the information presented in the report, and the resulting conclusions, Coast 2 Coast recommended the following:

- 1. Submitting the report to the Department of Toxic Substances Control (DTSC) for review when planning for the school site begins.
- 2. Capping or destroying the water well depending on its planned future use.
- 3. Locking the gates to the Property. Coast 2 Coast suggested that since the United States Border Patrol frequently used the Property that a double pad lock system be used on the gates.

5.4.2 Chronological Review

A search of selected and readily available historical records was performed and interviews conducted with people having knowledge of the Property's history, in an effort to find if past use of the Property or activities conducted on, or in the vicinity of the

Property could have adversely impacted the Property. The historical records used in this investigation, along with Coast 2 Coast's findings, are presented below in chronological order. Attempts were made to find information on five year intervals but data gaps may exist if information was not reasonably ascertainable for each interval.

In general, the Property has been undeveloped land except for the southern edge of Parcel B which was cultivated for agricultural row crops in 1960.

Prior to 1900: In 1829, all but approximately the southeast ¼ of Parcel B became part of Rancho Janal when it was granted to Jose Antonio Estudillo, brother of Maria Magdalena Estudillo, the owner of Rancho Otay. The remaining east portion of the Property was not part of a rancho. The primary use of the ranchos was to raise cattle for the hide trade. The Estudillo's were absentee ranchers who lived in San Diego's Old Town district.

On May 4, 1846, the Estudillo family's ownership of Rancho Janal was reaffirmed by Governor Pio Pico. After California became a state, the Land Act of 1851 required the Estudillo family to prove its ownership of Rancho Janal. This process took 21 years and Jose G. Estudillo, son of Jose Antonio Estudillo, finally received a Federal Land Patent on June 13, 1872. In 1873, Victoria Dominquez, inherited both Janal and Otay Ranchos after Maria Victoria Estudillo's death. Rancho Janal has also been known as Otay Dominguez and this is how it appears on current U.S. Geological Survey topographic maps.

Sometime between 1872 and 1889, Frank Kimball appeared to have become owner of Rancho Janal and developed mines on the site. In 1889, the mines on Rancho Janal (and presumably the entire Rancho Janal) were sold to John D. Spreckels. This is the only period where information was found during this assessment indicating that mining may have occurred on the Property. The type of mining was not specified. In turn, Mr. Spreckels sold Rancho Janal to Elisha Spurr Babcock, Jr. and his wife. (Historical sources conflicted on this point. One resource states that the Kimball's sold Rancho Janal to the Babcock's in 1894 and another resource states that Mr. Spreckels bought and then sold Rancho Janal to the Babcock's in approximately 1900.)

1900 to 1920: The Babcock's appear to have continued to own Rancho Janal during this period. Mr. Babcock was known to be an avid sportsman and he built a sports lodge on the west bank of the Upper Otay Reservoir which later became the home of the Birch family and was known as Rancho del Otay. This site is still marked on current U.S. Geological Survey topographic maps and is not part of the current Property. A 1904 topographic map depicted the outlines of both Rancho Janal (Otay Dominguez) and Rancho Otay (Otay Estudillo). The map did not depict features of environmental concern such as wells or mining pits on or near the Property.

1920: Mr. Babcock died suddenly in 1922 and his property, which presumably included most of the current Property, was sold to Mr. Rube Harrison in 1923. In 1926, Rancho Janal was reportedly sold to Henry Fenton and his Western Salt Company. However, it seems likely that this includes only the portion of the ranch that was west of the Upper

Otay Reservoir and not the eastern portion of the Rancho which includes most of the Property. A 1928/1929 aerial photograph depicted the Property as undeveloped land with one dirt track across the top of the Property which descended away from the Property toward Proctor Valley and some other small dirt tracks leading into the Property from Otay Lakes Road. Evidence of hazardous materials use on the Property was not found during this period.

1930: Beginning in 1936, Mr. Stephen Birch began purchasing property in and around Ranchos Otay and Janal after visiting the area in the 1920s and finding that he liked it. Though Mr. Birch had made his fortune as a mining engineer in Alaska and was chairman of Kennecott Copper Corporation, information was not found during this assessment indicating his purchase of the Property and surrounding lands was due to mining interests. Altogether Mr. Birch purchased 35,000 acres of land. His family included his wife, Mary Celine Marshall Rand, a daughter, Mary, born in 1917 and a son, Stephen, Jr., born in 1918. The family lived at Rancho del Otay and their 29,000 acre ranch originally operated under the name Otay Agricultural Corporation until being renamed United Enterprises. Upon formation of United Enterprises, Mr. Birch, Sr. named his son, Stephen, Jr., as the President and his daughter, Mary, as Vice President. The Stephen and Mary Birch Foundation was formed in 1939. A combination of Birch family members, the foundation and United Enterprises appear on various historical title documents for the Property.

The Birch's ranch was used for growing lima beans, hay and grain and cattle ranching. (The ranch's branding mark was the same used by Magdalena Estudillo.) Based on comments from Mr. Adams, a former ranch supervisor who was interviewed in January 2000 during a previous Phase I ESA, it appears that cattle ranching was likely the Birch's primary use for the Property throughout their ownership. Evidence of hazardous materials use on the Property was not found during this period.

1940: In 1940, Mr. Birch died and Miss Mary Birch inherited the ranch, United Enterprises, and Rancho del Otay. (Mr. Stephen Birch, Jr. inherited the family's New Jersey home and did not have an active role in managing the family's San Diego County holdings. He died in 1970.) A 1949 aerial photograph did not depict agricultural use or other development of the Property, though it is likely to have been used for cattle grazing during this period. Evidence of hazardous materials use on the Property was not found during this period.

1950: A 1953 aerial photograph did not depict significant changes to the Property compared to the 1949 photograph. Evidence of hazardous materials use on the Property was not found during this period.

1955: In 1955, Miss Mary Birch married Mr. Patrick R. Patrick and they resided at Rancho del Otay. The Patrick's did not have children. A 1955 topographic map did not depict structures on the Property. One north-south dirt track was marked on the map which essentially bisected the Property at its midpoint. Two topographic maps with different scales were published in 1955. The maps were the first to show the township

and range sections as well as being the first maps which depict the natural drainages on the Property. Neither map showed the current four-wheel drive tracks which cross the Property. The maps did not depict features of environmental concern such as wells or mining pits on or near the Property. Evidence of hazardous materials use on the Property was not found during this period.

1960: A 1960 aerial photograph depicted the lower third of Parcel B tilled for dry farming. Hay, or a grain crop such as barley, was most likely the product grown on the Property. (Lima bean production was discontinued on the Birch's ranch in 1949, after a bindweed morning glory infested the fields.) In conjunction with dry farming, it is possible, but unlikely, that chlorinated pesticides or herbicides were used on the Property. However, dry farming is an inexpensive method of farming which uses minimal materials, such as chemical pesticides, and therefore pesticide use on the Property was likely to have been minimal. A 1964 aerial photograph again depicted the Property as undeveloped land which was probably used for cattle grazing and no longer depicted agricultural use.

1965: A 1968 aerial photograph did not depict significant changes to the Property compared with the 1964 photograph. Evidence of hazardous materials use on the Property was not found during this period.

1970: Mr. Patrick died in 1971. A 1971 photorevised topographic map did not depict changes to the Property compared with the 1955 map. Structures were not depicted on the Property. The maps did not depict features of environmental concern such as wells or mining pits on or near the Property. A 1973 aerial photograph did not depict significant changes to the Property compared to the 1968 aerial photograph. Two small objects, possibly cars or water tanks were visible in near the center of the Property. Evidence of hazardous materials use on the Property was not found during this period.

1975: A 1975 photorevised topographic map depicted two small changes compared to the 1971 map. A four-wheel drive "Jeep Trail" appeared along the north edge of the Property and north adjoining site and another short, 3,000-foot dirt track was marked on the southwest end of the Property, leading from Otay Lakes Road toward the center of the Property. However, these trails appeared to be the same as those that had appeared on aerial photographs since 1928. A 1977 aerial photograph did not depict significant changes to the Property compared to the 1973 photograph. Two objects again were visible near the center of the Property in the 1977 photograph and appeared to be water tanks or possibly small mobile home trailers. Evidence of hazardous materials use on the Property was not found during this period.

1980: A November 1983 aerial photograph did not depict significant changes on the Property compared to the previous photographs. The mobile homes or water tanks were not visible in this photograph. Mrs. Mary Birch Patrick died in November 1983 and she named Mrs. Rose Patek as co-executor of her estate along with Southern California First National Bank. The estate included controlling interest in United Enterprises. During the 1980s, United Enterprises worked towards preparing the original planning documents

for the development of Otay Ranch. In 1984 or 1985, City National Bank replaced Southern California First National Bank as the co-executor of the estate. Evidence of hazardous materials use on the Property was not found during this period.

1985: On November 4, 1988, United Enterprises granted the Property to First American Title Insurance Company (Document #88-0567316) which in turn granted the Property to Baldwin Vista Associates L.P. on December 7, 1988 (Document #88-0629805). Baldwin Vista Associates was a company owned by James and Alfred Baldwin. A 1989 aerial photograph did not depict significant changes to the Property compared to the 1983 photograph. Mr. Adams said he began using the Property for cattle grazing in 1989. Evidence of hazardous materials use on the Property was not found during this period.

1990: In 1993, Baldwin Vista Associates, L.P. amended its partnership name to Otay Vista Associates, L.P. (Document #93-0310558) and again in 1994 to The Otay Ranch L.P. (Document #94-0522559). A 1994 aerial photograph did not depict significant changes on the Property compared to the 1989 photograph except that the cattle feeding station appeared to have been constructed. A 1994 topographic map depicted the four-wheel drive road bordering the west and north sides of the Property and another road crossing through the center of the Property. Mr. Adams said he continued to graze cattle on the Property during this period. Evidence of hazardous materials use on the Property was not found during this period.

1995: The Baldwin Company declared bankruptcy in July 1995 but they retained the Property as part of the bankruptcy settlement. A 1996 aerial photograph and a circa 1999 aerial photograph included in the 2000 Phase I ESA did not depict significant changes on the Property compared to the previous photographs. Magnification of the cattle feeding area on the 1996 photograph, showed the cattle feeding shed and the water tanks slightly west of the current water well. In August 26, 1997, Otay Ranch L.P. granted the Property to South Bay Project, LLC (Document #97-0411918) which on the same day transferred the Property to Otay Project, LLC (Document #97-0411919) which was still a company controlled by the Baldwin's. On July 30, 1999, Otay Project, LLC granted the Property to Otay Project, L.P., the current owner (Document #99-0527467). Evidence of hazardous materials use on the Property was not found during this period.

2000: A 2002 aerial photograph did not depict significant changes to the Property. Evidence of hazardous materials use on the Property was not found during this period.

2005: A 2006 aerial photograph did not depict significant changes to the Property. Magnification of the cattle feeding area continued to show a feed station canopy and two water tanks west of the current water well. Mr. Cameron said that the feed station canopy and water tanks were removed in 2007. Evidence of hazardous materials use on the Property was not found during this period.

5.4.3 Historical Sources Reviewed

Coast 2 Coast found historical sources from the early 1800s through the present. Copies of these resources are included in Appendix C, Historical Resources, or Appendix G, Previous Reports.

Aerial Photographs: Coast 2 Coast reviewed aerial photographs for the years 1953, 1964, 1977, 1990, 1994, 2002 and 2005 provided by EDR and for Coast 2 Coast reviewed aerial photographs for the years 1928/29, 1949, 1960, 1968, 1973, 1978, 1983 and 1989 at the Cartographic Services Section of the County of San Diego Public Works Department. 1996 and 2006 aerial photographs were obtained from Terraserver.com.

Building Permits: The Property is within an unincorporated area of the County of San Diego. The County of San Diego Development Services Department maintains computerized records of building permits dating back to 1987 and descriptions of purged building permits dating back to 1972. Since there has been no building activity on the Property between 1972 and the present and because there are no street addresses for the Property, building permit records were not searched.

Business and Street Directories: Due to the lack of street addresses for the Property, city directories were not researched for the Property.

Certified Unified Program Agency: The County of San Diego Department of Environmental Health Department did not have records indicating hazardous materials had been stored on the Property nor that events of environmental concern had affected the Property.

Chain-of-Title/Assessor Records: Coast 2 Coast reviewed recent assessor information for the Property available on First American Title Company's FastWeb database. Selected recent deeds were obtained from the County of San Diego Assessor and Recorder's Offices in order to confirm the names of the entities that have owned the Property since it was acquired by the Baldwin's in 1988.

Historical Topographic Maps: Coast 2 Coast reviewed historical topographic maps for the years 1904, 1955, 1971, 1975 and 1994 provided by EDR. Notably, these maps did not depict the water well observed near the center of the Property by Coast 2 Coast.

Interviews: Coast 2 Coast again interviewed Mr. Robert Cameron, Executive Vice President of The Otay Ranch Company, about changes to the Property since the previous assessment was completed between 2005 and January 2007. Ms. Cameron was not aware of issues of further environmental concern since the previous assessment.

Previous Assessments: Historical resources reviewed during the previous assessments described in Section 5.4.1 were incorporated into the above chronology. In particular, the previous assessment provided an interview with Mr. Jerry Adams, a former ranch supervisor on the Property from 1989 to 1999, and Mr. Robert Cameron, Executive Vice President of Otay Ranch Company.

Property Tax Files: Access to property tax files for the Property was not available at the County of San Diego Tax Assessor's office.

Sanborn Maps: EDR reported that Sanborn maps were not found in its collection for the Property.

Other Documents: A history of the Otay Valley entitled Otay Valley available by internet from the local history archives of the University of San Diego (http://history.acusd.edu/gen/local/otay.html). A history of Otay Ranch included in Chapter 3 of Part I of the Otay Ranch General Development Plan/Subregional Plan dated October 28, 1993. A history of the City of San Diego Water Department available on the Department's website at http://www.sandiego.gov/water/gen-info/history.shtml. Brief histories of the Upper and Lower Otay Reservoirs on the www.sdfish.com website. Information about the ownership of the Property by the Birch family and the bankruptcy of the Baldwins' development company in Mary Birch Patrick, A Millionaire Heriess's Unrealized Visions, The Stephen and Mary Birch Foundation, Part I, San Diego Union Tribune, March 17, 1997, Page A-1.

5.5 Historical Use of the Adjoining Sites

Specific historical research was not conducted for the adjoining sites and surrounding area. However, in the process of researching historical data for the Property, the following historical information was obtained for the adjoining sites:

North: The parcels which comprise the north adjoining site are undeveloped mountainous land. Research was not found during this assessment indicating these parcels had been used for any specific purpose during the last 150 years. Issues of further environmental concern associated with the past use of the north adjoining site was not found.

East: The site adjoining the Property to the east shares a similar history to the Property with the exception that the dry farmed area did not extend far enough to the east to include this site. Issues of further environmental concern associated with the past use of this adjoining site were not found.

South: The site adjoining the Property to the south shares a similar history to the Property. This site is hydraulically downgradient of the Property and issues of further environmental concern associated with the past use of this adjoining site were not found.

West: The August 3, 2009 Preliminary Title Report included a link to a document recorded in 1896 which includes information about the development of Otay Lakes Road. The 1904 topographic map is of too small a scale to evaluate whether the road had been built or not. The road is visible in the 1928/1929 aerial photograph.

In 1901, the Upper Otay Dam was built. The dam and its associated reservoir are still located adjacent to the upper west border of the Property. This reservoir was originally built as an emergency reserve for the Lower Otay Reservoir. However, beginning in

1959 and continuing through the present, it has been used as a fish hatchery and recreational fishing area for Florida-Strain largemouth bass. The remainder of the west adjoining site has included undeveloped mountainous land. Issues of further environmental concern associated with the past use of this adjoining site were not found.

In addition, the surrounding area was historically undeveloped mountainous land or ranch land used for cattle grazing and agricultural production of grains, hay or lima beans. Information was not found during this assessment indicating that these past uses impacted the environmental quality of the Property.

6.0 SITE RECONNAISSANCE

6.1 Methodology and Limiting Conditions

On August 26, 2009, Marybeth Norgren of Coast 2 Coast Environmental conducted an environmental assessment of the Property to find if current usage or activities on the Property have created, or have the potential to create, an environmental impairment to the Property. Access to the site was arranged by Mr. Rob Cameron, Executive Vice President. A representative for the Property owner was not present during the site reconnaissance. Ms. Norgren utilized a four-wheel drive vehicle to traverse the Property. She also hiked to several areas to better view the Property. Many areas of the Property were not readily accessible due to the mountainous terrain. However, from various vantage points it appeared that most of the Property could be viewed during the assessment.

During a site reconnaissance an emphasis is placed on viewing areas where activities likely to use and generate hazardous materials occur such as maintenance and repair areas, boiler rooms and manufacturing areas. For an undeveloped Property, the site reconnaissance focuses on walking or driving along the main roads and foot paths surrounding or within the Property in order to view as much of the Property as is readily accessible. The site reconnaissance is completed by viewing the Property from all adjacent public thoroughfares and commercial properties (where possible).

During the current assessment, the Property appeared to be completely accessible and limitations were not placed on Property access.

6.2 General Site Setting

The Property is currently undeveloped and unoccupied. Mr. Cameron has stated that The Otay Ranch Company has not allowed cattle grazing on the Property since 1999 and has not had tenants since then either.

During the current site reconnaissance, tenants using or generating hazardous materials were not observed. Buildings or other structures were also not observed. A description of secondary structures, Property grounds, utilities and roads is provided in Sections 3.3 and 3.4.

The United States Border Patrol does access the Property to conduct surveillance operations but they were not present during Coast 2 Coast's current site reconnaissance.

6.3 Interior and Exterior Observations

Coast 2 Coast looked for the following improvements and features on the Property and whether the use, treatment, storage, disposal or generation of hazardous substances and petroleum products had occurred on the Property.

Drains and Sumps:

Floor drains, floor sinks, trench drains, sumps and clarifiers were not observed on the Property.

Odors:

Strong, pungent or noxious odors were not detected during the assessment.

Oil and Gas Pipelines and Wells

Warning signs for oil and gas pipelines were not observed during the sitewalk. Map W1-7 prepared by the State of California Division of Oil, Gas and Geothermal Resources did not show oil wells within a one-mile radius of the Property.

Potential PCB-Containing Equipment:

Transformers and other potential PCB-containing equipment were not observed on the Property.

Stains and Corrosion:

Floors, walls and ceilings were observed for evidence of staining and corrosion caused by sources other than standing water. Evidence of stains or corrosion by hazardous substances was not observed.

Stained Soil and Pavement:

Visual observations were made of the soil and paved areas to find discolorations or surface staining which could be indicative of contaminant discharge.

Significant soil and pavement stains were not observed on the Property.

Stored Hazardous Materials:

Hazardous materials were not observed on the Property.

Storm Drains:

Storm drains were not observed on the Property. Three unnamed seasonal creeks were observed flowing northeast to southwest across the Property.

Surface Anomalies/Depression:

Visual observations were also made to find the presence of environmentally unusual and/or suspicious conditions such as land depressions and other surface anomalies indicative of possible oil wells, waste dump sites, leach fields or other subsurface activities.

Surface anomalies and depressions were not observed on the Property.

Surface Drainage on Site:

Based upon Property surface and improvement characteristics observed during Coast 2 Coast's site reconnaissance of the Property, surface drainage at the Property would flow to the south-southwest.

Surface Drainage Obstructions:

During Coast 2 Coast's site reconnaissance it was observed that the Property is protected from surface run-off from adjoining sites to the south and west by topography.

Underground and Aboveground Storage Tanks:

Underground and above ground storage tanks were not observed on the Property. Two, aboveground water storage tanks (ASTs) observed during previous site visits in 2003, 2005 and 2006 had been removed.

Vegetation:

Visual observations were made of the vegetation on the Property in an effort to find evidence of damage that could be related to the presence of localized soil or water contamination. Vegetation on the Property consisted of undisturbed, native plants.

Vegetation on the Property did not appear to be damaged or stressed in a manner which could be attributable to the presence of contamination.

Waste Disposal:

Solid waste and hazardous waste disposal was not observed on the Property.

7.0 INTERVIEWS

7.1 Interview with Owner

On September 1, 2009, Mr. Robert Cameron, Executive Vice President of The Otay Ranch Company, completed an Owner Questionnaire which is included in Appendix E. He has been familiar with the Property for more than 10 years. Mr. Cameron noted that since the previous assessment was completed in January 2007, The Otay Ranch Company has removed the cattle feeding station and associated canopy and the water tanks which were located west of the water well. He said the water well was capped in July 2009. He also explained that the site where a school is planned is part of the south adjoining site and not the Property currently being assessed.

Mr. Cameron was not aware any recognized environmental conditions associated with the Property.

7.2 Interview with the Property Manager

The Otay Ranch Company is also the current Property Manager.

7.3 Interviews with Occupants

There are no tenants currently occupying the Property. The United States Border Patrol accesses the Property to conduct surveillance, but has no permanent equipment on the Property.

7.4 Interviews with Local Government Officials

Coast 2 Coast reviewed a database of properties for which the Certified Unified Program Agency (CUPA) maintains records. The CUPA is responsible for enforcement and monitoring of various environmental programs. For the Property, the San Diego County Department of Environmental Health (DEH) is the CUPA. DEH did not have listings for the Property addresses.

Coast 2 Coast has also submitted a request for records from the DEH. DEH is now generally responding to records requests electronically. For each address submitted to the agency, DEH will provide a written response that it has no records or it will provide electronic copies of its files for an address. In general, detailed inspection records dated earlier than the early- to mid-1990s for most sites have been purged from DEH's files and only a brief summary page is available. Copies of past and current Unified Permits, Hazardous Materials Business Plans and Hazardous Materials Inventories are not readily available and require written permission from Business Owner to obtain.

DEH has not yet responded to Coast 2 Coast's request. However, Coast 2 Coast does not anticipate that DEH will find records for the site. If pertinent records are found, they will be forwarded to The Otay Ranch Company.

7.5 Interviews with Others

Other individuals with pertinent knowledge of the Property were not found during this assessment.

8.0 ADDITIONAL SERVICES

8.1 Asbestos and Lead-Based Paint

Since the Property was not developed with structures, a visual inspection for asbestos and lead-based paint concerns was not conducted during this assessment.

8.3 Radon

Radon is a colorless, odorless gas that can seep into structures from the ground. It is a leading cause of lung cancer. The USEPA has a recommended action level of 4.0 picoCuries per liter (pCi/L) of air. The USEPA has classified San Diego County as Zone 3, indicating that the average indoor radon activity is not expected to exceed 2 pCi/L.

Existing radon testing data for the Property area is summarized in EDR's report which is included in Appendix D. Within San Diego County, thirty (30) homes were tested as part of a Federal program and were reported to have less than 4.0 picocuries/liter (pCi/L) with the average concentration being 0.677 pCi/L on the first floor and 0.400 pCi/L on the second floor. As these results are below the EPA action level, it is not anticipated that radon poses a significant environmental threat to the Property.

9.0 FINDINGS AND CONCLUSIONS

Based upon Coast 2 Coast's review of the information obtained during the course of this assessment of the Property and herein presented, we have formed the following opinions:

• The Property, adjoining sites and nearby sites were not found on the Standard Environmental Record sources required to be reviewed under ASTM Standard E1527-05, including the following:

United States Environmental Protection Agency (U.S. EPA) National Priorities List (NPL) (including delisted sites)

State- and tribal-equivalent priorities list

U.S. EPA Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) (including sites requiring no further action)

State- and tribal-equivalent CERCLIS

U.S. EPA Resource Conservation and Recovery Act (RCRA) Treatment, Storage and Disposal Facilities (TSDF) and CORRACTS Facilities

U.S. EPA RCRA Generators

U.S. EPA Emergency Response Notification System (ERNS)

Federal Institutional Control (IC) or Engineering Control (EC) Registries

State- and tribal-equivalent IC and EC Registries

State Leaking Underground Storage Tank Program (LUST) and tribal equivalent

State Registered Underground Storage Tank (UST) and tribal equivalent

State Solid Waste Information System (SWIS) and tribal equivalent

State and tribal Voluntary Cleanup Program (VCP) sites

State and tribal Brownfields sites

- Structures were not observed on the Property.
- Solid waste, hazardous waste or illegally dumped debris was not observed on the Property.
 The gates to the Property appeared to be more secure than noted during previous
 assessments. Trash and debris observed in a few places next to the four wheel drive roads
 during previous site visits had been removed.
- A capped water well was observed in the center of the Property. Coast 2 Coast first observed the well in 2005. Evidence of illegal dumping into the well was not observed.
- During our review of historical resources, Frank Kimball was reported to have had several mines on Rancho Janal (also known as Rancho Otay Dominguez) in the 1870s and 1880s. The east portion of this rancho included most of the Property. No mention was made of the material that was being mined but it may have been for limestone which was found a few miles east at Rancho Jamul. Mr. Kimball sold Rancho Janal to the Babcock's in 1894. No other mention of mining on Rancho Janal was found and there are no mines marked on the U.S. Geological Survey topographic maps for Rancho Otay Dominguez and the Property. Based on this information, it is not likely that mining activities which may have occurred over 120 years ago are of environmental concern today.

- A 1960 aerial photograph depicted dry farming on a portion of the southern end of Parcel B
 and a portion of the south adjoining site. Dry farming was not observed on the 1953 or 1964
 photographs. However, dry farming is an inexpensive method of farming which uses
 minimal materials, such as chemical pesticides, and therefore pesticide use on the Property
 was likely to have been minimal.
- High voltage electrical transformers were not found on the Property.
- A review of a statewide radon study did not indicate the Property was within an area where radon is likely to be found in buildings in concentrations above the U.S. Environmental Protection Agency action limit of 4.0 picocuries per liter.
- Recognized environmental conditions were not found on the Property during this assessment.

10.0 RECOMMENDATIONS

Based upon Coast 2 Coast's review of the information presented in the report, and our resulting conclusions, we recommend the following:

• It is Coast 2 Coast's opinion that further environmental assessment of this Property is not warranted at this time.

11.0 DEVIATIONS

We have performed a Phase I Environmental Site Assessment of the Property known as Parcels A and B of Otay Ranch Village 13 located north of Otay Lakes Road within an unincorporated area of Chula Vista, San Diego County, California in conformance with the scope and limitations of ASTM Standard E1527-05. Exceptions to, or deletions from, the standard practice are described in Section 1.2 of this report. This assessment did not reveal evidence of recognized environmental conditions in connection with the Property.

12.0 REFERENCES

12.1 Published References

Federal Agencies, Departments and Offices

United States Department of Agriculture

Natural Resources Conservation Service

Soil Survey of the San Diego County Area, Roy H. Bowman, December 1973

United States Geological Survey

Preliminary Geologic Map

Geologic Map of the Jamul Mountains 7.5' Quadrangle, San Diego County, California, S. S. Tan, 2002

United States Department of Homeland Security

Federal Emergency Management Agency

State Agencies, Departments and Offices

Department of Conservation

Division of Oil, Gas & Geothermal Resources Wildcat Map W1-7, March 15, 2004

State Water Resources Control Board

Regional Water Quality Control Board – San Diego Region

Water Quality Control Plan for the San Diego Basin, April 1995

12.2 Agency Resources

San Diego County Agencies, Departments and Offices

Assessor/Recorder's Office

Current Ownership Records Historic Ownership Records

Environmental Health

Hazardous Materials Business Plan and Permits Inspection Records Site Mitigation Reports UST/LUST Records

Planning and Land Use

Building Permits

Current Zoning

Otay Ranch General Development Plan/Subregional Plan, October 28, 1993 Part I, Chapter 3, History of Otay Ranch

Public Works Department

Cartographic Services
Aerial Photographs
Topographic Maps

City of San Diego Agencies, Departments and Offices

Library

Haines and Polk Business/Street Directories

Water Department

History, http://www.sandiego.gov/water/gen-info/history.html

12.3 Commercial Resources

Environmental Data Resources, Inc.

Aerial Photographs Search City Directory Search Regulatory Database Search Sanborn Map Search Topographic Map Search

First American Title Company FastWeb Database

Current Property Ownership Records Historical Property Ownership Records

San Diego Reader

Promise Breakers, Nancy Fay, August 8, 2002

San Diego Union Tribune

Judge Approves Deal Settling Debts from Sale of Otay Ranch, Lori Weisberg, April 25, 1997, Pages B-3 and 7

Mary Birch Patrick, A Millionaire Heiress's Unrealized Visions, The Stephen and Mary Birch Foundation, Part I, Joe Cantlupe, March 17, 1997, Page A-1

Otay Ranch Annexation is Near, Kathryn Balint, January 14, 1997, Page B-3 and 7

SDFish.Com

Lower Otay Lake Reservoir History, http://www.sdfish.com/lakes/otaylower/index.html Upper Otay Lake Reservoir History, http://www.sdfish.com/lakes/otayupper/index.html

Terraserver.com

Recent Aerial Photograph

University of San Diego

Online Local History Archives

Otay Valley, No author provided, http://history.acusd.edu/gen/local/otay.html, Accessed May 21, 2006,

revised access appears to be http://history.sandiego.edu/gen/local/otay.html

13.0 SIGNATURE OF ENVIRONMENTAL PROFESSIONAL

I declare that to the best of my professional knowledge and belief, I meet the definition of Environmental Professional as defined in § 312.10 of 40 CFR 312. I have the specific qualifications based on education, training and experience to assess a property of the nature, history and setting of the subject Property. I have developed and performed all the all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312.

Submitted:

Marybeth Norgren, REA #05548

Mayboth Morgren

Principal





14.0 QUALIFICATIONS OF ENVIRONMENTAL PROFESSIONAL

Marybeth Norgren

Principal

Education

B.S., Chemistry, California State University Fullerton, 1988
M.S., Environmental Management, University of San Francisco, 1999
Asbestos Fiber Counting (NIOSH 582), McCrone Research Institute
EPA/AHERA Building Inspector and Management Planner, Design for Health
EPA/AHERA Asbestos Abatement Contractor/Supervisor, Design for Health
EPA/AHERA Asbestos Abatement Project Designer, Design for Health
EPA Radon Measurement Operator, Western Regional Radon Training Center
Lead-Based Paint Inspection & Assessment, Project Monitor and Project Designer,
U C Berkeley Extension
Continuing Education for Lead-Based Paint, Homesafe Environmental, Inc.

Registrations

Cal/EPA Registered Environmental Assessor #5548 Cal-OSHA Certified Asbestos Consultant #92-0720 California DHS Lead-Related Construction Inspector/Assessor and Project Monitor, #541

Experience

Ms. Norgren has 20 years experience managing and conducting environmental site assessments (ESAs) and hazardous materials surveys on all types of properties including commercial, industrial, residential, agricultural and unimproved properties. She has utilized the ASTM 1527 standard for ESAs since its inception in the early 1990s and incorporated it into client specific standards as requested. She has managed projects involving underground storage tank removals, unauthorized releases and associated sampling. In addition, she has experience conducting all phases of asbestos and lead-based paint abatement projects including comprehensive building surveys, contract bid solicitation, contract administration, project specifications, and contract documentation. Ms. Norgren also has extensive field experience in asbestos abatement contractor supervision and industrial hygiene services.

Relevant Projects

Wells Fargo Bank/First Interstate Bank, Bank of the West, Bank of America, Union Bank of California and Great Western Bank - Various Locations. Managed and conducted Phase I ESAs for commercial, industrial, retail and agricultural properties throughout California as well as Arizona, Nevada, Oregon, Washington, Texas and Midwest and East Coast sites. Assessment activities included Property reconnaissance, agency record reviews, historical land use research, geologic conditions research, and recommendations for handling identified concerns. Property reconnaissance has included asbestos sampling, radon sampling and/or water and paint sampling for lead. Conducted Phase II ESAs including comprehensive asbestos surveys and soil and groundwater sampling.

City of Ontario Housing Agency, Ontario, CA. Managed a multi-year contract for asbestos and lead-based paint sampling of 600 homes which are part of the Residential Sound Insulation Project to reduce air traffic noise from Ontario Airport. Other work included conducting Phase I ESAs and demolition surveys for asbestos and lead-based paint on properties being purchased by the City in high noise areas.

Paseo Project, San Diego State University Foundation, San Diego, CA. Prepared a Phase I Environmental Site Assessment (ESA) of five city blocks south of San Diego State University. The ESA was part of the Hazardous Materials Technical Study for the SDSU Foundation Master Plan concerning the formation of a redevelopment project area on lands adjacent to the University. The ESA included historical research dating back to the development of the area beginning in 1931 when the University moved to its current location. The report also included a review of agency files for four gas stations which were either currently or historically located on the site.

J Serra High School Expansion, San Juan Capistrano, CA. Prepared a Phase I Environmental Site Assessment Update as part of the Hazardous Materials Technical Study for an environmental impact report for the recreational facilities of the J Serra High School located on approximately 30 acres of land in San Juan Capistrano. As a private school, J Serra High School board chose not to have the project reviewed by the Department of Toxic Substances Control (DTSC), but the report was prepared in a format acceptable to DTSC. Issues associated with the project site included two adjacent and upgradient gasoline stations with active leaking underground storage tank cases and historic use of the site for agricultural orchards.

Various Residential and Commercial Developers and Land Brokers, San Diego County, CA. Managed and prepared Phase I ESAs for San Diego developers including McMillin Companies, Cornerstone Properties, Kaufman-Broad, McMahon Development Group, The Hoffman Company and Conservation Land Group. Properties assessed have included large tracts of land proposed for use as residential communities, commercial developments and mitigation bank sites.

Department of the Navy, Southwest Division, San Diego, CA. Conducted lead-based paint surveys and prepared Operations and Maintenance Programs based on survey results. Surveys included all exterior and some interior surveys on 170 buildings at two naval bases in San Diego. Conducted Pollution Prevention Assessment surveys of various naval operation shops to identify processes in each shop that use hazardous chemicals and/or generate hazardous waste. Prepared reports describing and quantifying materials used in the shops' processes.

City of Los Angeles Department of Airports, CA. Managed asbestos survey of approximately fifty buildings at Van Nuys Airport and Van Nuys California Air National Guard Facility. Based on survey results, prepared asbestos abatement specifications. Project included arranging for approval of special abatement procedures from the South Coast Air Quality Management District.

Trizec Properties, Inc., Various Locations. Performed contractor supervision and industrial hygiene services during removal of asbestos-containing fireproofing. All buildings were multi-story commercial structures and projects ranged from abating single suites to full-floor abatement. Responsible for ensuring contractor followed all government regulations and maintained proper work practices.

Professional Organization Affiliations

American Chemical Society

American Society for Testing & Materials (ASTM), E50.02 Subcommittee for ASTM Standards E1527 and E1528

Women's Environmental Council, San Diego Border Chapter, Chapter Treasurer, 2002 to present, and Corporate Board Scholarship Chair, 2006 to 2008