

# Phase 1 Environmental Site Assessment

Portion of May Property, APN 014-430-75  
Hayfork, Trinity County, California

Prepared for:

UPSTREAM 21

***SH*** Consulting Engineers & Geologists, Inc.

350 Hartnell Avenue, Suite B  
Redding, CA 96002-1875  
530/221-5424

October 2007

507064

Reference: 507064

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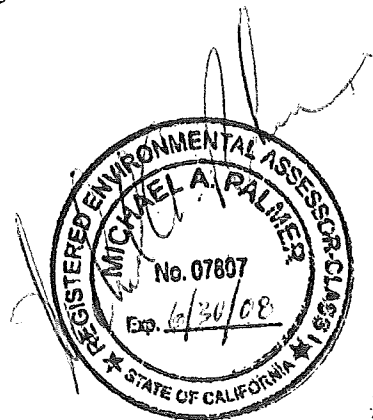
**UPSTREAM 21**

Prepared by:



Consulting Engineers & Geologists, Inc.  
350 Hartnell Avenue, Suite B  
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October 2007



QA/QC: PNB



**CONSULTING ENGINEERS & GEOLOGISTS, INC.**

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Reference: 507064

October 26, 2007

Bryan Redd  
President & CEO  
UPSTREAM 21  
721 NW Ninth Avenue, Suite 240  
Portland, OR 97209

**Subject: Phase 1 Environmental Site Assessment, Portion of May Property,  
Portion of APN 014-430-750 (53.9 Acres), Hayfork, Trinity County,  
California**

Dear Mr. Redd:

Enclosed are two copies of our Phase 1 Environmental Site Assessment (ESA) for the subject property. As part of our detailed investigation, SHN Consulting Engineers & Geologists, Inc. (SHN) encountered evidence of past or present land uses that may have generated or caused the release of regulated or hazardous materials and identified **Recognized Environmental Conditions** as defined in American Society for Testing and Materials-International (ASTM) Standard E 1527-05. As such, it is SHN's opinion that further site investigation is warranted at the subject property.

If you have any questions, or if we can be of further assistance, please call Pat Barsanti at (707) 441-8855 or me at (530) 221-5424.

Sincerely,

**SHN Consulting Engineers & Geologists, Inc.**

A handwritten signature in black ink, appearing to read 'Michael A. Palmer', with a long horizontal flourish extending to the right.

Michael A. Palmer, REA I  
Environmental Specialist

MAP:PNB:llc

Enclosures: Phase 1 ESA Report (2 copies)

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## Acronyms and Abbreviations

APN	Assessor's Parcel Number
ASTM	American Society for Testing and Materials-International
AUL	Activity and Use Limitations
BGS	Below ground surface
Cal-EPA	California Environmental Protection Agency
Cal-site	State Calsite (formerly ASPIS)
CDF	California Department of Forestry
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act of 1980 (Federal Superfund), 42 USC Section 9601 et seq., 40 CFR; California Superfund H&S Code Section 25300 et seq., see HAS
CGS	California Geological Survey
CDMG	California Division of Mines & Geology
DTSC	California Department of Toxic Substances Control
EDR	Environmental Data Resources, Incorporated
ERNS	Emergency Response Notification System
ESA	Environmental Site Assessment
FEMA	Federal Emergency Management Agency
FER	Fault Evaluation Report
HAZMAT	Hazardous Materials
L&A	Lawrence & Associates
LUST	Leaking underground storage tank
MDB&M	Mount Diablo Base and Meridian
MSL	Mean sea level
NPL	National Priorities List
pCi/L	pico-Curies per Liter of air
PCP	Pentachlorophenol
RCRA	Resource Conservation and Recovery Act
RCRIS-TSD	Resource Conservation and Recovery Information System
REC	Recognized Environmental Condition
RWQCB	California Regional Water Quality Control Board, North Coast Region
TCDHHS	Trinity County Department of Health and Human Services
TCEHD	Trinity County Environmental Health Department
TCHDEH	Trinity County Health Department, Environmental Health
TCP	Tetrachlorophenol
TCPD	Trinity County Planning Department
TCPUD	Trinity County Public Utilities District
TCPWBD	Trinity County Public Works, Building Department
TCWD	Trinity County Water Works District
SHN	SHN Consulting Engineers & Geologists, Inc.
SPCC	Spill prevention, control and countermeasure
SPI	Sierra Pacific Industries, Inc
TCP	Tetrachlorophenol
TPH	Total Petroleum Hydrocarbons
USC	United States Code
USEPA	United States Environmental Protection Agency
USDA	U.S. Department of Agriculture, Forest Service

## Acronyms and Abbreviations, continued

USFS	United States Department of Agriculture Forest Service
USGS	U.S. Geological Survey
UST	Underground Storage Tank



## 1.0 Introduction

### 1.1 Purpose

SHN Consulting Engineers & Geologists, Inc. (SHN) has completed a Phase 1 Environmental Site Assessment (ESA) for the subject property located at Tule Creek Road, in Hayfork, Trinity County, California (portion of May property, APN 014-430-75). The purpose of conducting this Phase 1 ESA was to assess the property, largely based on current circumstances, with respect to the presence or absence in the environment of regulated or hazardous materials, as defined in the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA), and Title 22 of the California Code of Regulations. This Phase 1 ESA was prepared in general accordance with American Society for Testing and Materials (ASTM) Standard Practice E 1527-05 for the Phase 1 ESA Process. Any exceptions to or deletions from these standard practices are described in Section 1.3 of this report.

This practice is intended to permit a user to satisfy one of the requirements to qualify for the innocent landowner, bonafide prospective purchaser, or contiguous property owner defense to CERCLA liability; that is, practices that constitute "all appropriate inquiry into the previous ownership and uses of the property consistent with good commercial or customary practice," as defined in 42 United States Code (USC) 9601 (35) (B).

This report has been prepared on behalf of and for the exclusive use of UPSTREAM 21, and is subject to and issued in connection with the agreement with SHN and the provisions thereof. UPSTREAM 21 may read and rely upon the information contained in this report for loan underwriting purposes, subject only to the conditions and limitations identified in this report.

### 1.2 Scope of Services

In compliance with ASTM Standard E 1527-05, SHN performed these services in preparation of this document:

- Conducted a field reconnaissance of the subject property to look for evidence of existing or potential soil and groundwater contamination. Provided color photographs of the subject property (Appendix A).
- Conducted a survey in the property vicinity in order to identify businesses or facilities that may use, produce, and/or store reportable quantities of hazardous materials or generate hazardous waste. SHN also conducted a perimeter survey of the adjacent properties for obvious signs of potential contaminant migration.
- Reviewed local and regional geological and groundwater conditions in the area of the property. Identified existing or proposed municipal infrastructure for the property and vicinity, including potable water, wastewater, and storm water provisions, as mandated by the ASTM guidelines.
- Examined aerial photographs of the property taken over a 63 year period, and requested historic Sanborn Maps for review (Appendix B); reviewed the assessors parcel map, U.S. Geological Survey (USGS) topographic maps, and other maps of interest (Appendix C); and discussed archived permit records, and reviewed other reasonably ascertainable standard sources, for the purpose of developing a continuous site history dating back to the first known development, as recommended by the ASTM guidelines.

- Using the ASTM-designated search radii, reviewed publicly available federal, state, county, and other regulatory agency lists and databases (including CERCLIS, NPL, and Cal-sites) for sites with known hazardous materials contamination and/or registered underground storage tanks located on or near the property (Appendix D).
- Reviewed and/or discussed selected regulatory agency files and records with the Trinity County Health Department, Environmental Health (TCHDEH), and Trinity County Building and Planning Departments, in order to evaluate whether the listed sites are likely to be potential hazardous materials threats to the subject property.
- Reviewed and completed a land use questionnaire, and discussed the follow-up list of questions (supplied by SHN, Appendix E).
- Interviewed a local government official as well as past and present owners, operators, and occupants, when available.
- Interviewed neighbors of abandoned properties, when applicable.
- Requested a comparison of the purchase price to the value of the property.
- Provided an opinion regarding the need for additional appropriate investigation.
- Identified and commented on the existence and significance of data gaps.
- Identified the presence or likely presence of any activity and use limitations (AULs) and environmental cleanup liens beyond the land title records, where reasonably ascertainable.
- Identified recognized environmental conditions (RECs).

Sampling and testing of soil and groundwater at the subject property, and surveys for asbestos, radon, or lead-based paint were beyond SHN's scope of services for this project.

### 1.3 Limitations and Exceptions

Information contained in this ESA was obtained in part from the Environmental Data Resources, Incorporated (EDR) Report (Appendix E). Previous site investigations were conducted in the general area (May and August 1997), and specific information from these investigations was used in part for this report. SHN also derived the data in this report primarily from visual inspections, examination of records in the public domain, and interviews with selected individuals with information about the property. Except as otherwise stated in the report, SHN has not attempted to verify the accuracy or completeness of any such information. The passage of time, manifestation of latent conditions, or occurrence of future events may require further exploration at the property; analysis of the data; and re-evaluation of the findings, observations, and conclusions expressed in this report.

Because of the limitations stated above, the findings, observations, and conclusions expressed by SHN in this report are not, and should not be considered an opinion concerning the compliance of any past or present owner or operator of the property with any federal, state, or local laws or regulations. No warranty or guarantee, whether expressed or implied, is made with respect to the data reported or findings, observations, and conclusions expressed in this report. Such data, findings, observations, and conclusions are based solely on site conditions in existence at the time of the investigation, and are not representative of areas of the property that were not readily accessible or observable.

No environmental site assessment can wholly eliminate uncertainty regarding the potential for recognized environmental conditions in connection with a property. Performance of this practice is intended to reduce, but not eliminate, uncertainty regarding the potential for recognized environmental conditions in connection with a property, and this practice recognizes reasonable limits of time and cost.

## **2.0 Site Description**

### **2.1 Location and Legal Description**

The subject property consists of the northwestern portion of a formerly developed lumber mill, which is situated in the community of Hayfork, and within Trinity County, California (Figure 1). California State Route 3 is located to the east approximately one-quarter mile. One Wizard Way borders the property to the east. Tule Creek Road borders the property to the north. Salt Creek borders the property to the west. The other portion of the former lumber mill property borders the property to the south and east. The site is situated within Sections 10, 11, and 15, Township 31 North, Range 12 West, Mount Diablo Base and Meridian (MDB&M), and is comprised of approximately 53.9-acres of assessor's parcel number (APN) 014-430-75.

### **2.2 Site and Vicinity General Characteristics**

Susan May is currently listed as the owner of the site. The current size of the May property is 96.3 acres, and consists of APN 014-430-75. The northwestern portion of property that UPSTREAM 21 will potentially be purchasing is 53.9 acres. The May property is located approximately ½-mile east of California State Route 3 and the town of Hayfork, and is situated within an industrial use area. The current predominant land usage of the subject property and property in the area consists of agriculture, light industrial, rural-residential, and public facilities districts. Salt Creek, a seasonal creek, flows toward the southwest, crossing Tule Creek Road within the northwestern corner of the property. Tule Creek Road is situated on the northern and western sides of the parcel. Salt Creek is also designated as the property boundary to the west of the subject property. To the south and east is the "other portion" of APN 014-430-75 or 42.4 acres, which Susan May will be retaining for her business.

The current use of the May property is that of a fireworks production and fireworks storage business. In addition, some portions of the property have been leased out to various businesses. Currently, Jefferson State Forest Products LLC uses the large storage shed located on the western side of the property for lumber storage. The property currently has scattered scrap steel, waste tires, concrete, asphalt, old bark piles, associated with past uses of the property. In addition, it appears that there are numerous former water lines crossing the property. These water lines are "dead"; however, if property development occurs in these areas, it may be necessary to remove and dispose of this scrap steel.

As part of the former sawmill production facility, several buildings remain onsite and are currently in use. Also, there remains a bermed area north of the buildings known as the former log pond. This area is heavily vegetated. A drainage ditch once distinctly entered the former log pond on the east side and would exit on the western side of the former pond. It is unknown how much water "stands" in the pond during the winter months. No water was noted within the former log pond



immediately adjacent to the subject property; however, overhead power lines are present along Tule Creek Road and cross the former log pond on the eastern side, connecting to the heavy equipment shop. One of the power-poles has two transformers (northeast corner of heavy equipment shop). These transformers appeared in good condition. In addition, one pole-mounted transformer is located along Tule Creek Road and it also appeared in good condition. Trinity County Public Utilities District (TCPUD) supplies power to the site.

### **2.3.5 Gas**

SHN did not observe any signage, monuments, or other surface evidence pertaining to buried liquid petroleum or natural gas pipelines located within the subject property. Near the pottery shop there is a steel structure that houses a gas-fired kiln. This kiln is associated with the pottery shop and has a propane tank associated with it. SHN did not observe any municipally provided gas pipelines on the subject property.

### **2.3.6 Telephone**

SHN did not observe any marked underground telephone utilities on the property.

## **2.4 Current Uses of Adjoining Properties**

### **2.4.1 North**

To the north of the subject property is Tule Creek Road. Beyond Tule Creek Road is Baley's Lumber & Hardware, Tule Creek Storage, Valley High School, a pump house, Tule Creek Towing, and Hayfork Community Center. SHN did not observe any evidence of contaminants or regulated materials migrating on the surface from these locations, onto the surface of the subject property.

### **2.4.2 West**

Salt Creek is located and adjoins the parcel to the west creating the property boundary. SHN did not observe any evidence of contaminants or regulated materials migrating on the surface of these locations, onto the surface of the subject property.

### **2.4.3 South**

To the south of the subject property, it appears that there is undeveloped land and agricultural lands beyond Salt Creek. SHN did not observe any evidence of contaminants or regulated materials migrating on the surface of these locations, onto the surface of the subject property.

### **2.4.4 East**

To the east is the adjoining other portion of the parcel where Firework by Boom Boom Productions operates. In addition there is a California Department of Forestry (CDF) fire station located at the entrance to One Wizard Way. Further east there is a residence with numerous scrap steel and beyond this are pasturelands. SHN did not observe any evidence of contaminants or regulated materials migrating on the surface of these locations, onto the surface of the subject property.

### 3.0 User Provided Information

#### 3.1 Environmental Liens or Activity and Use Limitations

The current owner of the subject property, Susan May, provided SHN with information indicating that there were no environmental liens and/or deed restrictions associated with environmental concerns regarding the site parcels.

#### 3.2 Commonly Known, Specialized Knowledge, or Reasonably Ascertainable Information

The users of this Phase 1 ESA (UPSTREAM 21) indicated they were aware of the past property uses such as a fireworks production facility and former sawmill and planer site. Mr. Bryan Redd, of UPSTREAM 21, indicated that he was aware of the reported chemical releases that had taken place at the former mill associated with the former underground storage tanks (UST). Furthermore, UPSTREAM 21 supplied copies of the Lawrence & Associates Phase 1 and Phase 2 reports completed in 1997 and a copy of the UST case closure letter from 1999 issued by the California Regional Water Quality Control Board, North Coast Region (RWQCB).

#### 3.3 Valuation Reduction for Environmental Liens

The current owner stated that the purchase price being paid for the subject property reasonably reflects the fair market value of the property.

#### 3.4 Owner, Property Manager, and Occupant Information

Table 1 Current Property Use Information Former SPI Planer Mill, Hayfork, California	
Current Property Owners/Occupant	
Name: Susan May	Phone Number: (707) 465-9876
Mailing Address: 1100 Doran Ct., Crescent City, CA 95531	
Current Occupant	
Name: Jefferson State Forest Products, LLC	Phone Number: (530) 628-1101
Mailing Address: P.O. Box 938, Hayfork, CA 96041	

#### 3.5 Reason for Performing the Phase 1 ESA

This Phase 1 ESA is being performed for UPSTREAM 21, for the purpose of identifying potential RECs prior to the land being purchased.

#### 3.6 Land Title Report

At the time of the writing of this report the preliminary Land Title Report was unavailable for review by SHN.

## 4.0 Records Review

### 4.1 Standard Environmental Record Resources

Using the ASTM Standard E 1527-05 recommended search radii; SHN authorized EDR, located in Milford, Connecticut, to perform a review of federal and state agency databases that track sites with known hazardous materials contamination (Appendix D). EDR did not identify any potential or confirmed state or federal "Superfund" sites located on or within one mile of the subject property during their review of the United States Environmental Protection Agency's (USEPA) CERCLIS and NPL databases. In addition, the subject property does not appear on the USEPA's Emergency Response Notification System (ERNS) database, or contain any businesses or facilities that are listed as Resource Conservation and Recovery Act (RCRA) Generators. However, the site is listed within the Executive Summary as not being mapped due to inadequate address information. Again using the ASTM Standard E 1527-05 recommended search radii, both EDR and SHN reviewed databases regarding hazardous materials contamination that are maintained by the following agencies:

- California Environmental Protection Agency (Cal-EPA)
- Cal-EPA Department of Toxic Substances Control (DTSC)
- Cal-EPA Office of Environmental Health Hazard Assessment (OEHHA)
- Cal-EPA Regional Water Quality Control Board, North Coast Region (RWQCB)
- California State Water Resources Control Board (SWRCB)
- Cal-EPA Integrated Waste Management Board (CIWMB)
- Cal-DHS Office of Drinking Water (ODW)
- California Division of Oil and Gas (DOG)
- Corrective Action Report (CORRACTS)
- Resource Conservation and Recovery Information System (RCRIS-TSD)
- Trinity County Department of Health and Human Services, Division of Environmental Health (TCDHHS)
- Trinity County Planning Department (TCPD)

### 4.2 Physical Setting

#### 4.2.1 Regional Geology

The former Sierra Pacific Industries Planer Mill (SPI) site is located in the Klamath Mountains physiographic province (Bailey, 1966). The Klamath Mountains physiographic province is characterized by a series of lithostratigraphic units that represent Paleozoic to lower Mesozoic volcanic-arc sequences (such as paleo-volcanic chains similar to the modern Cascade Range) that were accreted to the North American continent during ancient subduction processes at the ancestral plate boundary (Potter et al, 1990; Hacker and Peacock, 1990). The arc sequences contain both volcanic deposits associated with ancestral volcanic centers, and sedimentary deposits associated with depositional basins that were located adjacent to the ancient volcanic chains.

The major lithostratigraphic unit of the Klamath Mountains that encompasses the project site is the Western Paleozoic and Triassic Belt (Irwin, 1974). Rocks of the Western Paleozoic and Triassic Belt mapped within the project area consist of sedimentary units of the Weaverville Formation, sedimentary and metavolcanic rocks of the Hayfork terrain, and sedimentary alluvial and terrace deposits (Irwin, 1966).

## 4.2.2 Soils

Subsurface investigations have been performed on the parcel by L&A in 1997 as part of the Phase 2 site assessment. The subsurface lithology was characterized to a maximum depth of nine feet BGS during this investigation. The following is a summary of the investigation findings in regard to the subsurface soils taken from soil boring logs.

Subsurface soils at the site consist of silty gravels within the upper two feet of the site. Sandy gravels occur at different intervals down to nine feet BGS. Clayey silt that is stiff is also observed within the four to seven foot intervals. Saturated soils are encountered between approximately four and six feet BGS (L&A, 1997).

## 4.2.3 Hazards

### 4.2.3.1 Seismic Activity

The State of California designates faults as active, potentially active, and inactive depending on the recency of movement that can be substantiated for a fault. Fault activity is rated based upon the age criteria noted in Table 1.

Table 2 Fault Activity Ratings		
Fault Activity Rating	Geologic Period of Last Rupture	Time Interval (Years)
Active	Holocene	Within last 11,000 Years
Potentially Active	Quaternary	>11,000 to 1.6 Million Years
Inactive	Pre-Quaternary	Greater than 1.6 Million Years

The California Geological Survey (CGS), formerly named the California Division of Mines and Geology (CDMG), evaluates the activity rating of a fault in fault evaluation reports (FER). FERs compile available geologic and seismologic data and evaluate if a fault should be zoned as active, potentially active, or inactive. If an FER evaluates a fault as active, then it is typically incorporated into an Earthquake Fault Zone in accordance with the Alquist-Priolo Earthquake Fault Zoning Act (AP). AP Earthquake Fault Zones require site-specific evaluation of fault location and require a structure setback if the fault is found traversing a project site.

There are no AP-zoned active faults mapped in Trinity County (Hart, 1997). No faults are known to project through the project site (Jennings, 1994; Irwin, 1974). However, a number of regional and local faults traverse the project region. Faults mapped in the project region by Jennings (1994) and Irwin (1974) reportedly do not have evidence of quaternary activity and are not considered active.



A total of 8 active seismic sources were identified within about a 50-mile radius of the project site, which are summarized in Table 2. The maximum magnitudes evaluated for each fault listed are consistent with the United States Geological Survey Open-File Report 96-705.

The closest fault to the project site, not included in the United States Geological Survey (USGS) fault database, is an unnamed, northeast trending; fault located about 6,200 feet southeast of the site. That fault forms the southerly margin of a graben that forms the Hayfork Valley (Irwin, 1974) and is considered inactive (Jennings, 1994).

In addition to the continental faulting discussed above, the project area rests above the Cascadia Subduction Zone. West of the site, off the coast of California, the oceanic crust of the Gorda plate is being subducted beneath the continental crust of the Pacific Plate, in an area known as the Gorda Escarpment. The descending ramp caused by that subduction, called the Cascadia Subduction Zone, extends beneath the project area at a depth of about 15 to 20 miles. That ramp is capable of storing elastic stress that periodically causes large earthquakes that could affect the project area.

<p align="center"><b>Table 3</b> <b>Summary of Nearby Active or Potentially Active Faults</b></p>			
<b>Fault Name</b>	<b>Approximate Distance from Site (miles)</b>	<b>Maximum Earthquake Magnitude (Mw)</b>	<b>Approximate Slip Rate (inches/year)</b>
Lake Mountain	24	6.7	0.24
Mad River	31	7.1	0.03
Trinidad	36	7.3	0.10
McKinleyville	36	7.0	0.02
Fickle Hill	37	6.9	0.02
Little Salmon	38	7.0	0.20
Maacama	48	7.1	0.35
Cascadia Subduction Zone	52	9.0	N/A

#### 4.2.3.2 Flood Hazard

According to EDR and the Federal Emergency Management Agency (FEMA), the western and southern portion and of the subject property is located within a designated 100-year flood hazard zone from Salt Creek.

#### 4.2.3.3 Radon

Radon isotope-22 is a colorless and odorless radioactive gas that is a natural decay product of uranium. Uranium and radon gas are present in varying amounts in soil and rocks, and radon is present in background concentrations in the atmosphere. There is current evidence that indicates that increased lung cancer rates are directly related to radon decay products. Radon gas and indoor exposure levels in the United States are under intense research by government regulators and the medical communities. The EPA has established an action level for indoor radon concentrations at or exceeding 4 pico-Curies per Liter of air (pCi/L). This level, as established by the EPA, assumes that

1 to 3 persons per 100 exposed to this concentration during their lifetime will die of lung cancer induced by radon.

Based on SHN's review of the EPA's on-line "Map of Radon Zones," the subject property is located within Zone 3. The EPA specifies that properties and counties located in Zone 3 have a predicted average indoor radon screening level below 2 pCi/L, which is substantially lower than the designated action level of 4 pCi/L. Site-specific radon conditions, however, can only be determined by sampling and testing existing and/or future buildings located on the subject property. In addition, indoor radon concentrations can be affected by a number of variables, including building materials, site-specific geology, and quality of construction. As such, the U.S. EPA recommends that all owners test their homes for radon. Because the subject property is located within Zone 3, the likelihood of indoor radon concentrations exceeding the EPA-designated action level of 4 pCi/L is considered low.

#### **4.2.4 Groundwater**

Salt Creek borders the site to the east before joining Hayfork Creek less than one mile away. Surface water flow from the site presumably follows site topography, which slopes gently towards the northwest.

According to the 1998 Hayfork 7.5 Minute Topographic map, there is an elevation benchmark located at the crossing of Salt creek and Tule Creek Road. This benchmark elevation is stated at being 698.1 meters (2,290.34 feet) above mean sea level (MSL). During Lawrence & Associates 1997 Phase 2 site investigation, depth to groundwater at the site ranged from approximately four to six feet below Ground Surface (BGS). L&A also calculated groundwater flow direction to be in the general northerly direction (L&A, 1997).

#### **4.2.5 Biological Resources - Wetlands**

At this time it is unknown if the former log pond is defined as a wetland by the United States Army Corps of Engineers. A wetland delineation study may be warranted before any construction activity takes place within or near this area.

### **4.3 Historical Land Use of the Subject Property**

#### **4.3.1 Aerial Photographs**

SHN reviewed historic aerial photographs from EDR, United States Department of Agriculture Forest Service (USFS), and the former Lawrence & Associates Phase 1 ESA from 1997, which had coverage of the subject property and immediate surrounding area. The aerial photographs were taken in 1944, 1947, 1960, 1970, 1980, 1993, and 2003. These photographs are discussed in the remainder of this section. The reviewed aerial photographs reveal that minimal, if any, development occurred prior to 1944, and that since this time, numerous changes have occurred on the subject property during the past 63 years (Appendix B).

#### 4.3.11 1944 Aerial Photo Review

The site is vacant in the 1944 photo and appears to be vegetated with grass and some sparse trees along Salt Creek and into the southwest to northwest portion of the property. Tule Creek Road is observed along the western and northern section of the property as well. It is not evident that any roads traverse the property at this time. There appears to be a natural drainage traversing the property in a southeast to northwest direction. As mentioned in the L&A Phase 1 report, there may have been evidence of former gold dredging operations along Salt Creek. This appears to be the case as in this photo one can observe the "stacking" of rocks in parallel in the west-southwest portion of the property.

#### 4.3.1.2 1947 Aerial Photo Review

It is known that the Trinity Alps Lumber Company started operations on the site in 1945. It is evident that between the 1944 photo and the 1947 photo that site development had started. The site has been cleared of vegetation toward the west of the property; this was most likely leveled for timber storage. The log pond has not been installed; however, it appears that the log pond area is in the process of being built. The area around where the sawmill would be located appears to be in the process of possible construction. The main road into the facility also appears to have been built along with several other roads crossing the property.

#### 4.3.1.3 1960 Aerial Photographs

In the 1960 aerial photograph, the subject property shows the sawmill and planer mill in full production. The log pond has been constructed and is in operation as well. The Peeler building has been built on the western side of the log pond. The heavy equipment shop has been built and appears to be in operation. The lumber drying concrete pads have been installed in the south section of the parcel. There also appears to be a woodwaste area located to the west of the Peeler building. A Teepee burner has also been constructed towards the northeast of the sawmill. Toward the northeast of the parcel there is the location of the "Stacker" facility. The Stacker facility is where log truck trailers would have been loaded on the back of a log truck after they emptied their load of logs. Other buildings and lumber drying concrete slabs associated with the log mill are evident on the other section of property that is not being assessed as part of this ESA.

#### 4.3.1.4 1970 Aerial Photograph

In the 1970 aerial photograph, the subject property shows few changes to the parcel in question versus the 1960 photograph. However, new ownership has taken place just a few years earlier (SPI current owner). The apparent wood waste storage area appears to have been cleared. This area looks like a cleared section of property that is not currently being used. According to the former SPI foreman, Larry Wasson, the sawmill had burnt down by this time. Within this photograph it appears that the sawmill is still onsite. It is not known how extensive the fire was. A conveyor belt was added from the planer mill to the sawmill portion of the property. This was most likely for wood waste to be burned at the Teepee burner. It also appears that an additional wood storage area was added toward the northeast of the parcel. This would be across from where the CDF Fire Station is located today. The County fairgrounds are observed within this photo towards the southeast. It is unknown the approximate time that the fairgrounds relocated to this location.

#### 4.3.1.5 1980 Aerial Photograph

In the 1980 aerial photograph, the subject property appears similar to the 1970 aerial photograph with a few exceptions. Within this photo minimal lumber is observed at the southwestern staging area versus the 1970's photo. The mill may have been winding down at this time (closed in 1984). It appears that there has been an additional structure added to the planer mill extending to the south. The heavy equipment shop also has had a roofline added on the south side of the building. It is labeled as "Parts Storage" in the 1955 site plan from Trinity Alps Lumber Company. It is unknown if this site plan was accurate or contained proposed buildings. Surrounding the site there has been some increased building activity, mostly residential towards the north. However, there has been some development just across Tule Creek Road from the site that is industrial.

#### 4.3.1.6 1993 Aerial Photo Review

By 1993 the mill has been closed down nearly a decade. The log pond has vegetation located over approximately two-thirds of the area (no water is reflected in the photo). Nearly all buildings have been removed except for the heavy equipment shop building and the peeler shed<sup>1</sup>. One additional building that has been added between the 1980 and the 1993 aerial photo is the drying shed pole building (not located on the parcel). Remnant concrete footings and pads litter the site. The Teepee burner is no longer present as well. The CDF station has been built, and is located at the entrance to the site.

#### 4.3.1.7 2003 Aerial Photo Review

The subject site appears similar to the 1993 aerial photo; however, the site appears to have less metal debris within the site. The former log pond area has increased vegetation growth and nearly takes up the entire area. The adjacent properties surrounding the site also appear similar. There has been some agricultural development towards the south of the site (appeared flooded). The Boom Boom Productions facility has built a fenced storage site to the southeast of the subject site (fireworks storage).

#### 4.3.2 Sanborn Maps

As recommended by ASTM Standard E 1527-05, SHN contacted EDR to obtain Sanborn maps with coverage of the subject property. SHN was informed by EDR that they do not maintain any Sanborn maps with coverage of the subject property in their archived collections. SHN has been unable to locate any other source of Sanborn maps for the subject site.

#### 4.3.3 Topographic Maps

SHN reviewed USGS topographic maps with coverage of the subject property that were published in 1911, 1951, 1954, 1982, and 1998. The findings from the topographic map review are presented in the remainder of this section. Appendix C presents copies of the topographic maps that were reviewed during preparation of this report.

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<sup>1</sup> It is known that the building known as the pottery shop and the former pump house associated with the former log pond are onsite; however, they are hard to identify within the aerial photo.

#### 4.3.3.1 1911 Topographic Map

The 1911 USGS Topographic Map shows the subject property as undeveloped land. California State Route 3 is not present in the topographic map. Tule Creek Road is evident to the west and north of the site. Salt creek appears to the west as well, which drains into what is now Hayfork Creek (Fork). The town of Hayfork is located to the northeast of the subject property. No structures are evident in the topographic map and the project site appears undeveloped.

#### 4.3.3.2 1951 Topographic Map

The 1951 USGS Topographic Map shows the subject property with two structures. These two structures appear to be associated with the former Trinity Alps Lumber Company. A large body of water, presumably associated with the former log pond is evident on the northern portion of the parcel. Two access roads are also evident, paralleling the log pond (most likely for log truck traffic). In addition, an unnamed waterway passes through the former log pond. California State Route 3 appears in this topographic map and is located to the east of the subject property. The town of Hayfork is located to the northeast of the subject property, Salt Creek is located to the west-southwest, and undeveloped land is located to the south.

#### 4.3.3.3 1982 Topographic Map

The 1982 USGS Topographic Map shows the subject property with approximately six structures, the former peeler shed, the office/shop, former shed/restrooms, unknown structure, and the former planer mill. These structures appear to be associated with the former Sierra Pacific Industries Planer Lumber mill. The log pond is evident on the northern portion of the parcel. In addition, the unnamed waterway, now, does not pass through the former log pond. California State Route 3 is located to the east of the subject property. The town of Hayfork is located to the northeast of the subject property, Salt Creek is located to the west-southwest, and undeveloped land is located to the south. Hayfork appears to have had moderate growth in the surrounding areas (fairgrounds to the southeast).

#### 4.3.3.4 1998 Topographic Map

The 1998 USGS Topographic Map shows the peeler shed office/shop, shed/restrooms, the planer mill, and two unknown structures near the planer mill building. The sawmill is not evident in any of the topographic maps observed. The log pond is no longer used but is heavily vegetated. California State Route 3 is located to the east of the subject property. The town of Hayfork is located to the northeast of the subject property, Salt Creek is located to the west-southwest, and undeveloped land is located to the south. A California Department of Forestry Fire Department is located just east of the subject property. Hayfork appears to have had moderate growth in the surrounding areas.

#### 4.3.4 City Directory

SHN requested EDR to construct a city directory for the subject properties for the use of gaining knowledge on the business ownership history of the site. No city directories were available for review (Appendix C).

#### **4.3.5 Trinity County Assessor's Office Records**

Trinity County Assessor's office stated that there was only one easement associated with the parcel. This was for the water supply that was installed in 1998.

#### **4.3.6 Trinity County Environmental Health Division Records**

The Trinity County Environmental Health Division (TCEHD) contained two small files that included information regarding investigations at the Former Sierra Pacific Industries Mill located off Tule Creek Road. The information contained in the files is discussed in Section 4.4.

#### **4.3.7 Trinity County Building Department Records**

SHN visited the Trinity County Building Department on October 2, 2007. During SHN's visit, it was noted that no records exist for the subject site. It was thought that most of all the development took place prior to records being filed and/or permits being issued<sup>2</sup>. In addition, SHN had County personnel look up names of prior owners and previous parcel numbers.

#### **4.3.8 Trinity County Planning Department Records**

The Trinity County Planning Department informed SHN that no records are available for the subject site.

##### **4.3.7.1 Zoning**

The project area is currently zoned Heavy Industrial/Plan Review (M-2/PR). It is under The Plan Review because it is located within the Safety Zones for the Hayfork Airport. Some is Safety Zone 2 (Inner Safety Zone) and some is Safety Zone 3 (Inner Turning Zone).

#### **4.3.9 California Regional Water Quality Control Board, North Coast Region**

SHN contacted staff at the RWQCB in relation to the former SPI Mill located off Tule Creek Road. RWQCB staff informed SHN that they maintain a case file in relation to this former lumber mill. The RWQCB staff indicated that the site contained former Underground Storage Tanks (USTs) and had a case-closure letter issued in 1999. RWQCB staff stated that there were two small files associated with this site. One file contained correspondence and the like and the other file contained reports associated with the UST case. RWQCB staff informed SHN that there were no other regulatory files known for the site in question, such as the regulatory files containing such items as waste discharge permits, Spill Prevention, Control, and Countermeasures Plans (SPCC), etc.

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<sup>2</sup> Building department records were not kept or issued prior to 1974 (when permits were started to be issued and archived).

#### 4.3.10 Continuous Historical Usage

Table 4 Site History May Property, Hayfork, California			
Date	Business Name	Operations	Site Owner
<1945	Undeveloped	Gold Dredging/Grazing Land	N/A
1945-1965	Trinity Alps Lumber Company	Lumber Processing (w/ Sawmill)	Tarter, Webster, & Johnson <sup>1</sup>
1965-1967	American Forest Products <sup>1</sup>	Lumber Processing (w/ Sawmill)	Unknown
1967-1984	Sierra Pacific Industries Planer Lumber Mill	Lumber Processing (w/o Sawmill)	Sierra Pacific Industries (Emmerson)
1984-1998	Sierra Pacific Industries <sup>2</sup>	Vacant	Sierra Pacific Industries (Emmerson)
1998-2001	Boom Boom Productions	Producers of Fireworks	Fred & Susan May
2001-2007	Fireworks by Boom Boom Incorporated	Producers of Fireworks	Susan May
<sup>1</sup> Information taken from Lawrence & Associates Phase 1 Report (May 28, 1997).			
<sup>2</sup> Moved operations from Tule Creek Road to the east side of Hayfork in 1984.			

#### 4.3.11 Data Gaps

SHN was able to delineate the site operational uses from the time the site was undeveloped to the present. The site appears to have been developed as a saw and planer mill site from 1945 to 1984; then sat vacant for approximately 14 years (same owner), and then was used as a fireworks production and storage area for the remainder of the site history to the current date. Therefore, SHN did not encounter any data gaps, as defined in ASTM Standard E 1527-05, during the preparation of this Phase 1 ESA.

#### 4.4 Historical Use Information on Properties in Surrounding Area

Both SHN and EDR identified two facilities located within a one-half mile radius of the subject property that are known to have experienced unauthorized hazardous materials releases, including leaking underground storage tanks, and an operational waste transfer station. These facilities are shown in Table 5. The site parcel was identified in the Executive Summary within the EDR report, with regard to a leaking underground storage tank (LUST); however it was not described within the EDR report.

<p style="text-align: center;">Table 5 Agency-Listed Sites Within a 1/2 - Mile Radius May Property, Hayfork, California</p>		
Site Name	Address	Distance/Direction
Hayfork (CalTrans)	Hill Road Hayfork, CA	2,304 East-Southeast
Hayfork Transfer Site	East Hwy 3; South of Fairgrounds Hayfork, CA	2,331 Feet Southeast
Former SPI Planer Mill	Tule Creek Road Hayfork, CA	Subject Property

The former SPI Planer Mill site will be further discussed because of the known soil contamination that was associated with the former USTs. L&A's *Soil and Ground-Water Investigation* report from 1998 indicated that groundwater was not impacted at the site in the vicinity of the former USTs.

#### 4.4.1 Former SPI Planer Mill

Lawrence & Associates performed a Phase 2 Environmental Site Assessment on August 4, 1997 as part of the recommendations set forth in their Phase 1 ESA from May 1997. During the Phase 2, L&A collected soil and groundwater samples around the former USTs and fuel dispensers. These samples indicated that the soils surrounding the former USTs and dispenser were contaminated. Furthermore, soil samples collected below the water table indicated that groundwater could be impacted at higher levels than detected at (highest groundwater contaminant level was 9.0 parts per million or 9,000 parts per billion). Based on this information, L&A recommended further site investigation to define the limits of the contamination. According to the Phase 2 ESA, the USTs and dispensers were removed (1985) before environmental testing requirements were in place. With this groundwater contamination issue, the case was reassigned to the RWQCB, and its case number was listed as 1TTR064.

Between August 1997 and December 1998, L&A installed three groundwater-monitoring wells near the former USTs and dispenser locations. L&A sampled these wells and reported in the L&A *Soil and Ground-Water Investigation* report dated December 8, 1998, that "No ground-water contamination was detected in the soil boring and monitoring wells sampled during this investigation". It appears that the three monitoring wells were sampled over the course of a year on a semi-annual basis (February and August, when groundwater would be highest and lowest). The RWQCB granted closure of the UST case in a letter dated September 14, 1999.

## 5.0 Site Reconnaissance

### 5.1 Methodology

SHN staff performed a site visit on October 3, 2007, and met with Larry Wasson, Elizabeth Hoaghen, Randy Bashaw, and Jim Jungwirth; each having unique information about the site. The site visit consisted of visual inspection of the subject property, noting potential sources or evidence of hazardous materials release, location and alignment of utilities, site drainage patterns, uses of



adjacent parcels, potential for migration from off-site sources, and any other pertinent or unusual information that would aide in the development of this ESA. Photographs, site layout drawings, and notes were taken to document SHN's observation. Individual site observations noted during the site visit are summarized with the photographic documentation included in Appendix A.

## 5.2 Limitations

Portions of the site surface were not observable due to access issues, visibility, and the presence of vegetation. SHN did not fully investigate the former log pond area due to dense vegetation; or the service pit area in the vehicle shop building due to safety reasons.

## 5.3 General Site Setting

This 53.9-acre portion of the May property is located approximately 1/2-mile east of California State Route 3 and the town of Hayfork, in Trinity County, California (Figure 1), and is situated within an industrial use area. The current predominant land usage of the subject property and property in the area consists of agriculture, light industrial, rural-residential, and public facilities districts. An automobile wrecking yard was noted along Tule Creek Road, north of the former Log Pond.

Salt Creek, a seasonal creek, flows toward the southwest, crossing Tule Creek Road within the northwestern corner of the property. Tule Creek Road is situated on the northern and western sides of the parcel. Salt Creek is also designated as the property boundary to the west of the subject property. To the east is the "other portion" of APN 014-430-75 or 42.4 acres.

The current use of the May property is that of a fireworks production and fireworks storage business. In addition, some portions of the property have been leased out to various businesses. Currently, Jefferson State Forest Products LLC uses the large storage shed located on the western side of the property for lumber storage (former Peeler shed). The property was originally used for grazing lands and dredge mining prior to 1945. The site was used from 1945 up until 1984 for lumber milling, treating, processing, and shipping. From 1984 until 1998 the site sat empty while portions of the planer mill were removed and moved across town. According to former employees, the sawmill portion of the mill burnt down around 1968 and never again was used (not used by SPI). In 1998 Boom Boom Productions began operations on the property.

The property currently has scattered scrap metal and steel, waste tires, concrete, asphalt, old spread out bark piles, all associated with past uses of the property. In addition, it appears that there are numerous former underground water lines crossing the property.

As part of the former sawmill production facility, several buildings remain onsite and are currently in use. As mentioned earlier, the storage building that Jefferson State Forest Products is using was called the "Peeler" building (370'L x 85'W). The Peeler building is where logs were brought into the facility to have the bark peeled off of the main log itself. This building is situated on the southeast side of the former log pond. The building is of wood beam frame construction with metal roofing and siding with a concrete floor.

In addition to the Peeler building, the former truck maintenance/shop building is also still in use, mainly for storage. This shop was the main location of where all heavy equipment was worked on daily for nearly 40 years. As such, the associated concrete slab has oil and dirt build up on the floor.

In addition, there is a service pit that is associated with the former heavy equipment shop. This service pit, when the cover was opened, smelt of heavy hydrocarbon odor. The stairs leading down to the service pit bottom were covered with oil and grease, and the pit floor appeared to contain wood chips that were impacted with grease and oil. SHN did not go down into the pit due to safety concerns; therefore, we could not verify the integrity of the concrete pit walls or floor. It is unknown if a floor drain or sump is associated with this service pit. In addition, there is a non-operational service forklift located within the heavy equipment shop area.

Overhead power lines are present along Tule Creek Road and cross the former log pond on the eastern side. One of the power-poles located on the northeast corner, outside of the former heavy equipment shop has two transformers that appeared in good condition.

## 5.4 Site Visit Observations

SHN staff performed the site visit on October 3, 2007. SHN met with Larry Wasson (former SPI Foreman), Elizabeth Hoaghen (former SPI Accountant that dealt with environmental items), Randy Bashaw (former Manager of Boom Boom Productions), and Jim Jungwirth (current CEO of Jefferson State Forest Products); each having unique information about the site. The site visit consisted of visual inspection of the subject property, noting potential sources or evidence of hazardous materials release, location and alignment of utilities, site drainage patterns, uses of adjacent parcels, potential for migration from off-site sources, and any other pertinent or unusual information that would aide in the development of this ESA. Photographs, site layout drawings, and notes were taken to document SHN's observation.

SHN started the site walk at the northeast portion of the site. Within this location, a current drainage with culverts crossing One Wizard Way was noted. The drainage leads to the former log pond area. Near the entrance to the former log pond area, on the eastern side, SHN inspected the area where the former Teepee burner was situated. SHN observed scrap steel and waste bark.

SHN moved to the former location of where the Stacker was located. This area has a concrete footprint that has been filled in with scrap steel and waste concrete. In addition, asphalt concrete surrounds this location.

South of the Stacker is where SHN identified the possible first well that had a sheet of scrap steel covering the large steel casing(s). The casing(s) had water in the bottom at around 5-feet below ground surface (BGS). It is unknown if this potential well is located on the 53.9 acre parcel or not.

SHN also identified a former water system that still is in place near the entrance of the property (along the entrance roadway). There were steel structures protruding out of the ground. The site plan from 1955 (Trinity Alp Lumber Company) identifies this former water system.

The former planer mill facility was inspected; however, only the concrete footings/pillars remain. A small pump house/transfer station is situated directly west of the former planer building. No surface staining was noted in this area.

SHN continued to the southern portion of the site, where the former processed and treated lumber was stacked on concrete slabs (west of the large pole building). Currently, there are some

weathered processed lumber in this location. It is unknown if these boards were processed through the wood treatment system or not. No soil staining was noted in this area. Aluminum sheeting with insulation was noted at this southerly location.

SHN walked the southern and western boundaries of the property. Wood waste was noted in these locations (spread out). Within older aerial photos it appears to be where wood waste/bark was piled after logs were debarked within the former Peeler building. It appeared that the area had been graded with a tracked Caterpillar Dozer in the past. Several berms were noted along the Salt Creek area. In addition, SHN noted an old pump house that still contained piping leading to the property. This was most likely used for taking water from the Creek to add to the former log pond. No soil staining was noted in this area. Various scrap steel was noted throughout this area.

On the northwestern side of the former Peeler building there is various scrap steel lying about. In addition there is several concrete footings that represent where wood was stored. There is also a type of concrete vault that is heavily vegetated near this location as well. It is not known what the purpose of this structure was for. SHN could not see the bottom of the vault.

SHN moved onto the log pond area itself. The former log pond is heavily vegetated throughout most of the area. The former log pond has a large berm surrounding the area. The estimated depth of the pond is approximately 10-12 feet BGS. SHN also observed that there were some steel water pipes coming from the western side of the former log pond. It is not known if this piping is still operational.

SHN went inside of the former Peeler building during our site walk. Many board feet of processed lumber are stored in this building (Jefferson State Forest Products). SHN continued to the north end of the building where the former logs would be brought into the building. Concrete footings were noted below grade in this location along with large beams. This location is where the debarker equipment was set. Some oil staining was noted on the wood beams in this location.

SHN drove by the location of a potential well that is situated on the southeastern side of the former Peeler shed. This location was built up with vegetation. However, the indication that a well was located at this point at one time was that of an existing decommissioned power pole with metal guardrails surrounding it.

The next area SHN investigated was that of the former sawmill location. Several large concrete footings remain in this location, and that was the only evidence that a sawmill existed. There were no pits observed or staining of the concrete. Vegetation has grown up around this location. There is also a drainage that crosses through this location (culverts were placed in this location so vehicles could travel across a ditch).

SHN continued to where the current "pottery shop" is located. Outside, located to the east of the shop is a steel shed that contains a fired pottery kiln. This kiln is hooked into the only propane tank noted on the property. Inside the pottery shop there are two main rooms. One room contains a restroom and shower. Two floor drains were evident, one in each room. The room on the east side appears to be where the sleeping quarters were. The room on the west is where clay was turned into pottery (two electric pottery wheels). Numerous containers of clay and 5-gallon containers of "glaze" were located in this location within the cabinets. Other incidental chemicals for the processing of clay were also located within the cabinets. Apparently, the restroom and shower are

tied into the septic system that services the heavy equipment shop (located on the west side of the building).

Next, SHN walked around the former heavy equipment shop. As noted before, two pole-mounted electrical transformers are located on the northeast of this building. No pad-mounted transformers were observed. SHN also observed soil staining from a diesel or oil spill located on the southeast side of the building. SHN estimated that the soil staining was approximately 12' L x 6' W x unknown depth. SHN also looked around where the former USTs were located (western side of the heavy equipment shop); however, we did not see any evidence of the former USTs or dispenser area. SHN also did not observe any of the former monitoring wells that were once in this location. SHN inspected the area where the former waste oil tank was located (northwestern side of the shop). No evidence of the former waste oil tank was noted. No 55-gallon drums were discovered during the site visit.

SHN moved inside of the former heavy equipment shop area. SHN noted several hand labeled 5-gallon buckets of unknown material. SHN also identified a former service pit, which was covered with plywood for safety reasons. When SHN opened the former pit area, a distinctive odor of old fuel/oil was noted. The floor was covered with oily wood chips/saw dust. SHN did not enter the former service pit area due to safety concerns. Additionally, it was noted that the concrete floor was covered with oil and dirt. SHN estimated that the entire service area contained approximately 1/8-inch of this oily/dirt material over the concrete, most likely from years of working on heavy equipment in this location.

SHN also observed a wooden cabinet that contained mostly empty gasoline storage containers, some oil, etc. improperly stored. There were also numerous cans of latex paints in various states of use. On the backside of the shop there is a storage area where numerous small containers of PVC pipe glue, primer, mineral spirits, and spray paints were stored. This location appears to also contain equipment for the manufacture of fireworks/equipment.

No storm drains were noted during the site visit. Topography is generally flat. Storm water flows toward the northwest of the site towards Salt Creek.

## 6.0 Interviews

During the course of this Phase 1 ESA, Ms. Susan May, the current owner completed a Site Assessment Questionnaire (provided by SHN), and a follow-up list of questions regarding current and historic operations on the subject property. These questions were developed to address potential areas of concern from a hazardous materials (HAZMAT) perspective that may be present on the subject property, and/or known "Recognized Environmental Conditions" as defined in ASTM Standard E 1527-05.

In addition, SHN sent questionnaires Elizabeth Hoaghen, former Accountant of SPI that had knowledge of the environmental testing of the subject site from 1968-1984; Fred May, former owner with Susan May; Randy Bashaw, former Boom Boom Productions General Manager from 1998-2005; and Bob Ellery, the current Director of Energy Resources and Environmental Affairs with SPI.

SHN invited Mr. Larry Wasson to the site visit that occurred on October 3, 2007. Mr. Wasson, a former SPI Foreman who worked at the subject site from 1967-1983, also filled out the questionnaire at SHN's request.

Copies of each Questionnaire may be found in Appendix E.

## **6.1 Susan May, Property Owner**

Ms. Susan May, owner and occupant of the subject property, completed a Site Assessment Questionnaire and a Phase 1 ESA User Questionnaire on September 27, 2007 (supplied by SHN). The following is a summary of Ms. May's response to the questionnaire included in Appendix E.

Ms. May acquired the subject property in 1998<sup>3</sup> from SPI. She indicated that she knew of potential contamination, in the form of stained soils and the former USTs that were located at the subject site. She indicated that she was not aware of any other potential environmental issue associated with the subject property.

## **6.2 Larry Wasson, SPI Foreman (Ret), 1967-1983**

Mr. Larry Wasson was interviewed as part of this Phase 1 ESA, because he has prior knowledge of the former SPI saw and planer mill. Mr. Wasson's knowledge of the site is extensive because he worked at the mill when it was acquired from Trinity Alps Lumber Company in 1967, to when the planer mill moved east across town along Highway 3. Mr. Wasson stated that wood preservatives were used at the former planer mill but no dip tanks were used as part of the process, only the spray process. Mr. Wasson stated that EPA (most likely the California Department of Toxic Substances Control (DTSC)) had tested the site for pentachlorophenol and tetrachlorophenol as part of a call that was received at the DTSC's office stating that SPI was covering up hazardous wastes. Mr. Wasson further stated that the tests came up clean during the DTSC's investigation.

## **6.3 Former Owner, SPI (Representative)**

SHN spoke with Mr. Bob Ellery, Director of Energy Resources and Environmental Affairs with SPI on September 28, 2007, in regard to the former SPI mill site. Mr. Ellery stated that he did not have specific knowledge of the site and didn't recall if anyone else at the SPI office would know of the activities at this site due to how long the site had been closed. Regardless, Mr. Ellery filled out a questionnaire at SHN's request. Mr. Ellery responded within the questionnaire with many "Yes" answers to the questions; however, he failed to supply comments to those yes answers.

## **6.4 Elizabeth Hoaghen, SPI Accountant (Ret), 1968-1984**

SHN met with Elizabeth Hoaghen, a former SPI Accountant (Ret), 1968-1984, during SHN's site walk on October 3, 2007. Mrs. Hoaghen was in charge of the environmental testing of the site during her tenure at SPI. Mrs. Hoaghen stated that:

*What Trinity Alps Lumber did for dipping or spraying, we don't know. The Penta and Tetra that was used at the Planer Site was incidental to lumber being planed, not dipped. The Dip tank for SPI*

<sup>3</sup> At the time, Susan and Fred May had purchased the property together as co-owners.

*was on the other end of town at the original sawmill site. SPI did not operate the sawmill on the proposed site. If any export lumber was brushed, it would have been minimal. Anyway, as we told you, all P&T Testing was negative for both SPI plant sites. Any storage of P&T would have been for, SPI, on the other end of town, along with all lubricants, fuel, etc. I simply cannot remember any type of storage areas except for lumber. Some above ground diesel tanks were near the shop, but most fuel was on the other SPI property. SPI cut Ponderosa, Sugar Pine, and Douglas Fir....To the best of my knowledge, there was never a sump storage pit or drain in the shop, only a pit. We shipped the refuse oil to the recycler plant somewhere around the Chico area. Both sites did the same because in those days we were paid to have it hauled off instead of having to pay for the service. Again, we (SPI) did not operate a sawmill (burnt down) on the proposed site, only a Planer, Dry Kilns, Peeler Shed, Sorting Shed, Shop, Shipping Office, and Main Office.*

In addition, Mrs. Hoaghen has assisted with questions that SHN has had in relation to the storage and past use of hazardous chemicals throughout the site.

## **6.5 Trinity County Building & Development Services, Environmental Health Division**

SHN spoke with Peter Hedtke, Environmental Health Division Director, on several occasions in relation to the subject site. Mr. Hedtke stated that he was unaware of any related pentachlorophenol and tetrachlorophenol issues at the site. He was aware that there was a UST investigation that happened at one time. He vaguely remembered issuing an Unauthorized Release (Leak)/Contamination Site Report in 1997 (Appendix C). The files that were at the Trinity County Environmental Health Division (TCEHD) were small in size and contained primarily information on the former USTs at the site, and the subsequent investigations that took place. In addition, Mr. Hedtke requested information from the Assessor's office. His thought was that there might be some additional information at this department related to septic systems. JoAnne Simmons with the Assessor's office responded back by stating that they did not have any information relating to the subject property except for an easement that was granted by the Trinity County Waterworks in 1998 (installation of a waterline for fire related situations). It was thought that all site development occurred long before the issuing of permits had taken place.

## **6.6 Randy Bashaw, Former Boom Boom Productions Employee**

SHN sent a Questionnaire to Randy Bashaw, former Boom Boom Productions employee from 1998-2005. Randy answered questions pertaining to the former saw/planer mill and the fireworks production business. In addition, Randy informed SHN about the septic system and leach field that is associated with the former heavy equipment shop. Randy stated that most of the environmental testing was completed before he was hired at Boom Boom Productions.

## **6.7 California Regional Water Quality Control Board, North Coast Region**

SHN contacted the RWQCB located in Santa Rosa, California in regards to the subject property (the site has a former UST Case Number assigned; 1TTR064). The subject property was identified in EDR's Executive Summary under the Leaking Underground Storage Tank (LUST) database. One of the items that the Executive Summary lists is sites that have poor or inadequate address information. In addition, it was known that the site contained former USTs that had leaked contamination into the soil and minimally into the groundwater.

SHN contacted the RWQCB and spoke with Kathleen Hudson to find out if any other information was available within the file besides the UST related information. Kathleen was able to look through an electronic database where she was able to inform SHN that there were two small files associated with this former mill site. One file was that of correspondence and the other was that of reports. Any other files were related to the other SPI mill that was located across town.

SHN also spoke with Manuel Baldenegro within the Enforcement Unit at the RWQCB. Manuel stated that he was aware of the site (former regulator); however, he recalls that there was, "hardly anything there" (associated with groundwater contamination from the former USTs). SHN requested any information in relation to the past uses of PCP and TCP at the site. Manuel stated that he was unaware of any issues relating to PCP or TCP at this site; however, he did mention that the RWQCB was starting to look into the dioxin issues at former mill sites that used wood preservatives. He did mention that the last communication to SPI was the closure letter from September 14, 1999 (Appendix C). He stated that he did not see any information relating to the destruction of the three monitoring wells at the site. SHN mentioned that we did not see any evidence of monitoring wells during our site visit. Manuel stated that he was turning our request over to another caseworker that works in the UST division.

SHN received an e-mail from Cody Walker with the RWQCB on October 15, 2007 in relation to the former mill. Cody stated that he could only locate information on the former USTs at the site (and that he had not found any other site on Tule Creek Road).

## 6.8 California Department of Toxic Substances Control (DTSC)

SHN attempted to contact the California Department of Toxic Substances Control (DTSC) in Sacramento in relation to the former SPI mill site, and the possibility that the site has had a PCP and TCP investigation completed in relation to the site. Larry Wasson and Elizabeth Hoaghen mentioned both that the agency that conducted the testing was the "EPA" in the late 1980's. SHN was not able to obtain any documents relating to the site; however, within the former L&A Phase 1 from 1997, it was stated that:

*A site investigation for wood-preservatives (pentachlorophenol and tetrachlorophenol) was conducted at the site in about 1998 by DTSC. Written documentation of the investigation was not available, but according to Mr. Jim Pappararo of DTSC, about 30 soil samples were randomly collected over the site at the surface and tested for pentachlorophenol and tetrachlorophenol. Samples were not obtained at the former dip-tank and spray-area locations because both these areas were covered by concrete slabs. None of the samples detected any pentachlorophenol and tetrachlorophenol.*

## 6.9 Others

SHN contacted the United States Department of Agriculture (USDA), Forest Service in Redding, in regard to obtaining historical aerial photographs. Ms. Rachel Corkill accompanied SHN to their historical file rooms, and helped locate aerial photographs from 1944, 1947, 1970, 1980, and 2003.

SHN also spoke with personnel at the CDF Fire Station located directly adjacent to the subject site. SHN spoke with Captain Dusty Gyves in relation to responding to any fires, spills, or incidentals.

Captain Gyves stated that their facility was built around 1993 and that they had not responded to any incidents at the property in question since that time.

## 7.0 Findings and Opinions

The purpose of this section is to summarize the findings in this report and to identify RECs. A REC, as defined in ASTM Standard E 1527-05, is:

*...the presence or likely presence of any hazardous substance or petroleum products on a property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products into structures on the property or into the ground, ground water, or surface water of the property.*

SHN's research conducted for the subject property, which included reviews of historic aerial photographs, topographic maps, agency records, interviews, site assessment questionnaires, and a review of the previous site investigations revealed that the property has been occupied continuously by the same type of business (lumber) since the mid 1940s until the mid 1980's, then sat vacant for approximately 15 years until a fireworks manufacturer began operations on the subject parcel in 1998 and is still in operation today. In addition, a portion of the former SPI mill (former Peeler Building) is currently utilized as a lumber storage yard for Jefferson State Forest Products, LLC.

During SHN's preparation of this Phase 1 ESA, there was evidence indicating the likely past use, or release of petroleum products, and the past use of hazardous substances (TCP and PCP) at the site.

It is SHN's opinion the strength of direct (SHN) visual observations of petroleum staining and the verbal record from former site workers regarding TCP and PCP is sufficient justification to recommend a limited Phase 2 investigation on the subject properties in the areas indicated in the Recognized Environmental Conditions (REC's) in Section 8.0 below.

## 8.0 Conclusion

SHN has performed a Phase 1 Environmental Site Assessment in conformance with the scope and limitations of ASTM Practice E 1527-05 of that portion of the May property, which is comprised of the northwestern 53.9 acres of APN 014-430-75. Any exceptions to, or deletions from, this practice are described in Section 1.3 of this report. This assessment has revealed evidence of recognized environmental conditions (RECs) in connection with the property, which include the following:

- **REC #1:** Wood treatment chemicals were reportedly used at the Trinity Alps Lumber sawmill, and at the SPI planer mill. These wood treatment chemicals could have caused a release to the soil and/or groundwater within the application areas, and within the lumber storage yards where the treated lumber was stored. Former sampling results for the wood treatment constituents of concern, Pentachlorophenol (PCP) and Tetrachlorophenol (TCP) indicated that the concentrations were below the laboratory reporting limits for those areas sampled.



treatment constituents of concern, Pentachlorophenol (PCP) and Tetrachlorophenol (TCP) indicated that the concentrations were below the laboratory reporting limits for those areas sampled.

SHN recommends Limited Phase 2 sampling at the application area at the former Trinity Alps Lumber sawmill to verified the previous sampling results due to the lack of sampling locations, sampling methodology, and documentation.

SHN recommends Limited Phase 2 sampling at the application area at the former SPI planer mill to verify the previous sampling results due to the lack of sampling locations, sampling methodology, and documentation.

SHN recommends Limited Phase 2 sampling at the main runoff areas from the former treated lumber storage areas to verify the previous sampling results due to lack of sampling locations, sampling methodology, and documentation.

- **REC #2:** Teepee burners historically have resulted in an impact to the soil and/or groundwater at former mill sites and because of the lack of sampling in this area for the constituents of concern, SHN is recommending Limited Phase 2 sampling to verify if the soil and/or groundwater have been impacted in this area.
- **REC #3:** A former fuel spill area (12' L x 6' W x unknown depth) was observed at the southeast corner of the heavy equipment maintenance building. SHN recommends Limited Phase 2 sampling at this spill area to verify if the soil and/or groundwater have been impacted.
- **REC #4:** The service pit was observed during the site walk within the heavy equipment shop; however, the pit bottom had a considerable amount of woody debris built up. Based upon the fact that the pit was used for maintenance operations, and the potentially petroleum impacted woody debris that remains in the pit; SHN is recommending additional work in this area.

SHN is recommending that the pit be cleaned out and the potentially impacted debris be disposed appropriately off-site. Once the pit is cleaned, an inspection can be conducted to verify that the pit does not have major cracks or a drain. If major staining of the bottom and walls is observed or if major cracks or a drain is observed, then Limited Phase 2 sampling will need to occur at this area to determine if soil and/or groundwater have been impacted.

- **REC #5:** Drains from the heavy equipment maintenance shop reportedly empty into a septic tank and leachfield area (towards the northwest of the building). Regulated products could have been disposed of into the septic tank and released into the leachfield areas.

SHN is recommending Limited Phase 2 sampling to determine if soil and/or groundwater have been impacted at the leachfield area.

- **REC #6:** The former log pond could have received storm water runoff from the Teepee burner areas and from the treated lumber storage areas.

SHN is recommending Limited Phase 2 sampling to determine if the sediment within the log pond has been impacted.

- **REC #7:** Former USTs were reported to have been removed from the westside of the heavy equipment shop area along with a dispenser. Previous soil sample results have indicated that the concentrations were above the laboratory reporting limits. Groundwater samples collected from the same area indicated that the concentrations were below the laboratory reporting limits.

SHN recommends Limited Phase 2 sampling at the former UST and dispenser areas to verify the previous sampling results do to lack of sampling locations, sampling methodology, and documentation.

- **REC #8:** Former gasoline and diesel ASTs were reportedly in use at this facility. Historically, the AST fill locations, and the vehicle and equipment fueling areas could have impacted the site soil and/or groundwater.

SHN is recommending Limited Phase 2 sampling to determine if soil and/or groundwater have been impacted in these areas.

- **REC #9:** The existing on-site groundwater well(s) were observed during the site walk, and they were not secured and locked. Unsecured wells can be an open conduit down to groundwater.

SHN is recommending Limited Phase 2 sampling to determine if the groundwater in these well(s) has been impacted.

## 9.0 Deviations

A continuous site history was developed for the site dating to pre-development; however, site ownership documentation was collected from historical research, former employee personal recollection, and the former L&A Phase 1 Report. Information obtained during the previous and current site investigations has adequately determined the site usages.

## 10.0 References Cited

### 10.1 Published References

American Society for Testing and Materials. (2005), "Standard Practice for Environmental Site Assessments: Phase 1 Environmental Site Assessment Process," *ASTM Standards on Environmental Site Assessments for Commercial Real Estate, Third Edition: E1527-05*. Philadelphia: ASTM.

Bailey, E.H. (1966), "Geology of Northern California". California Division of Mines and Geology, Bulletin 190, p. 39-62.

Hacker, B.R. and Peacock, S.M. (1990), "Comparison of the Central Metamorphic Belt and Trinity terrane of the Klamath Mountains with the Feather River terrane of the Sierra Nevada, in

Paleozoic and early Mesozoic paleogeographic relations"; Sierra Nevada, Klamath Mountains, and related terranes, Harwood, D.S. and Miller, M.M. (eds). p. 75-92.

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- Irwin, W.P. (1966), "Geology of the Klamath Mountains Province", in Geology of Northern California, Bailey, E.H. ed., pp 19-38.
- Irwin, W.P. (1974). "Reconnaissance Geologic Map of the Hayfork Quadrangle, Trinity County, California", Miscellaneous Field Studies Map-576.
- Jennings, C.W. (1994), "Fault Activity Map of California and Adjacent Area, with Locations and Ages of Recent Volcanic Eruptions", Scale 1:750,000, California Division of Mines and Geology Geologic Data Map No. 6.
- Lawrence & Associates. (May 28, 1997). "Phase I Environmental Site Assessment, Former Sierra Pacific Industries Planer Mill, APNs 14-430-68, 14-430-70, and 14-430-71, Tule Creek Road, Hayfork, California". C97.03.08; Prepared for Sierra Pacific Industries
- (August 4, 1997). "Phase II Environmental Site Assessment, Former Sierra Pacific Industries Planer Mill, APNs 14-430-68, 14-430-70, and 14-430-71, Tule Creek Road, Hayfork, California": C97.03.08; Prepared for Mr. Fred May, Boom Boom Productions
- (December 8, 1998). "Soil and Ground-Water Investigation, Former Planer Mill, Tule Creek Road, Hayfork, California". C97.03.08; Prepared for Sierra Pacific Industries
- Potter, A.W. and 10 others, (1990). "Early Paleozoic Stratigraphic, Paleogeographic, and Biogeographic Relations of the Eastern Klamath Belt, Northern California, *in*, Paleozoic and early Mesozoic Paleogeographic Relations; Sierra Nevada, Klamath Mountains, and related terranes", Harwood, D.S. and Miller, M.M. (eds). p. 57-74.
- Trinity Alps Lumber Company (1955). Site Plan, 1"=100', Fred S. James & Co., Engineering Dept., San Francisco, California

## 10.2 Records of Communications

- Bob Ellery. (October 2, 2007). Director of Energy Resources & Environmental Affairs, Sierra Pacific Industries, Anderson, CA. Written questionnaire provided by SHN. The questionnaire and supplemental list of questions focused on past site operations at the subject property.
- Bryan G. Redd. (September - October, 2007). President & CEO UPSTREAM 21. Written questionnaire provided by SHN. Numerous e-mail communications. Buyer of property in question.
- Cody Walker. (October 15, 2007). Regulator. Regional Water Quality Control Board, North Coast Region, UST Unit. E-mailed Cody about site issues past and present.
- Dusty Gyves. (October 3, 2007). Captain. California Department of Forestry, Hayfork. Discussed and hazardous spills associated with May property.
- Elizabeth A. Hoaghen. (September 25, 2007 (several other e-mails, etc.)). Former Accountant at SPI, 1968-1984 (kept records of all environmental related items at the mill). Written

questionnaire provided by SHN. Former SPI Accountant from 1968-1984. The questionnaire and supplemental list of questions focused on past site operations at the subject property.

Fred May. (September 25, 2007). Former Owner Boom Boom Inc. Written questionnaire provided by SHN. The questionnaire focused on past site operations at the subject property.

Jeanne Bonomini. (September 25, 2007). Senior Planner. Trinity County Planning Division. Discussed zoning at the site.

John Jelich. (October 2, 2007). Principal Planner. Trinity County Planning Division. Discussed zoning at the site.

Kathleen Hudson. (October 5, 2007). Office Technician. California Regional Water Quality Control Board, North Coast Region. Spoke about the former SPI Mill off of Tule Creek Road, the UST case, and what was in the file in general.

Larry A. Wasson. (October 3, 2007). Former SPI Foreman from 1967-1983. Written questionnaire provided by SHN. The questionnaire focused on past site operations at the subject property.

Mary Roberts. (October 2, 2007). Administrative Services Officer. Trinity County Building Department. Looked up information pertaining to former APN numbers associated with property along with past owners. No building records found for subject parcel

Manuel Baldenegro. (October 11, 2007). Regulator. Regional Water Quality Control Board, North Coast Region, Enforcement Unit. Spoke to Manuel about site issues past and present.

Peter Hedtke. (October 2, 2007). Director. Trinity County Environmental Health Division. Spoke with Peter about septic systems onsite, file review, UST case, etc. (e-mails).

Randy Bashaw. (September 26, 2007). Former Boom Boom Productions General Manager from 1998-2005. Written questionnaire provided by SHN. The questionnaire focused on past site operations at the subject property.

Susan May. (September 27, 2007). Current owner and CEO of Fireworks by Boom Boom Inc. Written questionnaire provided by SHN. The questionnaire and supplemental list of questions focused on past site operations at the subject property.

### 10.3 Aerial Photographs (USDA, EDR, & Google Earth)

Table 6 Aerial Photographs Portion of May Property, Hayfork, California		
Date	Identification Numbers	Scale
8-15-1944	DDD-33-75	-- <sup>1</sup>
1947	3-120 GS.EH	--
8-28-1960	E11-16-18	1"=700'
7-17-1970	EVZ-18-121	1"=750'
6-10-1980	380-204	1"=1,050'
1993	Inquiry: 2035826.5	1"= 666'
7-9-2003	USDA-F 16 615140 303-228	1"=750'
1. Scale of photograph is not specified.		

### 10.4 Topographic Maps

U.S. Geological Survey. (1911). "60-Minute Series, Big Bar and Vicinity, California Quadrangle." NR: USGS.

-- (1951). "15-Minute Series, Hayfork, California Quadrangle." NR: USGS.

-- (1982). "7.5-Minute Series, Hayfork, California Quadrangle." NR: USGS.

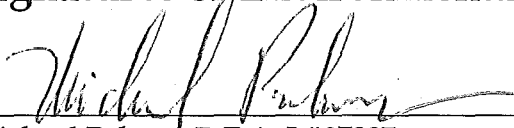
-- (1998). "7.5-Minute Series, Hayfork, California Quadrangle." NR: USGS.

## 11.0 Statement of Qualifications of Environmental Professionals

SHN's project team included Michael Palmer and Patrick Barsanti. Resumes for these key team members are included in Appendix F. Michael Palmer is a Registered Environmental Assessor in the State of California, and has a Bachelor's Degree in Environmental Studies from Sacramento State University (1993). Mr. Palmer has worked for SHN for 7 years, and has been conducting Phase 1 ESAs for approximately 5 years. Patrick Barsanti is also a Registered Environmental Assessor in the State of California, and has a Bachelor of Science Degree from Humboldt State University (1991). Mr. Barsanti has worked for SHN for more than 27 years, and has been conducting Phase 1 ESAs for more than 14 years. Mr. Barsanti provided the quality control and quality assurance for this project.

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

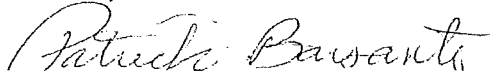
## 12.0 Signatures of Environmental Professionals



Michael Palmer, R.E.A. I #07807  
Environmental Specialist

October 26, 2007

Date



Patrick Barsanti, R.E.A. #05041  
Senior Environmental Engineer

October 26, 2007

Date