4.13 HAZARDS

INTRODUCTION

This section addresses the potential for impacts related to the presence and use of hazardous materials by existing and historical uses within the proposed Specific Plan Area and the proposed land uses. These risks are primarily associated with the potential for on-site hazards from abandoned oil wells, storage of materials categorized as hazardous under existing regulations, underground and aboveground storage tanks, and the operations of facilities historically located within the boundaries of the proposed Specific Plan Area.

ENVIRONMENTAL SETTING

The Specific Plan Area currently contains the Hanson Aggregates sand and gravel mine site, including concrete and asphalt production facilities; retention basins; agricultural crops, including strawberry production; commercial and institutional uses. Historically, the project area has been used for intensive agricultural production, and for oil and gas extraction as part of the now abandoned El Rio oil field. There are existing industrial areas located east of the existing mine pits that several permitted underground storage tank facilities, industrial uses that generate waste products categorized as hazardous under existing regulations, and other industrial uses that utilize hazardous materials in their operations. Considerable information is currently available on the potential to encounter hazardous materials and wastes during the development of the project area under the proposed Specific Plan. A summary of the findings of previous environmental site assessments completed for the properties within the Specific Plan Area is provided below.

Phase I and II Environmental Site Assessment (ESA) Methodology and Findings

The purpose of a Phase I ESA is to address the environmental conditions associated with past and present operations conducted at the subject property and adjacent properties. Phase I ESAs are typically conducted utilizing generally accepted industry standards in accordance with the American Society for Testing and Materials (ASTM) Standard Practice for Environmental Site Assessments (E-1527-00). The scope of a Phase I ESA generally includes review of the subject property history, physical characteristics, current conditions, regulatory database review, and review of activities conducted at the property and at adjacent properties with regards to release of regulated substances to the environment. A Phase I ESA also provides recommendations for Phase II studies to further assess any area of potential concern. Phase II studies involve the sampling and testing of soils and groundwater as warranted.

A summary is provided for each available Phase I and Phase II ESA conducted within the proposed Specific Plan Area. Together, the available studies address all portions of the proposed Specific Plan Area. A complete listing of all studies referenced is contained in **Section 8.0, References**, of this EIR. The report *Limited Phase II Environmental Site Assessment, Approximate 212-Acre Area "A" and 66-Acre Campbell Basin*, prepared by Applied Environmental Technologies Inc., is provided in **Appendix 4.13**.

North El Rio Detention Basin No. 1 and Magallon Property (APNs 133-0-010-615 and 133-0-010-190)

These parcels are located on the north side of Vineyard Avenue and are comprised of a total of approximately 15 acres. Specifically, the North El Rio Retention Basin No. 1 consists of a flood control basin on 14.98 acres. The Magallon property consists of 0.36 acres and consists of a vacant commercial property formerly utilized as a sandblasting business. Each parcel was historically utilized for agricultural purposes.

Materials categorized as hazardous are not currently utilized at the location of Basin No. 1. The basin accepts runoff from agricultural areas east of Vineyard Avenue and includes an outlet structure constructed at the southwest corner of the basin which connects it to the North El Rio Detention Basin No. 2, located to the southwest. Records indicate that an oil well was drilled on this site in 1960. Review of the Oil Field Map No. 214, published by the State of California Division of Oil, Gas, and Geothermal Resources (DOGGR), indicated Chevron's Brigham No. 1 well is located within the basin area. The well was drilled to a total depth of 11,500 feet, however it was reported that "no commercial showing of oil or gas" was observed at the well location. Reportedly, the well location was abandoned as a dry hole in 1961 by placement of cement within the well casing at specific intervals in addition to the placement of a wooden plug at a depth of 25 feet, and sealing of the well casing to the well cellar at the surface with cement.

Storage of materials categorized as hazardous was observed at the location of the Magallon property during the time of the site reconnaissance activities. Miscellaneous containers and substances observed included: one 500-gallon capacity empty propane tank, one 30-gallon unlabeled container full with unknown substance, one unlabeled five-gallon container, and two empty 55-gallon poly tanks. A small shed and two storage containers were observed to be located on the Magallon property. These structures were identified as potentially containing asbestos-containing building materials (ACM) and lead based paint based on the date of construction. This site was reported to have formerly been used for a sand blasting operation, which has resulted in large amounts of sand deposited on the site that may possibly containing elevated concentrations of heavy metals.

A Limited Phase II ESA soil screening of the 0.36-acre Magallon Property was prepared in response to the historical sandblasting business by Applied Environmental Technologies (AET). A total of two surface samples of loose sand (Samples SB-1 and SB-2) were collected and submitted to a state certified analytical laboratory for chemical analyses. The samples were analyzed for the California List of 17 heavy metals.

The laboratory reported that no mercury, arsenic, berylium, selenium, silver, and thallium were detected in the samples. Concentrations of antimony, barium, cadmium, chromium, cobalt, copper, molybdenum, nickel, vanadium and zinc were detected below the Total Threshold Limit Concentration (TTLC) and below 10-times the Soluble Threshold Limit Concentration (STLC) and are considered to be background concentrations. The TTLC and STLC standards have been established to identify hazardous wastes for purposes of transport and disposal. Soils with concentrations of contaminants over these thresholds would be categorized as hazardous wastes. Lead was reported at 74.8 milligram per kilogram (mg/kg) and 111 mg/kg in the two samples. The concentrations are below the TTLC value of 1,000 mg/kg but are greater than 10-times the STLC value (50 mg/kg).

Based on the results of the heavy metals analysis, there are apparent elevated lead concentrations in the loose sand on the surface of the Site, however, the reported lead concentrations are below the TTLC value for hazardous waste and below the U.S. EPA Preliminary Remediation Goals (PRG) for residential soil (450 mg/kg) and for industrial soil (750 mg/kg) and are not considered to be a present hazard.

North El Rio Detention Basin No. 2 Property (APNs 132-0-020-160 and 132-0-020-190)

The properties containing the North El Rio Retention Basin No. 2 (APNs 132-0-020-160 and 132-0-020-190) are located at 3009 and 3091 Vineyard Avenue on the north side of Vineyard Avenue and are comprised of a total of 67.40 acres. Specifically, the North El Rio Retention Basin No. 2 is comprised of 66.40 acres and is currently utilized for a combination of strawberry crop production and as a flood control basin. Additionally, a 1-acre portion of this site along Vineyard Avenue contains a single-family residence.

Materials categorized as hazardous are not currently used within the basin property. The portion of the property located along Vineyard Avenue and a portion of the basin itself are currently used for strawberry crop production. Prior to the excavation of the basin material these parcels were utilized for agricultural purposes, typically row crops and orchards.

Review of the Oil Field Map Nos. 213 and 214, published by the DOGGR dated 1990 and 1998, respectively, indicated the locations of two abandoned oil or gas wells within the subject parcels. Chevron's Standard-Sun J.H. Grubb No. 1 well was drilled in 1960 to a total depth of 10,765 feet. The well was abandoned in 1962, reportedly due to low production, by placing a wooden plug at a depth of 31 feet capped with cement to the surface. The well casing was cut off at a depth of five feet below surface grade. SWEPPI's Grubb No. 1 well was drilled in 1928 to a total depth of 5,310 feet, however was reported that "no commercial showing of oil or gas" was observed at the well location. The well was abandoned as a dry hole in 1928 by filling the casing with drilling mud. A wooden plug was set at 600 feet and cement was placed above to a depth of 10 feet. Another wooden plug was set at 10 feet with cement placed above into the well cellar at the surface. During the site reconnaissance a vertical metal casing was observed within the detention basin area, and is believed to be the Standard-Sun J.H. Grubb No. 1 abandoned well location.

Materials categorized as hazardous were observed at the equipment storage area located adjacent to the residence at Vineyard Avenue along the northeast boundary of this site. Substances observed at the equipment storage area include a 500-gallon capacity aboveground storage tank (AST), likely containing diesel fuel, one car battery, and an open 5-gallon container of used motor oil. Additionally, three storage containers and an office trailer were observed within the equipment storage area. The residence on this site was surrounded by a locked chain-link fence. One 250 gallon capacity AST, one propane tank, and a cutting torch cart with two compressed gas vessels were observed within fenced are of the residence. Additionally, a metal cover was observed within the driveway of the residence which may overlie an underground vault or tank.

A Limited Phase II ESA of the 66.4-acre North El Rio Detention Basin No. 2 Property was prepared, due to the historical agricultural uses of this site, by Applied Environmental Technologies (AET). A group of four shallow soil samples, collected from the four quadrants of the strawberry field in the lower elevation of the Campbell Basin were submitted for laboratory analysis. The laboratory made one composite sample from the 4 samples for analysis (Sample C-16). In addition to the composite sample, three discrete samples were collected from the at-grade portion of the Site located between the Basin and Vineyard Avenue (Samples SSA-1, SSA-2 and SSA-3). All four samples were analyzed for organochlorine pesticides, and one sample (SSA-2) was also analyzed for chlorinated herbicides and the California List of 17 heavy metals.

The laboratory reported that no chlorinated herbicides were detected in the sample analyzed. No mercury, arsenic, berylium, cadmium, selenium, silver, and thallium were detected in the sample analyzed. Concentrations of antimony, barium, chromium, cobalt, copper, lead, molybdenum, nickel,

vanadium and zinc were below the total threshold limit concentration (TTLC) and below 10-times the soluble threshold limit concentration (STLC) and are considered to be background concentrations.

The laboratory reported that concentrations of DDD, DDE and DDT were detected in all four samples. No other organochlorine pesticides on the list were detected. The highest concentrations of DDD, DDE and DDT were reported in Sample SSA-3 at 0.034 mg/kg, 0.155 mg/kg and 0.062 mg/kg, respectively.

The U.S. EPA Region 9 Preliminary Remediation Goal (PRG - EPA Region 9, November 22, 2000) values were reviewed by AET. The residential soil PRG values for DDD, DDE, and DDT, reported for planning purposes, are: 2.4 mg/kg; 1.7 mg/kg; and 1.7 mg/kg, respectively. While a PRG is specifically not intended as a stand-alone decision-making tool, a chemical concentration exceeding a PRG suggests that further evaluation of the potential risk is appropriate. Based on the results, none of the sample results exceed the residential PRG values.

Hanson Aggregates Property (APNs 133-0-01-011, 133-0-01-057, and 133-0-01-060)

A Phase I ESA was prepared for the 54-acre portion of the mine site containing the materials processing plants and administrative facilities. Historically the mine site and associated production area was utilized for agriculture, and was developed as an aggregate mining and processing facility in 1942. The active plant facilities include two ready mix concrete batch plants operated by Associated Ready Mix, an asphalt plant operated by Sully Miller, a recycling plant operated by Hanson Aggregates, and related shop areas and offices. Hanson Aggregates has recently removed some facilities and completed other site maintenance activities in accordance with the approved mine reclamation plan for the site. Over the past year Hanson Aggregates has removed a rock and sand plant, various equipment in other locations on the property, an underground asphalt oil tank, and three transformers. In addition, two structures, a tire shop and a quonset hut, have been removed from the site.

The Phase I ESA found that materials categorized as hazardous are used at the production facilities as part of the daily operations. The majority of these materials are maintained at the shop area, and some of these materials are used at the ready-mix batch plant, and at the fuel dispenser area. These materials include: crankcase oil, waste oil, grease, antifreeze, transmission fluid, gear lube, welding gases, and cleaning solvents and were observed in their sealed original containers and in designated storage areas. Minor discoloration was observed within the containment area, however no major cracks were observed within the concrete surfaces of the storage areas.

The fuel dispenser area is located north of the shop / maintenance area. Regulated materials utilized at the fuel dispenser area include diesel fuel, hydraulic oil, propane, and turbine oil. These materials are maintained in multiple ASTs contained within concrete containment areas. Minor staining was observed beneath the fill ports of the ASTs, however the material did not appear to be migrating from the containment area.

Records show that a total of 23 above ground and under ground storage tanks have been in service at some time on this site. Of the 12 Underground Storage Tanks (USTs) reported at the site, eight are reported as being either inactive or removed. The remaining four USTs identified at the site are associated with the asphalt plant and the containment of asphalt emulsion, and are exempt from registration. Of the 11 ASTs at the site, one AST containing asphalt emulsion was recently removed. The remaining 10 ASTs are utilized for various materials associated with the operations at the site. No storage violations were reported for the ASTs at the site.

Information pertaining to historical ASTs at the site included the review of a fire insurance report, dated June 1960, prepared for the site. Five ASTs containing fuel oil and weed oil were identified as being located approximately 100 feet north of the asphalt plant. No additional documentation regarding the installation or removal was available for review.

Review of available documentation at the Ventura County Environmental Health Department (VCEHD) revealed that the Hanson Aggregates Facility is listed with a “case closed” status on the facility listing. The review indicated that a total of six USTs were removed during the period of 1987 through 1991. Contaminated soil resulting in release from the USTs was reported for one of the six USTs removed. The Hanson Aggregates Facility also appears on the list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 (Cortese List) as a leaking underground tank site. The site was also identified on the VCEHD Leaking Underground Fuel Tank (LUFT) list, however appropriate action was taken and the contamination was removed and properly disposed off-site at a licensed disposal facility. The Hanson Aggregates Facility is currently listed by the VCEHD with case closed status in regards to aboveground and underground storage tanks.

The ready-mix batch plant utilizes materials categorized as hazardous in the manufacturing process of concrete. The materials utilized, such as calcium chloride liquid, typically contain high pH levels. These materials were observed to be stored in high-density plastic containers on concrete pads at the ready-mix batch plant facility. Moderate staining was observed on the surface areas of material storage. Additionally, an acid wash area is located adjacent to the ready-mix batch plant operation. The acid wash area consists of two concrete lined bays where concrete batch trucks remove the hardened

concrete using a low pH acid solution. The residual solution is contained within the bays and typically evaporates. Moderate staining and corrosion was observed on the concrete surface of the containment bays. Stained soil was observed to extend approximately 10 feet beyond the entrance to the bays.

The surface areas of the site are unpaved and graded to provide some slope and swale to direct surface water away from on-site buildings. Concrete surfaces at the locations of the shop / maintenance area and the fuel dispenser islands were observed to be highly degraded with cracks and moderate staining. According to personnel at the site, a release of diesel fuel occurred in the vicinity of the fuel dispenser islands impacting the soil adjacent to the concrete pad surface. Approximately 40 cubic yards of diesel-containing soil was excavated and disposed off-site a licensed disposal facility. A report documenting this spill and remediation activities submitted to VCEHD in December 1997.

Review of the historical aerial photographs of the site revealed dark surface staining in the vicinity of the diesel fuel spray rack associated with the asphalt plant at the site. The diesel fuel spray rack is an unpaved area where diesel fuel was formerly sprayed into the beds of the trucks prior to loading the asphalt to reduce the potential for the hot asphalt to adhere to the truck bed during transportation. At the time of the site reconnaissance, the use of diesel fuel has been discontinued per California Department of Transportation (Caltrans) requirements, and surface staining was not observed at this area.

The Phase I ESA identified the following areas that were determined to have potentially impacted the environmental integrity of the site.

- Former washout area at the northeast corner of the site.
- AST containing diesel at northeast portion of the site.
- Truck and equipment storage area at northeast portion of site.
- Fuel staging area near fuel dispensers and AST containment areas.
- Equipment maintenance area.
- Former paint storage and spray area, in the vicinity of the clarifier and the waste water UST.
- Former washout area along the western boundary of the site.
- Wastewater discharge in the area of the recycle plant.
- Ready-mix batch plant, including the batch truck washout area and the acid wash off area.
- Asphalt plant including the diesel fuel spray rack and five ASTs former located approximately 100 feet north of the asphalt plant.

A Limited Phase II ESA of Hanson Aggregates property was prepared in response to the Phase I ESA findings. As part of the Phase II ESA, Padre advanced a total of 24 soil borings and total of 25 soil samples were submitted to a state certified analytical laboratory for chemical analyses. Laboratory analyses of selected samples included total petroleum hydrocarbons (TPH); benzene, toluene, ethylbenzene, and total xylenes (BTEX); volatile organic compounds (VOCs); heavy metals; and pH values.

Laboratory analytical results generally indicated non-detectable concentrations of TPH, BTEX, and VOCs; and background concentrations of heavy metals. Levels greater than 7.0 pH units were reported for all seven soil samples analyzed for levels of pH. The average soil pH value was 9.1 pH units. Background levels of pH for the site range from 7.4 to 8.4 pH units.

Elevated concentrations of TPH as diesel fuel (TPH-d) (2,300 milligrams per kilogram [mg/kg]), were reported for soil samples collected from the vicinity of the diesel fuel spray rack. Soil pH values as great as 12.2 pH units were reported in the vicinity of the former washout area at the northeast corner of the site.

Additional assessment activities were conducted in late 1998. The area of the diesel fuel spray rack was further assessed to determine the vertical and lateral extent of diesel fuel-containing soil and ground water. Following the completion of the assessment activities, approximately 3,500 cubic yards of petroleum hydrocarbon-affected soil in the diesel fuel spray rack area was excavated and either transported off-site for proper disposal or treated on-site utilizing bioremediation techniques. Regulatory closure for the remediation of diesel fuel-containing soil in the vicinity of the diesel fuel spray rack was granted by the Regional Water Quality Control Board, Los Angeles Region in a letter dated June 15, 2000.

Ventura County El Rio Maintenance Yard (APN 132-0-020-205)

This site contains several small office buildings, a fire station, vehicle maintenance buildings, and various portable storage buildings. Information regarding the use of this site prior to 1966 was not found. For the purpose of the assessment the parcel has been divided into four areas referred to as Areas 1 through 4 which are described below.

Area 1 is located at the south end of the parcel and consists of 13 buildings that are used for offices, a fire station, a weight calibration station, and a vehicular electric installation facility. Materials categorized as hazardous were not reported as being used in this area.

Area 2 is located to the north of Area 1, and consists of three buildings that are utilized for offices, vehicle maintenance, a paint and body shop, and for storage of materials categorized as hazardous. Substances observed within this area include one 500-gallon capacity AST containing waste oil and three 55-gallon hydraulic fluid reservoirs. Additionally, materials considered hazardous were observed to be stored in and around three portable storage containers located within the south central portion of this area. Equipment utilized within this area includes four hydraulic lifts, three parts washers, and an air compressor, in addition to ten pole mounted electrical transformers. Minimal staining was observed at the base of the waste oil AST and beneath the parts washers. Moderate leakage from the piping of one of the four hydraulic lift fluid reservoirs was observed. Excessive oil was observed to have leaked from the air compressor located within the northeast portion of the vehicle maintenance building. Additionally, heavy staining was observed within the vehicle maintenance building as a result of vehicle maintenance. The paint and body shop was observed to be well maintained, and hazardous materials were not observed to be stored at this location.

Area 3 is located to the north of Area 2, and consists of two buildings, a shelter of metal construction, and portable storage containers. The buildings in this area are generally utilized for offices, a sign shop, a vehicle wash, vehicle maintenance, hazardous materials storage, and a paint booth. Substances observed within this area include one 500-gallon capacity AST containing motor oil; two 55-gallon drums containing motor oil; small quantities of gasoline and propane; pesticides and other hazardous materials. Equipment utilized within this area includes an air compressor, five hydraulic lifts, four parts washers, and a paint spray booth. Hazardous materials within the area were observed to be sealed in their original containers and properly stored in a specific location. Propane and gasoline were observed to be stored at the exterior of the sign shop in a specific enclosure. The storage area was reported to be in poor condition and minor surficial staining was observed. Minor staining was generally observed at all locations of hazardous materials storage within Area 3.

Area 4 is located at the northernmost portion of the parcel boundary, and consists of four buildings, materials storage sheds, gardening equipment shelter, fuel dispenser islands with associated USTs, and an equipment storage yard. Substances observed within this area include two pallets of dry pellet fertilizer, three 35-gallon drums of liquid fertilizer, and an AST containing asphalt release agent. Equipment utilized within this area includes an air compressor and two pole-mounted electrical transformers. Reportedly, two USTs containing gasoline and diesel fuel are located within this area, and are associated with the fuel dispenser islands, however no other information was provided. Minor staining was observed in the vicinity of the on-site equipment and in the areas of materials storage. Asphalt release agent was observed on the ground surface within the storage area.

Developed and Agricultural Parcels within RiverPark Area 'A'

Previous Phase I site assessment reports were not available for review for the remaining properties within RiverPark Area 'A', including the two existing office buildings in the southwestern corner of RiverPark Area 'A' and the agricultural fields. As the office buildings were recently developed, there is a low potential for impacts related to hazardous materials and no additional investigation of these properties is warranted.

The primary areas of environmental concern are the agricultural fields in RiverPark Area 'A' due to the potential for the historical use of environmentally persistent pesticides on agricultural fields, presence of abandoned oil wells associated with the abandoned El Rio oil field, and possible unauthorized dumping sites. Elevated concentrations of environmentally persistent pesticides have been identified within the upper two feet of soils throughout the Oxnard Plain from the historical application of DDT and Toxaphene during agricultural operations. DDT and Toxaphene are now banned in the United States but have half-lives of greater than 30 years, so elevated concentrations may remain in soils for a very long time. Given the historical use of this part of the site for agriculture, the potential exists for soils to contain residual levels of these pesticides.

A Limited Phase II ESA of the approximate 155-acre agricultural portion of RiverPark Area 'A' was completed by Applied Environmental Technologies (AET). Area A was divided into 15 primary parcels of approximately 14 acres each. Each primary parcel was divided into four quadrants of approximately 3.5 acres each. AET collected one shallow (1 to 6 inches) soil sample from the approximate center of each of the quadrants (60 samples total from Area A). All 60 samples were submitted to a State Certified Analytical Laboratory. The laboratory made one composite sample from each set of four samples. One composite sample was analyzed from each primary 14-acre parcel (Samples C-1 through C-15).

In addition to the 15 composite samples, four discrete samples were collected from a depth of approximately 2-feet below ground surface from 4 of the 14-acre primary parcels to evaluate the vertical extent of any resistant chemicals detected in the shallow soil (Samples S-7, S-12, S-32 and S-40), and two discrete samples were collected from the fallow vacant land in the northwest corner of RiverPark Area 'A', near the Santa Clara River levee (Samples SSB-1 and SSB-2). All 21 samples were analyzed for organochlorine pesticides. Seven samples (C-1, C-3, C-5, C-9, C-12, C-14 and SSB-2) was also analyzed for chlorinated herbicides and five samples (C-3, C-9, C-12, C-14 and SSB-2) were analyzed for the California List of 17 heavy metals.

The laboratory reported that no chlorinated herbicides were detected in any of the six samples analyzed. No mercury, arsenic, berylium, cadmium, selenium, silver, and thallium were detected in the sample analyzed. Concentrations of antimony, barium, chromium, cobalt, copper, lead, molybdenum, nickel, vanadium and zinc were below the Total Threshold Limit Concentration (TTLC) and below 10-times the Soluble Threshold Limit Concentration (STLC) and are considered to be background concentrations.

The laboratory reported that concentrations of DDD, DDE and DDT were detected in all 17 surface samples analyzed. Dieldrin was detected in 15 of the samples and Endrin was detected in 14 of the samples. Other organochlorine pesticides, including Toxaphene, were not detected in any of the samples. The highest concentrations of DDD, DDE and DDT were reported in Sample C-11 at 0.161 mg/kg, 0.337 mg/kg and 0.280 mg/kg, respectively. The highest concentrations of Dieldrin was reported in Samples C-1 and C-11 at 0.051 mg/kg and 0.016 mg/kg, respectively. The highest concentration of Endrin was reported in Sample C-11 at 0.013 mg/kg. The laboratory reported significantly lower concentrations of the pesticides in the two discrete surface samples from the fallow land.

The U.S. EPA Region 9 Preliminary Remediation Goal (PRG - EPA Region 9, November 22, 2000) values were reviewed by AET. The residential soil PRG values for DDD, DDE, and DDT, reported for planning purposes, are: 2.4 mg/kg; 1.7 mg/kg; and 1.7 mg/kg, respectively. The residential PRG values for dieldrin and endrin are 0.03 mg/kg and 18 mg/kg, respectively. While a PRG is not intended as a stand-alone decision-making tool, a chemical concentration exceeding a PRG suggests that further evaluation of the potential risk is appropriate. One sample (C-1) had a concentration of dieldrin at 0.051 mg/kg that exceeded the residential PRG value of 0.03, however it did not exceed the Industrial/Commercial PRG value of 0.15 mg/kg. All other sample results were below residential PRG values.

REGULATORY SETTING

The following section provides a brief description of some of the applicable state and federal regulations relating to the use, storage, and disposal of hazardous substances and petroleum.

Federal Laws/Regulations

Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA). Under CERCLA, owners and operators of real estate where there is hazardous substances contamination may be held strictly liable for the costs of cleaning up contamination found on their property. No evidence linking the owner/operator with the placement of the hazardous substances on the property is required.

CERCLA, also known as Superfund, established a fund for the assessment and remediation of the worst hazardous waste sites in the nation. Exceptions are provided for crude oil wastes that are not subject to CERCLA.

In 1986, Congress established the "innocent landowner defense" in the 1986 amendments to CERCLA known as the Superfund Amendments and Reauthorization Act (SARA). To establish innocent landowner status, the landowner "must have undertaken, at the time of acquisition, all appropriate inquiry into the previous ownership and uses of the property consistent with good commercial and customary practice in an effort to minimize liability." In an effort to clarify what constitutes "all appropriate inquiry," the ASTM has developed a standard that provides specific definition of the steps one should take when conducting a "due diligence" environmental site assessment for commercial real estate.

Federal Water Pollution Control Act of 1972 (Clean Water Act). The Clean Water Act governs the control of water pollution in the United States. This Act includes the National Pollutant Discharge Elimination System (NPDES) program, which requires that permits be obtained for point discharges of wastewater. This Act also requires that storm water discharges be permitted, monitored, and controlled for public and private entities.

Resource Control and Recovery Act of 1974 (RCRA). RCRA was enacted as the first step in the regulation of the potential health and environmental problems associated with solid hazardous and non-hazardous waste disposal. RCRA and the formation of the U.S. Environmental Protection Agency (EPA) to implement the Act provide the framework for national hazardous waste management, including tracking hazardous wastes from point of origin to ultimate disposal.

Hazardous and Solid Waste Amendments of 1984 (HSWA). The HSWA law was enacted to close RCRA loopholes and regulated leaking underground storage tanks specifically.

Asbestos Hazard Emergency Response Act of 1986 (AHERA). This Act is the federal legislation that governs the management and abatement of asbestos-containing materials in buildings.

National Emission Standards for Hazardous Air Pollutants; Asbestos, 40 CFR Part 61. This regulation requires the assessment and proper removal of asbestos-containing materials that could release asbestos when disturbed prior to the demolition of buildings.

California Laws/Regulations

Porter-Cologne Water Quality Control Act (Division 7 of the California Water Code). The Porter-Cologne Act established a regulatory program to protect water quality and protect beneficial uses of the state's waters. The Porter-Cologne Act also established the State Water Resources Control Board and nine regional boards as the main state agencies responsible for water quality in the state. Discharges of wastes (including spills, leaks, or historical disposal sites) where they may impact the waters of the state are prohibited under the Porter-Cologne Act, including the discharge of hazardous wastes and petroleum products. The assessment and remediation of these wastes are regulated by the regional boards, the Los Angeles Regional Water Quality Control Board in the vicinity of the proposed project.

California Code of Regulations, Title 14, Division 3, Oil and Gas. The California Department of Conservation, Division of Oil, Gas and Geothermal Resources (DOGGR) has regulatory authority over the drilling, re-working and abandonment of oil wells, per Public Resources Code Section 3208.1.

Current oil well abandonment standards require the placement of cement plugs placed across oil or gas production zones, fresh water/saltwater interface zones, fresh water zones, and a minimum 25-foot surface plug. Abandoned well casings are required to be cut off at a minimum of five-feet below ground surface, and to have a metal plate with the well number welded to the top of the remaining casing (PRC Section 1723 et seq.). DOGGR also regulates the placement of buildings over abandoned well casings.

PROJECT IMPACTS

Thresholds of Significance

For the purposes of this EIR, a potential impact related to the presence of hazardous materials and/or risk of upset impact of hazardous materials is identified as significant based on the following thresholds:

1. Create a significant hazard to the public or the environment through the routine transport, use or disposal of hazardous materials.

2. Create a significant hazard to the public or the environment through the reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.

3. Emit hazardous emissions or handle hazardous or acutely hazardous materials within one-quarter mile of an existing or proposed school.

4. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would create a significant hazard to the public or the environment.

5. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles or a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area.

6. For a project within the vicinity of a private airstrip, would the project result in the safety hazard for people residing or working in the project area.

7. Impair the implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.

8. Expose people or structures to a significant risk or loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands.

Environmental Impacts

The project would not create a significant hazard to the public or the environment through the routine transport, use or disposal of hazardous materials. The proposed project does not include construction of industrial uses that would use large amounts of hazardous materials or generate hazardous wastes. However, small quantities of hazardous wastes will be generated by residences, businesses, and park facilities. These materials will be required to be handled, stored, transported, and disposed in accordance with state and federal hazardous materials and hazardous waste regulations. Therefore, the impact from the use of these materials by the proposed project is considered less than significant.

Development of the project area could potentially expose construction workers and future residents to potentially hazardous concentrations of environmentally persistent pesticides. The surface and shallow surface soils at the RiverPark Project area that historically been utilized for intensive agricultural production may contain residual concentrations of environmentally-persistent pesticides or heavy metals above adopted human health thresholds. Chlorinated pesticides, such as DDT and Toxaphene, were extensively used throughout the Oxnard plain prior to their prohibition in the mid-1970s. The U.S. Environmental Protection Agency, Region IX, has developed Preliminary Remediation Goals (PRGs) for toxic compounds in soil for residential and commercial properties. The PRGs are health risk standards that have been developed for a wide range of toxic compounds, including volatile organic compounds, metals, semi-volatile organic compounds, and pesticides. The Ventura County Environmental Health Department applies PRGs to clean-up sites when reviewing site remediation and development proposals. Previous remediation programs for former agricultural properties in the Oxnard Plain area have included importing top soil to cover the original surface soils, or scraping off

the upper one to two feet of existing surface soils and placement of the soil under impervious surfaces such as buildings, parking lots, or roads to eliminate exposure pathways for future residents and workers. This impact is considered potentially significant given the historical agricultural use of this portion of the site, but can be mitigated to a level that is less than significant through the application of PRG cleanup targets to former agricultural properties and the use of common remediation techniques.

The results of a Limited Phase II Soil Screening, consisting of the collection and analysis of 60 shallow soil samples composited into 15 samples for laboratory analysis and the analysis of 9 discrete shallow and deeper soil samples, indicate that the Site soils contain concentrations of the organochlorine pesticides DDD, DDE, DDT, Dieldrin and Endrin. The U.S. EPA Region 9 Preliminary Remediation Goal (PRG - EPA Region 9, November 22, 2000) values were compared to the laboratory reported concentrations. The residential soil PRG values for DDD, DDE, and DDT, reported for planning purposes, are: 2.4 mg/kg; 1.7 mg/kg; and 1.7 mg/kg, respectively. The residential PRG values for dieldrin and endrin are 0.03 mg/kg and 20 mg/kg, respectively. While a PRG is specifically not intended as a stand-alone decision-making tool, a chemical concentration exceeding a PRG suggests that further evaluation of the potential risk is appropriate. One sample (C-1) had a concentration of dieldrin at 0.051 mg/kg that exceeded the residential PRG value of 0.03, however it did not exceed the Industrial/Commercial PRG value of 0.15 mg/kg. All other sample results were below residential PRG values. This sample was from a 14-acre area located in the northwestern portion of RiverPark Area'A'. The proposed land use plan from the RiverPark Specific Plan shows that high-density residential uses (apartments) are planned in this portion of the site. As the residential PRG value for dieldrin was exceeded in a sample from this portion of the site, there is some potential health risk to future residents that is considered significant. All of RiverPark Area 'A,' including the 14-acre area where this sample was taken will be mass graded to support construction of the major roads and utilities planned and create the desired drainage patters. The existing elevations range from approximately 70 to 90 feet in RiverPark Area 'A'. The maximum cut or fill in RiverPark Area 'A' will be about 7 feet with an average of 5 feet of material that will need to be removed and recompacted. Overall, approximately 1.9 million cubic yards of earth materials will be excavated in RiverPark Area 'A'. The resulting grades will be 75 to 90 feet. As a result of this grading about 5 feet of the soil in the 14-acre area where sample C-1 was taken will be graded as part of the mass grading process. The removal, mixing and relocation of this soil through the planned grading operation will effectively mitigate the potential impact associated with the concentration of dieldrin detected in this one portion of the site.

The Rio School District (RSD) proposes to construct new elementary and middle schools on the portion of RiverPark Area 'B' now occupied by the El Rio Detention Basin No. 2 and the buffer strip of land located between the basin and Vineyard Avenue. The excavation of the surface and shallow subsurface

soils in the basin is anticipated to have removed potential residual pesticides in the soil. In addition, this 15 foot deep basin will be filled as part of the overall mass grading operation to reclaim the basin for use. As the basin will be filled, risks to school children from environmentally persistent pesticides in the basin is not anticipated to pose a significant risk. The adjacent buffer strip is in agricultural use and may contain residual amounts of pesticides. However, Assembly Bill 387 and Senate Bill 162 require that all new school sites be assessed for potential contamination through the Phase I Environmental Site Assessment process with oversight by the State of California Department of Toxic Substances Control (DTSC). If contamination is suspected at the proposed site, a Preliminary Endangerment Assessment (PEA) must be prepared with oversight by the DTSC. The PEA process includes sampling and chemical analysis of environmental media, an environmental risk evaluation, and a public participation process. Due to the established procedures for assessment and the results of the limited soil sampling and laboratory analysis, this impact is considered less than significant.

Sites within the project site have the potential to contain hazardous waste containers, site contamination, and underground storage tanks which may pose an environmental concern during redevelopment activities. These sites are in various stages of assessment of potential contamination, and remediation of known contaminated sites. The Hanson Aggregates site appears on the list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 (Cortese List) as a leaking underground tank site. The leaking underground storage tank case at the Hanson Aggregates facility site was successfully remediated and the case has been closed by the VCEHD.

Other known leaking underground storage tank sites are present in areas adjacent to the project area and may pose environmental concern to the project site from migration of subsurface contamination. As of October 25, 2001, there are three known active leaking underground storage tank sites in the industrial areas to the north of the Specific Plan Area. These sites consist of:

- Poole Oil Company, 3885 E. Vineyard Avenue. Contamination from this site has reached groundwater and the extent of the contamination is currently being characterized.
- Ventura Oil, 3815 E. Vineyard Avenue. Contamination from this site has been limited to the soil and is being actively remediated.
- Sparkletts/McKesson, 210 Beedy Street. Contamination from this site has been limited to the soil and a preliminary site assessment is underway.

Analysis of the potential for the subsurface groundwater contamination at the Poole Oil site, which is located in the Carnegie Street industrial area immediately east of the existing Small Woolsey/Brigham Mine Pits, is provided in **Section 4.5, Water Resources**. This analysis determined

that no significant potential exists for the contamination on the Poole site to migrate into the Specific Plan Area. Established cleanup goals will be applied to contaminated sites and the sites remediated before development is allowed to occur. Therefore, the existence of contamination at these sites is considered a less than significant impact.

Presence of abandoned oil wells and oilfield site contamination at the project site. Abandoned oil wells are located within the project area which were not abandoned to current Division of Oil, Gas and Geothermal Resources (DOGGR) well abandonment standards. These abandoned oil wells may present a hazard to future residents either as a physical hazard (open hole) or through the leakage of potentially explosive or asphyxiating gasses. This impact is considered significant but can be mitigated to a level that is less than significant through conformance with current regulatory requirements.

Presence of asbestos-containing materials and lead-based paint in existing buildings. Older buildings within the project site may have asbestos-containing materials and lead-based paint. Asbestos-containing materials are required to be abated prior to demolition activities as part of the federal National Emissions Standards Hazardous Air Pollutants (NESHAP) notification process required to be satisfied by the applicant prior to the issuance of any demolition permit. The Ventura County Air Pollution Control District (APCD) reviews NESHAP demolition notifications and is responsible to ensure that asbestos-containing material that could release asbestos fibers during demolition are properly contained and removed from the structure. Loose or flaky lead-based paint can potentially contaminate the ground surface unless properly removed prior to demolition activities. Sandblasting of lead-based paint is prohibited by the APCD. Impacts from the presence of asbestos-containing materials is anticipated to be less than significant. Exposure to lead based paint is potentially significant, but can be mitigated to a level that is less than significant through conformance with current regulatory requirements.

The project does not lie within the jurisdiction of an airport land use plan or within two miles or a public airport or public use airport, or within the vicinity of a private airstrip. The project site is not in close proximity to public or private airports, therefore no significant impacts from aircraft hazards are anticipated.

The project will not impair the implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. The project site will provide adequate emergency access and evacuation of residents in the events of emergencies.

The project site will not expose people or structures to a significant risk or loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands. The project site is located within an area designated as a low wildland fire hazard area, therefore no significant risks from wildland fires are anticipated.[1]

CUMULATIVE IMPACTS

As discussed above, the site assessments prepared for the various portions of the Specific Plan Area included consideration of surrounding properties to determine the potential for cumulative impacts. No conditions on surrounding properties were identified that would result in significant cumulative impacts.

MITIGATION MEASURES

4.13-1 Buildings or enclosed spaces shall not be constructed over abandoned oil wells, where feasible. If no feasible alternative is available, the responsible party shall locate the abandoned oil well casing and inspect the well casing for leaking oil or gasses in the presence of a DOGGR inspector. If the well is found to be leaking, the responsible party shall conduct all appropriate plugging and reabandonment of the well casing to DOGGR specifications.

4.13-2 In the event that an abandoned oil well is encountered during construction activities, the regional DOGGR office in Ventura shall be notified immediately of the discovery. The oil well casing shall be checked for leaking oil or gasses. The DOGGR representative shall determine appropriate actions, up to and including re-abandonment of the oil well casing.

4.13-3 If abandoned oil sumps or associated oilfield site contamination are located within the project site during grading or other construction activities, remediation shall be completed in accordance with existing regulations and subject to the oversight of VCEHD prior to development of the individual properties.

4.13-4 Asbestos and lead-based paint that could potentially result in surface contamination of the project site shall be properly abated from project site buildings prior to demolition activities, with oversight by the APCD and VCEHD.

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1 Source: Ventura County *General Plan*, Hazards Appendix, Fire Hazard Map, 1988.

UNAVOIDABLE SIGNIFICANT IMPACTS

No unavoidable significant impacts related to the presence of hazardous materials will result from the RiverPark Project.