4.6 HAZARDS and HAZARDOUS MATERIALS

4.6.1 Setting

The project site is located in an unincorporated portion of southern Ventura County at the eastern edge of the Oxnard Plain and at the western flank of the Santa Monica Mountains. CSUCI campus is 1.5 miles south of the City of Camarillo, northeast of the intersection of Lewis and Potrero Roads and east of Calleguas Creek. North of the Regional Park portion of the site is agricultural lands. East of the site is land characterized by natural steep mountainous terrain. Areas to the southeast, south, and west are presently in agricultural use. The Camrosa Water District Wastewater Treatment Facility is located west of the southwestern end of the project site and generally west of the main campus. A 28-megawatt cogeneration facility owned by Delta Power Partnership is also located within the project site west of the main campus.

This discussion is based on information and prior analyses conducted for the 1998 CSUCI Master Plan EIR, 2000 CSUCI Master Plan, and 2004 Campus Master Plan SEIR pertaining to Agricultural Resources and the acquisition of additional acres of land that would be removed from agricultural use. The 2004 SEIR addressed the acquisition of 154 total acres north of the campus core. Since 2004, the 154 acres north of the campus core have been acquired (referred to in this document as the "new access road area"), and now CSUCI proposes to acquire an additional 370 acres (referred to in this document as the "open space conveyance area") adjacent to the north side of the campus [Figure 2-3(b)].

The new access road area, north of the campus and east of Calleguas Creek and Lewis Road, was analyzed for proposed improvements and hazards in 2004. The north access road area has historically been used for agricultural purposes and is proposed for improvements. During the first phase of facilities improvements, the proposed primary access road with a vehicular bridge crossing and one pedestrian bridge crossing will be constructed. A new flood control earthen levee will be constructed within the upland area north of Long Grade Canyon Creek, and north of the existing earthen "North Levee". The proposed new levee is shown on Figure 2-4 and on Figure 2-7. Construction of the levee would commence in 2009 concurrently with Phase 1 roadway and bridge projects.

The second phase of facilities improvements within the new access road area includes construction of a secondary vehicular access road with a bridge crossing and a second pedestrian bridge crossing. New athletic fields are also proposed north of the proposed earthen levee and east of Calleguas Creek and Lewis Road. Parking would be developed to serve the proposed new athletic fields within the new access road area north of Long Grade Creek and the proposed new earthen levee. The west parking lot will be located east of the future athletic fields and west of the proposed primary access road. The east parking lot will be located east of the future athletic fields and east of the proposed new primary access road.

Under the proposed project, CSUCI would take control of about 370 additional acres, including 279 acres of Ventura County-owned public open space land adjacent to the north side of campus [see Figure 2-3(b)]. CSUCI proposes to preserve and improve these open space conveyance area into a multi-use regional educational and recreation area, consistent with the

previous intended use of the site.

Rincon Consultants performed a Phase I Environmental Site Assessment (ESA) for the Camarillo Regional Park property (Rincon Consultants, September 15, 2008). The property includes 370 additional acres proposed for conveyance to CSUCI (see Figure 2-3(b)). The potential future conveyance property includes about 235 acres in the central western portion of the proposed conveyance area, 91-acres of property east of the Camrosa Water District retention ponds, the acreage west of the Camrosa Water District retention ponds along Calleguas Creek, and the 35-acre southeastern parcel (see Figure 2-3(b)). The County of Ventura is the current owner of the property and reportedly obtained ownership of the site in 1984. Prior to 1984 the Federal Government (National Parks Service) was the owner of about 270 acres of the property.

The Phase I ESA revealed that the 91-acre parcel was in agricultural use from 1947 through at least 1977, and was formerly used as a spreading ground for sewage sludge processed by the State from the former Camarillo State Hospital (current CSUCI). This 91 -acre area is currently an alkaline meadow. The 35-acre parcel has been undeveloped since 1904, and the 235-acre parcel was in agricultural use from 1947 through the present. Part of the 235-acre parcel historically contained a dairy and pig farm, operated by the former Camarillo State Hospital.

Two potential recognized environmental conditions were identified during Rincon's Phase I ESA: the historical agricultural use of the 91-acre parcel and the parcel to the west of the 35-acre parcel (which encompasses the 235-acre parcel); and the sewage sludge disposed on the 91-acre parcel by the State. The historical agricultural use of the above-mentioned parcels was considered a potential recognized environmental condition as there is the potential for the site to be impacted with pesticides or other chemicals used routinely in agricultural production.

The historical use of the 91-acre parcel as a spreading ground for sewage sludge processed by the State from the former Camarillo State Hospital was also considered a potential recognized environmental condition. However, because the sewage sludge was already treated to some degree before being transported to the parcel and the hospital closed approximately 20 years ago, we would expect any contaminants associated with the sewage to have degraded or volatilized and not have an impact on the property. However, metals in the sewage sludge would not be expected to have degraded and may remain on the property.

During the Phase I ESA, Rincon also identified the presence of two plugged and abandoned dry oilfield holes on the subject property. The plugged and abandoned dry holes were reportedly located in the northeastern portion of the 35-acre parcel and the southeastern portion of the 91-acre parcel. However, these locations were not confirmed during the site reconnaissance. The threat of contamination related to the uncompleted, abandoned dry holes is likely low, due to the fact that the wells were never completed as producing wells. Further discussion of these issues can be found in section 4.6.2, *Impact Analysis*, below.

a. Regulatory Setting. State and Federal governmental agencies regulate the use, storage, and transport of hazardous materials through numerous legal and regulatory requirements. Among other requirements, existing regulations require businesses that store, use, or manufacture specific amounts of hazardous materials to report the quantities and types of materials to the local administering agency. For the City of Ventura, the Ventura County

Environmental Health Department (VCEHD) is the regulatory agency with primary responsibility for ensuring that businesses in the County handle, store, and dispose of and clean up hazardous materials in accordance with applicable laws and regulations. The Ventura Fire Department also implements requirements pertaining to the use and storage of flammable and explosive materials. Additionally, the Ventura County Air Pollution Control District (VCAPCD) oversees the permitting process for hazard remediation for certain hazardous materials.

The U.S. Environmental Protection Agency sets Preliminary Remediation Goals for residential and industrial uses, which are normally utilized in determining the allowable levels of a potential contaminant at a particular site. Similarly, the California Title 22 Total Threshold Limit Concentration (TTLC) is used for determining whether a material is classified as a hazardous waste. However, the regulatory status of pesticide residues is dependent upon how the residue was formed. Pesticide residues that result from legal use of the product are not subject to hazardous waste regulations, because the material is present as a result of its intended use. Residues from spills are subject to hazardous waste regulations, because spills are not an intended use and a spilled material is a "waste" if it can no longer be used. In addition, if a soil containing pesticide residue is disposed of, then the hazardous waste regulations apply because the soil has become a waste. Regardless of whether the hazardous waste regulations apply, adverse health effects can result from exposure to pesticide residues. Mitigation of adverse health effects may be warranted, even if the material is not classified as a hazardous waste.

b. Hazardous Materials and Potential Hazardous Materials. The plan area is located on lands that historically have been for sewage sludge spreading, and historically and continue to be used for agricultural production.

Agricultural Pesticides. In general, pesticide use can result in health impacts to those who come in contact with such chemicals. The Ventura County Agricultural Commissioner's office retains a registry of pesticides used on individual agricultural parcels in the County. Although most of the area between Lewis Road and Long Grade Creek has been organically farmed for at least the past few years, due to the diversity of crops produced over its history, it is likely that a variety of pesticides have been applied in this area through past management practices.

The California Office of the U.S. Environmental Protection Agency (Cal EPA), Department of Pesticide Regulations (DPR) is the state agency that sets regulatory standards for pesticides, whether in homes or agriculture. DPR establishes regulatory practices that determine when and how a pesticide is applied and establishes safety precautions. The California Occupational Health and Safety Administration (Cal/OSHA) also establish workplace standards for pesticide use to protect farm workers. DPR uses "signal words" to classify pesticides. This classification ranges, in order of decreasing severity, from "danger," to "warning," to "caution." These classifications are based upon testing of the entire formulation, active and inactive ingredients, and indicate acute, short term health hazards, such as those resulting from inhalation, eye contact, ingestion, dermal absorption, and dermal irritation. Additionally, the long-term effects of exposure to some of these pesticides may be considered carcinogenic. A lifetime exposure to a pesticide (70 years) is assumed for a carcinogen.

Methyl bromide is a pesticide used in the County of particular concern that has demonstrable health effects. In California, methyl bromide is typically used on strawberries, colored peppers, and nursery stock. This pesticide was phased out of production in 2005. The plan area has not been used to cultivate strawberries, colored peppers, or nursery stock, so the use of methyl bromide in this area is unlikely prior to the 2005 phase out.

Pesticide use is governed by the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA) in the EPA Office of Pesticide Programs. The County has not established recommendations for land use setbacks or buffers between the land on which pesticides, other than methyl bromide, are applied and adjacent land uses, though the State of California has established setback requirements for certain pesticides. The County does require that all pesticides be used pursuant to the manufacturers' instructions and that the pesticides are sprayed so as to prevent drift onto nearby properties.

However, the Ventura County Agricultural Policy Advisory Committee (APAC) comprised of five growers who advise the Board of Supervisors and other decision makers on matters affecting the agricultural industry and resources, generally recommends the following standard setbacks and buffers:

- A minimum 150-foot setback (in conjunction with a vegetative buffer) or 300-foot setback (without vegetative buffer) between urban or rural residential uses and agricultural production. The setback is to be located on the development, not the agricultural property.
- If it is not feasible for the development to provide a 150 or 300 foot setback, the developer is required to acquire an easement on the adjoining farmland (if the grower is the property owner) or enter into an agreement with the grower (if the grower is not the property owner and leases the farmland) to compensate the grower for the costs associated with the necessary modification of agricultural practices in the easement/agreement area (e.g., application of pesticides by hand rather than aerial or speed sprayers; reduction in quality or quantity of commodities grown within easement/agreement area because pesticides are not applied to the area; use of noise-producing agricultural equipment during weekday hours, etc.). The easement/agreement could be designed to terminate if the agricultural property is developed in the future;
- A vegetative buffer within the setback area. The buffer should consist of two staggered rows of trees/bushes characterized by foliage that extends from the base of the plant to the crown, 50 to 75% porosity (i.e., approximately 50 to 75% of the vegetation is air space) and a mature height of 15 feet or more (if adjacent to tree crops; plants adjacent to row crops would not need to be as tall) to effectively minimize pesticide drift or dust effects. The APAC has previously recommended that the buffer consist of a mix of native California plants such as Toyon (*Heteromeles arbutifolia*), Sugarbush (*Rhus ovata*), Laurel sumac (*Malosma laurina*) or other species with the indicated characteristics to reduce irrigation and maintenance needs. In urban settings, non-native plant species with the indicated characteristics may be more appropriate, such as Italian cypress (*Cupressus sempervirens*). To provide adequate coverage, the two staggered rows should be located 5 feet apart and consist of a minimum 5-gallon plant size planted 10 feet on center.

- Minimum 8-foot high wall or reinforced chain link fence between urban/rural residential use and agricultural operation to reduce potential trespassing, vandalism, and pilferage.

The APAC has also consistently recommended that a 300-foot setback be provided between agricultural operations and the structures and outdoor playfields of proposed schools. The APAC finds that roads, parking lots, landscaped areas (but not bike trails or other outdoor recreational activities) or maintenance/storage buildings where people are present for very transitory periods, are the only acceptable uses within the setback between agricultural operations and urban/residential or school uses. Depending on the type of proposed uses and impacts that would occur to nearby agricultural operations, the APAC also has recommended additional site-specific measures (e.g., to control dust impacts, alleviate agricultural-residential traffic conflicts, etc.)

Sewage Sludge. Biosolids are primarily organic materials produced during wastewater treatment which may be put to beneficial use. The Environmental Protection Agency's 40 CFR Part 503, *Standards for the Usage and Disposal of Sewage Sludge* (the Part 503 Rule) requires that wastewater solids be processed before they can be beneficially used. Alkaline stabilization helps to minimize the potential for odor generation, destroys pathogens, and reduces the material's vector attraction potential. Based on information provided during our Phase I ESA regarding the 91.07 acre parcel, this parcel is now considered an "alkaline meadow" indicating that stabilization of the sewage sludge occurred through the addition of alkaline materials to raise the pH level to make the conditions unfavorable for the growth of organisms such as pathogens. However, any other materials, other than biological or organic, remaining in the sludge may not have been removed during this alkaline treatment process. The County of Ventura Environmental Health Department would oversee any remedial activities pertaining to sewage-impacted soil at the property.

4.6.2 Impact Analysis

a. Methodology and Significance Thresholds. Previous analyses of hazards of the project site were prepared for the Master Plan Area as part of the 1998 Campus Master Plan FEIR (1998 FEIR) , the 2000 Campus Master Plan SEIR (2000 SEIR), and the 2004 Campus Master Plan SEIR (2004 SEIR), under Agricultural Resources, which have been incorporated herein by reference. Potential hazards were previously identified to occur as a result of the CSUCI Master Plan, as discussed in the 1998 FEIR, 2000 SEIR, and the 2004 SEIR. The following discussion is limited to changes and additional impacts that would result from the proposed facilities projects within the new access road area, and within the potential future open space conveyance area.

b. Project Impacts and Mitigation Measures. Hazards that may affect the proposed 2009 Facilities Projects are described below.

09-Impact HAZ-1 Previous agricultural use of the new access road area and the potential future conveyance area could have caused the accumulation of pesticides in the soil. Development in these areas could result in exposure of persons to

concentrations of agricultural contaminants and potential health risks. This is a Class II, *significant but mitigable*, impact.

Ideally, a pesticide is applied to the soil, remains in the area long enough to perform its desired function, and then degrades into harmless by-products. However, different pesticides degrade at different rates; therefore, it is possible for some pesticides to remain for long periods of time within the soil, potentially accumulating over time. Through the various exposure pathways for humans – dermal exposure, inhalation, and ingestion – concentrations of pesticides in soil may present a health hazard. Because the area between Lewis Road and Long Grade Creek has formerly been in agricultural production, accumulation of pesticides in soil may have occurred and could present a health risk to future users of the site. Therefore, mitigation is recommended to evaluate the potential for soil contamination related to prior agricultural production.

Mitigation Measures. The following measure was adapted from the mitigation recommended for this impact in the 2004 Master Plan update EIR. Deleted language is shown in ~~strikethrough~~ and new language is shown in underline format.

~~**03-AG-2**~~

09-HAZ-1 **Agricultural Contamination.** Prior to ~~the acquisition of~~ soil disturbance within the 158-acre area (new access road area), soil sampling shall be conducted to determine the potential presence of agriculture-related contaminants. If contaminants are present on the site in concentrations exceeding regulatory action levels, a health risk assessment and/or remediation of the affected soils may be required. If necessary, remediation shall be conducted in accordance with federal, state, and local regulations and shall be performed under the oversight and to the satisfaction of the Ventura County Environmental Health Division. Remediation shall utilize appropriate measures such as onsite sequestration or offsite disposal.

Onsite Sequestration. The upper ½ foot of soil (or as recommended by the Ventura County Environmental Health Division) shall be removed from contaminated locations, and shall be sequestered on-site in a manner approved by the Ventura County Environmental Health Division. Sequestration necessitates isolation from human and wildlife contact and would require that the soil be buried onsite at depths unlikely to be disrupted, or would require capping by pavement or asphalt. Areas suitable for capping might include beneath the parking lots, or beneath roadways. Onsite sequestration shall be conducted as directed by Ventura County Environmental Health.

Offsite Disposal. The upper ½ foot of soil shall be removed from contaminated areas and shall be transported off site and disposed

of as hazardous waste at an approved facility in accordance with applicable rules and regulations.

Significance After Mitigation. With implementation of the above mitigation measure, health risks associated with potential exposure to agricultural contaminants would be reduced to a less than significant level.

09-Impact HAZ-2 **The previous use of the 91-acre parcel (see Figure 2-3(b)) within the potential future open space conveyance area as a spreading ground for sewage sludge processed by the State from the former Camarillo State Hospital could have contaminated the soil in this area. Reuse of this area for a multi-use regional educational and recreation area could result in exposure of persons to concentrations of organic or inorganic contaminants and potential health risks. This is a Class II, *significant but mitigable,* impact.**

The 91-acre parcel (see Figure 2-3(b)) was historically used as a spreading ground for sewage sludge processed by the State from the former Camarillo State Hospital. However, because the sewage sludge was already treated to some degree before being transported to the parcel and the hospital closed approximately 20 years ago, we would expect any contaminants associated with the sewage to have degraded or volatilized and not have an impact on the property. There is still the potential for metals in the sewage sludge to exist in the soil, as metals would not be expected to have degraded. Therefore, mitigation is recommended to evaluate the potential for soil contamination related to prior sewage sludge spreading.

Mitigation Measures. The following measure is recommended:

09-HAZ-2 **Sewage Sludge.** Prior to soil disturbance on the 91- acre parcel, soil sampling shall be conducted to determine the potential presence of metals, volatile organic compounds, and nitrates. If contaminants are present on the site in concentrations exceeding regulatory action levels, a health risk assessment and/or remediation of the affected soils may be required. If necessary, remediation shall be conducted in accordance with federal, state and local regulations and shall be performed under the oversight and to the satisfaction of the Ventura County Environmental Health Division. Remediation could include off-site disposal, or on-site sequestration, depending on the contaminant.

Significance After Mitigation. With implementation of the above mitigation measure, health risks associated with potential exposure to sewage sludge contaminants would be reduced to a less than significant level.

09-Impact HAZ-3 **Two plugged and abandoned dry holes were reportedly located in the northeastern portion of the 35-acre parcel and the southeastern portion of the 91-acre parcel during the 2008 Phase I ESA for portions of the potential future open space conveyance area. This is a Class II, *significant but mitigable,* impact.**

The Phase I ESA identified the presence of two plugged and abandoned dry oilfield holes on the potential future open space conveyance area. However, these locations were not confirmed during the site reconnaissance. The threat of contamination related to the uncompleted, abandoned dry holes is likely low, due to the fact that the wells were never completed as producing wells. However, mitigation is recommended if future development is ever proposed in these two areas.

Mitigation Measures. The following measure is recommended:

09-HAZ-3 **Oil Wells.** Prior to any future development in the vicinity of the former oil wells in the northeastern portion of the 35-acre parcel and the southeastern portion of the 91-acre parcel as shown on Figure 2-3(b), the California Division of Oil, Gas and Geothermal Resources shall be contacted to determine if the oil wells need to be re-abandoned or any other constraints are to be placed on future work in these areas.

Significance After Mitigation. With implementation of the above mitigation measure, health risks associated with potential exposure to plugged and abandoned oil wells would be reduced to a less than significant level.

c. Cumulative Impacts. Buildout of CSUCI would have the potential to expose future area residents, employees, and visitors to hazards by developing and redeveloping areas that may previously have been contaminated. The magnitude of hazards for individual projects would depend upon the location, type, and size of the development and the specific hazards associated with individual sites. Therefore, hazard evaluations would need to be completed on a case-by-case basis. If pesticide or sewage sludge (residual metals or nitrates) contamination is found to be present on sites of planned and future development, these conditions would be required to be mitigated so as to meet regulating agency remediation goals. Implementation of appropriate remedial action on all contaminated sites on a case-by-case basis would avoid potential hazard impacts associated with cumulative development on the CSUCI campus.