4.7 HAZARDS AND HAZARDOUS MATERIALS

4.7.1 INTRODUCTION

The Hazards and Hazardous Materials chapter of the EIR: describes the potential for existing hazards and hazardous materials to occur within the project area; analyzes the potential for workers at the project site to be exposed to such hazards; assesses the potential for impacts resulting from hazards or hazardous materials that could be used on the project site as a result of the proposed mining and reclamation operations; and analyzes potential wildfire risks at the project site. Information included in this chapter is drawn primarily from the Phase I and Limited Phase II Environmental Site Assessment (ESA) prepared for the project by Nichols Consulting Engineers, Chtd. (NCE) (see Appendix I),[1] the Cache Creek Area Plan (CCAP) Update EIR,[2] as well as the Yolo County General Plan[3] and the Yolo County General Plan EIR.[4]

In response to the NOP, the County received comments related to hazards and hazardous materials from a number of residents in the area. These commenters expressed that the DEIR should consider the following:

- Potential impacts regarding the abandonment of existing well systems (California Department of Conservation – Division of Oil, Gas, and Geothermal Resources);
- Increased mosquito population from the reclaimed lake (Resident);
- Potential impacts from vector-borne diseases (Resident);
- Potential impacts from the disposal of asphalt remnants (Resident);
- Potential impacts from the handling of hazardous materials, hazardous waste generation, aboveground storage tanks, and waste tires (Yolo County Environmental Health Division); and
- Potential impacts related to emergency access and evacuation (Resident).

The CEQA Guidelines note that comments received during the NOP scoping process can be helpful in "identifying the range of actions, alternatives, mitigation measures, and significant effects to be analyzed in depth in an EIR and in eliminating from detailed study issues found not to be important." (CEQA Guidelines Section 15083.) Neither the CEQA Guidelines nor Statutes require a lead agency to respond directly to comments received in response to the NOP, but they do require that the comments be considered. Consistent with these requirements, these comments have been carefully reviewed and considered by Yolo County and are reflected in the analysis of impacts in this chapter. Appendix B includes all NOP comments received.

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1 Nichols Consulting Engineers, Chtd. *Phase I and Limited Phase II Environmental Site Assessment, Shifler Property, Yolo County APNs 025-430-01, 025-430-02, 025-120-32, and 025-120-33, Yolo County, California.* September 27, 2007.

2 Yolo County. *Cache Creek Area Plan Update Project, Final Environmental Impact Report. SCH# 2017052069.* December 2019.

3 Yolo County. *2030 Countywide General Plan.* November 10, 2009.

4 Yolo County. *Yolo County 2030 Countywide General Plan Environmental Impact Report. SCH# 2008102034*. April 2009.

Concepts and Terminology

The following terms are used throughout this chapter and have important bearing upon properly evaluating hazards and hazardous materials within the context of the CEQA. As a result, this section begins by providing definitions of key terms, as follows:

A Recognized Environmental Condition (RECs) indicates the presence or likely presence of hazardous substances in, on, or at a property due to a release into the environment, under conditions indicative of a release to the environment, or under conditions that pose a material threat of a future release to the environment.

A Fire Hazard Severity Zone (FHSZ) is a designation used by Cal Fire to indicate the potential wildfire risk associated with an area.

4.7.2 EXISTING ENVIRONMENTAL SETTING

The following setting information provides an overview of the existing conditions of the project site and surrounding area in relation to hazards and hazardous materials.

Description of Regional Environment

The project region is characterized primarily by continuous agricultural lands within a broad, alluvial valley surrounded by distant rolling hills. Cache Creek generally meanders west to east and runs into the Sacramento Valley, ending in a settling basin east of Woodland, eventually flowing into the Sacramento River. Regional topography is generally flat. Vegetation, other than agricultural crops, is primarily limited to grasslands and ornamental landscaping.

The region is rural and sparsely populated, with urban development being primarily concentrated within small towns such as Capay, Esparto, and Madison. Rural residences, farm dwellings with various accessory and agricultural structures, and commercial uses sparsely dot the landscape. Roads provide interconnections between agricultural properties having various crops, such as row crops, orchards, and vineyards. Telephone and electricity poles frequently parallel the roadways throughout the region. Aggregate mining operations, inclusive of above-ground structures and equipment, are prevalent throughout the region, in particular, along the banks of Cache Creek, within the CCAP boundaries.

Description of Local Environment

The central and southern portions of the project site consist primarily of actively managed agricultural land. Crops planted at the site over the past decade have included wheat, alfalfa, tomatoes, cucumbers, canola, sunflower, and safflower. The northeastern portion of the site previously contained a ranch headquarters (Stevens Ranch); however, the structures that comprised the headquarters were burned down as part of a fire department training exercise in the late 1970s or early 1980s. Currently, structures do not exist at the location and the area is currently overgrown by low-lying brush. The northern portion of the site consists of 52 scattered oak trees and ruderal grassland vegetation.

Moore Canal, a concrete-lined water conveyance structure owned and operated by the Yolo County Flood Control and Water Conservation District (YCFCWCD), bisects the central portion of the site from west to east. Magnolia Canal is an unlined water conveyance structure owned and operated by the YCFCWCD that intersects the Moore Canal on the northeastern portion of the project site. An existing groundwater well used for agricultural purposes is located along the western site boundary. In addition, a domestic water supply well is located at the location of the

former ranch headquarters. The northern portion of the site also includes an electric conveyor and associated gravel road formerly used to transport mined aggregate from the Teichert Woodland Storz mining site to the Woodland Plant located north of the project site. The natural environment of the immediate vicinity is similarly characterized by agricultural lands, but also includes Cache Creek, immediately north of the project site. Riparian woodland vegetation is located along portions of the banks of Cache Creek.

The environment of the immediate vicinity is dominated by aggregate mining operations to the north; a golf course (Yolo Fliers Club), rural residential, airport (Watts-Woodland), and farm dwellings to the west/southwest; rural residential and cemetery (Monument Hill Memorial Park cemetery) to the south; and farm dwellings to the east. The aggregate mining operations to the north consist of Teichert's Storz mining site to the northwest and Teichert's Woodland Plant site to the northeast, beyond which is Teichert's Schwarzgruber mining site. The Teichert-Woodland Plant has been in continuous operation for over 50 years.

The following discussion focuses on the potential RECs associated with the project site. A REC indicates the presence or likely presence of hazardous substances in, on, or at a property due to a release into the environment, under conditions indicative of a release to the environment, or under conditions that pose a material threat of a future release to the environment.[5]

Additionally, the following includes a discussion of historical RECs associated with the project site. An historical REC indicates a past release of hazardous substances or petroleum products that has occurred in connection with a property and has been addressed to the satisfaction of the applicable regulatory authority, such that the property does not include any use limitations in respect to future activities on the property.

On-Site Recognized Environmental Conditions

Based on the Phase I ESA prepared for the project site, NCE determined that the project site did not contain evidence of significant soil staining, stained pavement, septic systems, or stressed vegetation. While a small area of diesel-stained soil was observed at the location of an irrigation water pump, the staining was determined to be insubstantial. In addition, while the site contains two existing electrical transformers, evidence of polychlorinated biphenyl (PCB) leakage was not observed. However, an existing groundwater well is located on-site within the western portion of Parcel 2, as well as a domestic water supply well located at the location of the former ranch headquarters within Parcel 1. In addition, an abandoned gas well is located within the southern portions of Parcels 2. The gas well was abandoned in 1994. Other potential RECs identified in the Phase I ESA include the disposition and potential on-site disposal of waste oil and solvents commonly associated with equipment maintenance, and potential contamination within the refuse piles located to the north and northeast of the former ranch headquarters. The southern portion of Parcel 3 also includes a gas well, abandoned in 1985; however, this gas well is located outside of the project site boundaries, along County Road 22.

Lastly, because the Phase I ESA indicated that storage and disposal of agricultural chemicals may have occurred at the former ranch headquarters, a Phase II ESA was prepared in order to determine whether soils containing pesticide or herbicide contaminants are present within the project site.

[5] ASTM International. *ASTM E1527, Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process.* 2013.

The Limited Phase II ESA consisted of a geophysical investigation to locate buried objects such as underground storage tanks (USTs), wells, septic tanks, or any other anomalous objects in the vicinity of the former ranch headquarters. The geophysical investigation included use of a magnetometer to map a magnetic gradient across the project site. The geophysical investigation was followed by a backhoe investigation, which included excavation of a series of backhoe test pits at the location of anomalies identified by the geophysical investigation, as well as several locations in the vicinity of the existing refuse piles. A total of 25 test pits were excavated. NCE did not note any signs of soil staining, odors, obvious signs of containers of agricultural chemicals, or visible sign of spilled chemicals within the test pits. A deteriorated metal tank of undetermined use was found in one of the test pits; however, signs of soil staining or odors were not noted in the soils around the tank.

It should be noted that while an attempt was made to locate potential septic tanks associated with the former ranch headquarters using radar scans, the clay content of the soil at the study area was too high for the radar to penetrate, and the scans were inconclusive. Thus, the potential exists for the site contain an undocumented septic tank. In addition, NCE identified a steel pipe near the former ranch headquarters that was buried to a depth of approximately four feet below the ground surface, extending to a depth of approximately 20 feet. The purpose and previous use of the pipe is unknown.

Nearby Recognized Environmental Conditions

The Phase I ESA evaluated sites located near the project site that are listed in federal, State, and/or local databases of hazardous materials sites. Per the Phase I ESA, one HAZNET site was identified within 0.5-mile of the project site, and two ASTs were identified within 0.75-mile of the project site. Violations have not been reported at any of the three identified sites; thus, the sites were deemed to not pose a substantial risk to the project site.

In addition, the Phase I ESA identified 27 “Orphan Sites”, which are sites that could not be mapped or "geocoded" due to inadequate address information. A review of the Orphan Site locations revealed that all but two are located downgradient of the project site (with respect to groundwater flows) and are therefore unlikely to impact conditions at the site. The two exceptions included Cache Creek Regional Park, located at 1475 State Route 16, and Monument Hill Memorial Park cemetery, located at 35036 County Road 22. Cache Creek Regional Park is listed in a database for USTs and is located approximately one mile southwest of the project site. Due to the distance and cross-gradient location of the Cache Creek Regional Park, potential USTs are unlikely to impact conditions at the project site. Monument Hill Memorial Park cemetery is also listed in a database for USTs and abuts the southern project site boundary. According to Yolo County Environmental Health Department (YCEHD) records, no regulatory violations related to previous or existing UST(s) at the cemetery have been reported. In addition, the Monument Hill Memorial Park cemetery is not included in the State’s database of leaking UST sites. Thus, the Monument Hill Memorial Park cemetery is not considered to pose a risk to the project site.

Airport Hazards

The nearest airport to the project site is the privately-owned Watts-Woodland Airport, located immediately southwest of the site across County Road 94B. The project site lies within airport safety zones identified in the Watts-Woodland Airport Comprehensive Land Use Plan (CLUP).[6] As shown in Figure 10 of the CLUP, the northwestern portion of the project site north of the Moore

[6] Sacramento Area Council of Governments. *Watts-Woodland Airport, Comprehensive Land Use Plan.* March 1993.

Canal lies within Safety Area 2 (Approach-Departure Zone), while the remainder of the project site lies within Safety Area 3 (Overflight Zone).

Depending on location and type, projects occurring within the vicinity of the airport need to conform to the guidelines stipulated in the LUCP. In addition, the Federal Aviation Administration (FAA) has published guidance regarding the protection of navigable airspace in the Code of Federal Regulations (CFR), Title 14, Part 77. Part 77 establishes standards for determining obstructions to navigable airspace and the effects of obstructions on the safe and efficient use of airspace.

Evacuation Routes

Per the Yolo County Office of Emergency Services, the project site is located within Evacuation Zones 35 and 36.[7] Within Zones 35 and 36, State Route 16 and County Road 20 are identified as evacuation routes. The nearest identified evacuation rally point is at the Willow Oak Fire Station, located at 18111 County Road 94B, to the southwest of the project site. Figure 4.7-1 and Figure 4.7-2 provide an overview of the identified evacuation routes and rally points in the project vicinity.

4.7.3 REGULATORY CONTEXT

The following is a description of federal, State, and local environmental laws and policies that are relevant to the review of hazards and hazardous materials under the CEQA process.

Federal Regulations

The following are the federal regulations relevant to hazards and hazardous materials.

Occupational Safety and Health Act of 1970

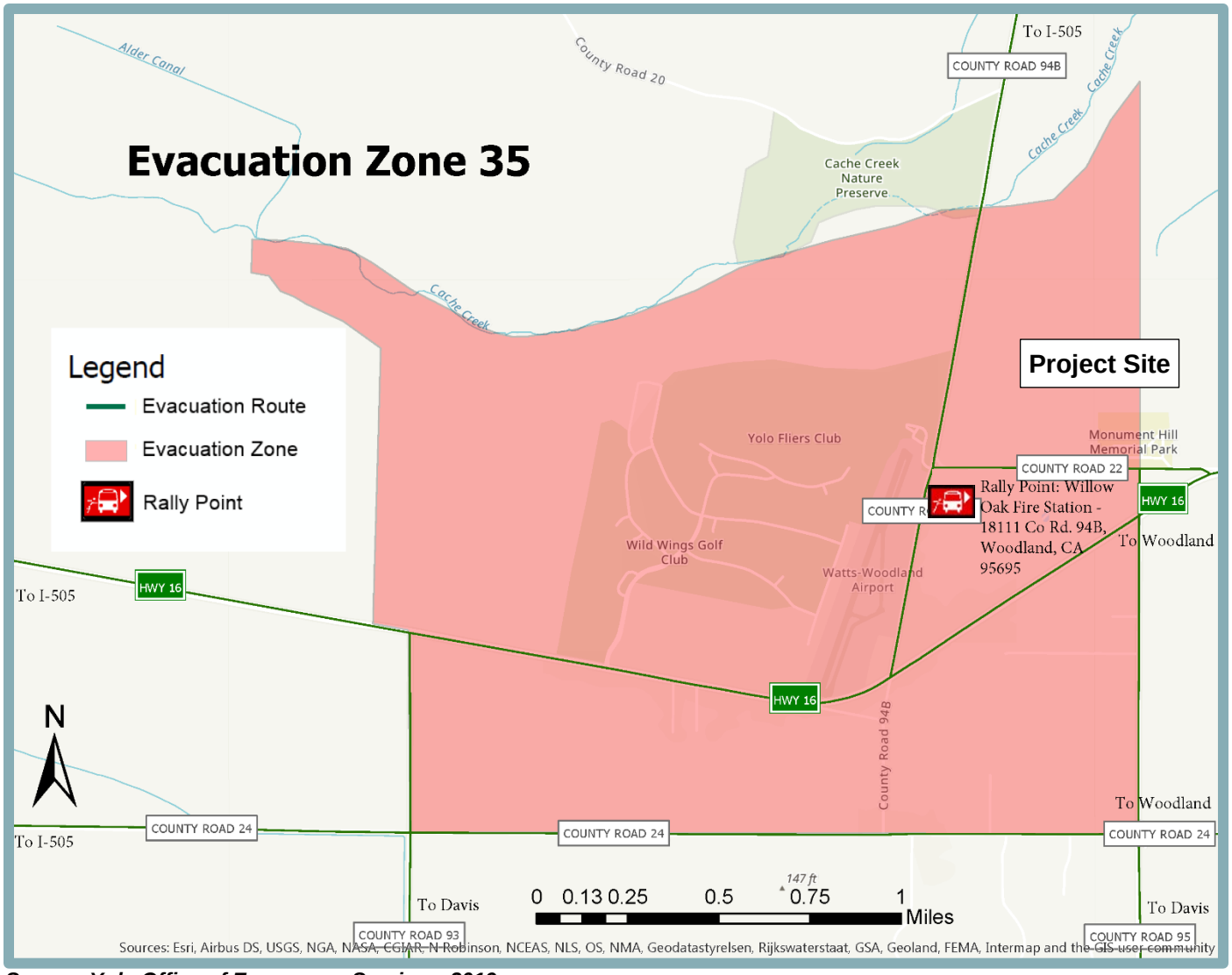
Congress passed the Occupational and Safety Health Act to ensure worker and workplace safety. Their goal was to make sure employers provide their workers a place of employment free from recognized hazards to safety and health, such as exposure to toxic chemicals, excessive noise levels, mechanical dangers, heat or cold stress, or unsanitary conditions. In order to establish standards for workplace health and safety, the Act also created the National Institute for Occupational Safety and Health (NIOSH) as the research institution for the OSHA. OSHA is a division of the U.S. Department of Labor that oversees the administration of the Act and enforces standards in all 50 states. Operations on the project site would be subject to OSHA regulations related to employment conditions.

Superfund Amendments and Reauthorization Act of 1986

The Superfund Amendments and Reauthorization Act (SARA) of 1986 reauthorized CERCLA to continue cleanup activities around the country.

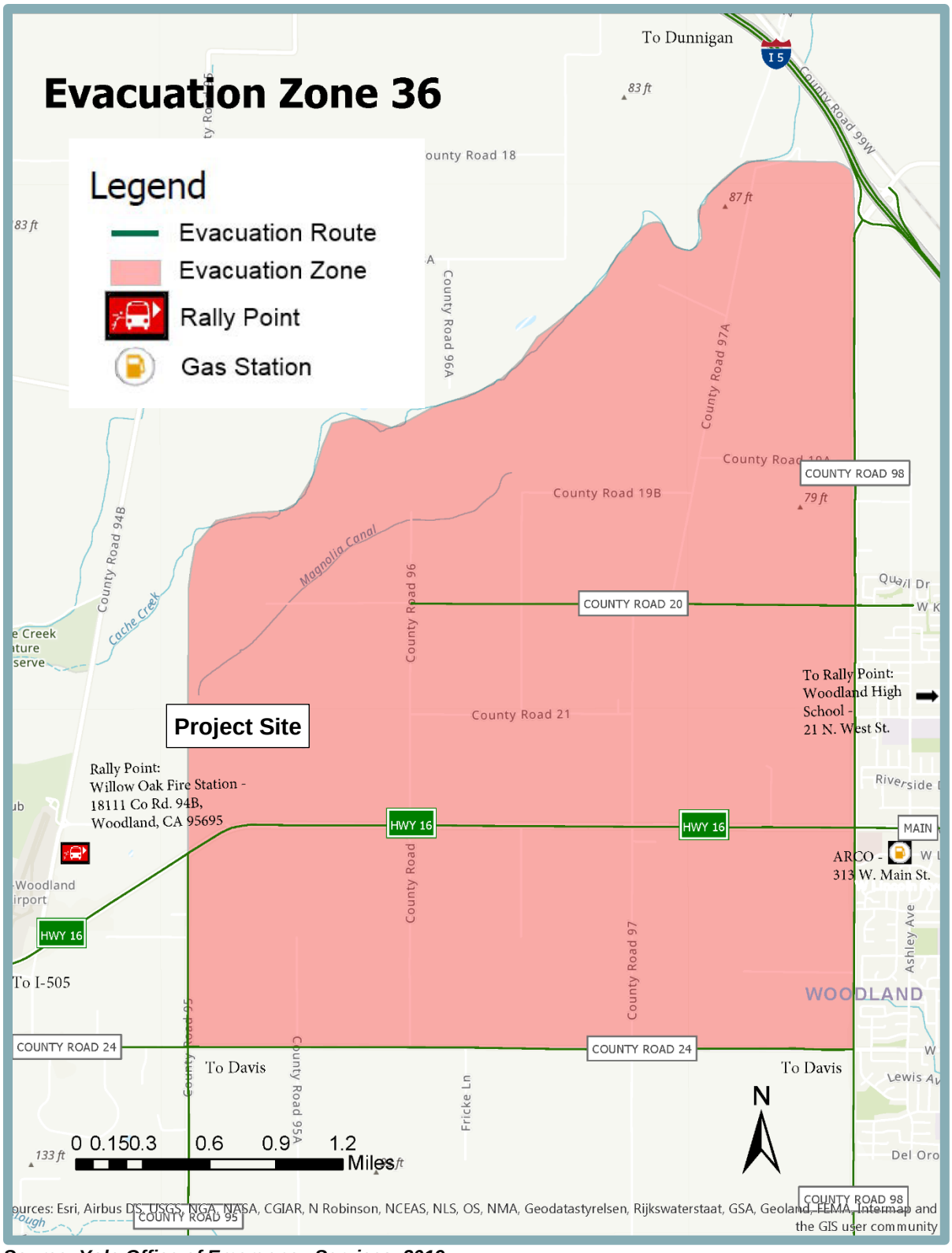
[7] Yolo Office of Emergency Services. *Know Your Zone.* Available at: https://yolo.maps.arcgis.com/apps/webappviewer/index.html?id=5458e2e8c8c54e19923da248ac3add0c/. Accessed August 2019.

Figure 4.7-1
Local Evacuation Routes: Zone 35



Source: Yolo Office of Emergency Services, 2019.

Figure 4.7-2
Local Evacuation Routes: Zone 36



Source: Yolo Office of Emergency Services, 2019.

Several site-specific amendments, definitions clarifications, and technical requirements were added to the legislation, including additional enforcement authorities. In addition, Title III of SARA authorized the Emergency Planning and Community Right-to-Know Act. SARA, Title III provides funding for training in emergency planning, preparedness, mitigation, response, and recovery capabilities associated with hazardous chemicals. Title III of SARA addresses concerns about emergency preparedness for hazardous chemicals, and emphasizes helping communities meet their responsibilities in preparing to handle chemical emergencies and increasing public knowledge and access to information on hazardous chemicals present in their communities.

Toxic Substances Control Act (15 U.S.C. §2601 et seq. [1976])

The Toxic Substances Control Act (TSCA) of 1976 provides USEPA with authority to require reporting, record-keeping and testing requirements, and restrictions relating to chemical substances and/or mixtures. Certain substances are generally excluded from TSCA, including, among others, food, drugs, cosmetics and pesticides. TSCA addresses the production, importation, use, and disposal of specific chemicals including polychlorinated biphenyls (PCBs), asbestos, radon and lead-based paint.

State Regulations

The following are the State regulations relevant to hazards and hazardous materials.

Cortese List

Per Government Code Section 65962.5(a), the DTSC shall compile and update as appropriate, but at least annually, and shall submit to the Secretary for Environmental Protection, a list of all of the following:

1. All hazardous waste facilities subject to corrective action pursuant to Section 25187.5 of the Health and Safety Code.
2. All land designated as hazardous waste property or border zone property pursuant to former Article 11 (commencing with Section 25220) of Chapter 6.5 of Division 20 of the Health and Safety Code.
3. All information received by the DTSC pursuant to Section 25242 of the Health and Safety Code on hazardous waste disposals on public land.
4. All sites listed pursuant to Section 25356 of the Health and Safety Code.

Central Valley Regional Water Quality Control Board

The Central Valley Regional Water Quality Control Board (CVRWQCB) is responsible for implementing regulations pertaining to management of soil and groundwater investigation and cleanup. The CVRWQCB's regulations are contained in Title 27 of the California Code of Regulations (CCR). The DTSC, CVRWQCB, and/or a local agency typically oversees investigation and cleanup of contaminated sites.

California Health and Safety Code

The handling and storage of hazardous materials is regulated on the federal level by the USEPA under CERCLA as amended by the SARA. Under SARA Title III, a nationwide emergency planning and response program was established that imposed reporting requirements for businesses which store, handle, or produce significant quantities of hazardous or acutely toxic substances as defined under federal laws. SARA Title III required each state to implement a comprehensive system to inform federal authorities, local agencies, and the public when a significant quantity of hazardous, acutely toxic substances are stored or handled at a facility.

The California Office of Emergency Services regulates a wide range of acutely hazardous materials (AHMs) under the California Accidental Release Program (CalARP), the USEPA under the Risk Management Program (40 CFR 68), and the OSHA under the Process Safety Management Program (OSHA 1910.119). The California Accidental Release Program and Risk Management Program require that all facilities that store, handle, or use AHMs above a minimum quantity, known as the threshold planning quantity, are required to develop a plan and prepare supporting documentation that summarizes the facility's potential risk to the local community and identifies safety measures to reduce potential risks to the public.

The HWCL, Chapter 6.5 of the California Health and Safety Code, is administered by CalEPA to regulate hazardous wastes. While the HWCL is generally more stringent than RCRA, until the USEPA approves the California program, both the State and federal laws apply in California. The HWCL lists 791 chemicals and about 300 common materials that may be hazardous; establishes criteria for identifying, packaging, and labeling hazardous wastes; prescribes management controls; establishes permit requirements for treatment, storage, disposal and transportation; and identifies some wastes that cannot be disposed of in landfills.

The handling and storage of hazardous materials is regulated by Chapter 6.95 of the California Health and Safety Code. Under Sections 25500–25543.3, facilities handling hazardous materials are required to prepare a Hazardous Materials Business Plan. The plan provides information to the local emergency response agency regarding the types and quantities of hazardous materials stored at a facility, and provides detailed emergency planning and response procedures in the event of a hazardous materials release. In the event that a facility stores quantities of specific acutely hazardous materials above the thresholds set forth by the California code, facilities are also required to prepare a Risk Management Plan and California Accidental Release Plan, which provides information on the potential impact zone of a worst-case release, and requires plans and programs designed to minimize the probability of a release and mitigate potential impacts.

Emergency Response to Hazardous Materials Incidents

California has developed an emergency response plan to coordinate emergency services provided by federal, state, and local governments and private agencies. Response to hazardous material incidents is one part of this plan. The plan is managed by the Governor's Office of Emergency Services (OES), which coordinates the responses of other agencies, including CalEPA, California Highway Patrol, California Department of Fish and Wildlife (CDFW), and CVRWQCB.

Division of Oil, Gas, and Geothermal Resources

The State Department of Conservation Division of Oil, Gas, and Geothermal Resources (DOGGR) oversees the drilling, operation, maintenance, and plugging and abandonment of oil, natural gas, and geothermal wells. DOGGR regulations require that for abandoned wells, the following procedures are followed:

> […] the hole and all annuli shall be plugged at the surface with at least a 25-foot cement plug. The district deputy may require that inner strings of uncemented casing be removed to at least the base of the surface plug prior to placement of the plug. All well casing shall be cut off at least 5 feet but no more than 10 feet below the surface of the ground. The district deputy may approve a different cut-off depth, as conditions warrant, including but not limited to excavation or grading operations for construction purposes. As defined in Section 1760(j), a steel plate at least as thick as the outer well casing shall be welded around the circumference of the casing at the top of the casing, after Division approval of

the surface plug. The steel plate shall show the well's identification, indicated by the last five digits of the API well number. Authority: Sections 3013 and 3106, Public Resources Code. Reference: Section 3106, Public Resources Code. § 1723.5.

Sections 3208 and 3255(a)(3) of the Public Resources Code give DOGGR the authority to order the re-abandonment of any well that is hazardous, or that poses a danger to life, health, or natural resources. Responsibility for re-abandonment costs for any well may be affected by the choices made by the local permitting agency, property owner, and/or developer. (Cal. Public Res. Code, § 3208.1.)

Fire Safe Regulations

Section 4291 of the Public Resources Code requires maintenance of at least 100 feet of defensible space for buildings or structures in, upon, or adjoining a mountainous area, forest-covered lands, brush-covered lands, grass-covered lands, or land that is covered with flammable material. The amount of fuel modification necessary must take into account the flammability of the structure as affected by building material, building standards, location, and type of vegetation.

Local Regulations

The following are the regulatory agencies and regulations pertinent to the proposed project on a local level.

Sacramento-Yolo Mosquito and Vector Control District

The Sacramento-Yolo Mosquito and Vector Control District provides ongoing surveillance of mosquitoes and other vectors to determine the threat of disease transmission and lower annoyance levels.

Yolo County General Plan

The relevant goals and policies from the Yolo County General Plan related to hazards and hazardous materials are presented below.

Goal HS-4 Hazardous Materials. Protect the community and the environment from hazardous materials and waste.

- Policy HS-4.1 Minimize exposure to the harmful effects of hazardous materials and waste.
- Policy HS-4.3 Encourage the reduction of solid and hazardous wastes generated in the county.
- Policy CO-2.15 Encourage the use of mosquito abatement methods that are compatible with protecting fish and wildlife, including native insect pollinators.

Off-Channel Mining Plan

Goal 2.2-4 Eliminate or minimize hazards to the public health and safety that are associated with surface mining operations and reclamation.

- Action 2.4-2 Hazardous materials business plans (or equivalent) must be submitted annually, as required by the California Health and

Safety Code, unless the types of hazardous materials used change, in which case revised business plans must be submitted within thirty (30) days of the change. (See Section 10-4.403 of the Mining Ordinance.)

Off-Channel Surface Mining Ordinance

Section 10-4.403 of the Yolo County Off-Channel Surface Mining Ordinance (OCSMO) provides the following requirements related to accidental reporting:

> ### Section 10-4.403. Accident Reporting
> The operator shall immediately notify the Director of any events such as fires, explosions, spills, land or slope failures, or other conditions at the site which could pose a hazard to life or property. Action shall be immediately undertaken to alleviate the hazard. The operator shall provide a written report of any such event, within thirty (30) days, which shall include, but not be limited to, a description of the facts of the event, the corrective measures used, and the steps taken to prevent a recurrence of the incident. Failure to provide this report shall initiate violation proceedings pursuant to Article 11. This condition does not supersede nor replace any requirement of any other governmental entity for reporting incidents.

Section 10-4.415 of the OCSMO provides the following requirements related to equipment maintenance:

> ### Section 10-4.415. Equipment Maintenance
> All internal combustion engine driven equipment and vehicles shall be kept tuned according to the manufacturer's specifications and properly maintained to minimize the leakage of oils and fuel. No vehicles or equipment shall be left idling for a period of longer than is required by law, recommended by the Air District, or ten (10) minutes, whichever is shorter.
>
> Fueling and maintenance activities of heavy equipment (except draglines and floating suction dredges) are prohibited within one-hundred (100) feet of open bodies of water during mining and reclamation. All Storm Water Pollution Prevention Plans shall include provisions for releases of fuels during fueling activities for draglines and floating suction dredges.

Section 10-4.417 of the OCSMO states the following regarding groundwater monitoring requirements:

> ### Sec. 10-4.417. Groundwater Monitoring Programs
> All surface mining operations that propose off-channel excavations extending below the groundwater level shall develop and maintain a groundwater monitoring program consisting of two components: water level measurements and water quality testing. A groundwater level monitoring program shall be initiated at least six months prior to the removal of overburden. At a minimum, the groundwater level monitoring program shall consist of three monitoring wells, with at least one well upgradient of the wet pit and one well downgradient of the wet pit. Monitoring programs for proposed mining areas exceeding one-hundred (100) acres (total proposed mining area over the life of the project) shall include one additional well for each one-hundred (100) acres of wet pit mining. Therefore, wet pit mining areas of 1 to 99 acres would require three (3) wells, 100 to 199 acres would require four (4) wells, 200 to 299 acres would require five (5) wells, and so on. These wells shall be distributed through the vicinity of the wet pit mining area and used for

groundwater level measurements. Groundwater levels shall be collected from the monitoring wells on a quarterly basis for six (6) months prior to mining and for the duration of the mining period. All wellheads shall be surveyed with horizontal and vertical control to allow calculation of groundwater elevations and development of groundwater contour maps. Groundwater levels shall be measured with an accuracy of plus or minus 0.01 foot, at minimum.

Water quality in the vicinity of each active wet pit mining location shall be evaluated by analyzing samples from selected monitoring wells (one upgradient and one downgradient) and wet pit surface water sampling locations. Since mining may be conducted in phases over a relatively long period of time, pit boundaries may change with time. Selection, and installation if necessary, of downgradient monitoring wells, which would be critical to adequately characterize the groundwater quality in the vicinity of the wet pits, shall be submitted by the operator for review and approval by the County. The selected monitoring wells shall be installed and sampled at least six (6) months prior to the removal of overburden. The downgradient wells shall be located as near to the active wet pit mining areas as is practical. The upgradient wells shall be located an adequate distance from the proposed mining area to ensure that the effect of the wet pit on water quality in the well would be negligible. The water samples from the wet pit shall be collected in a manner so as to ensure that they are representative of water quality within the wet pit. The minimum sampling schedule and required analyses are described below.

(a) Groundwater level and pit water surface level measurements shall be performed quarterly in all wells for the duration of mining and reclamation.
(b) For monitoring the groundwater quality of proposed wet pit mining, sample collection and analysis of physical, chemical, and biological constituents shall be conducted according to the following specifications:

    (1) Prior to the removal of overburden – one upgradient and one downgradient well shall be sampled at least six (6) months prior to the removal of overburden and again at the start of excavation. The samples shall, at minimum, be analyzed for general minerals; inorganics; nitrates; total petroleum hydrocarbons (TPH) as diesel and motor oil, benzene, toluene, ethylbenzene, and xylenes (BTEX); pesticides (EPA 8140 and 8150); and coliform (with E. coli confirmation).
    (2) During wet pit mining and active reclamation – the wet pit shall be sampled semi-annually for the duration of mining and active reclamation. The samples shall, at minimum, be analyzed for general minerals; inorganics; nitrates; TPH as diesel and motor oil, BTEX; pesticides (EPA 8140 and 8150); and coliform (with E. coli confirmation).

        One upgradient and one downgradient well shall be analyzed, at minimum, for general minerals; inorganics; nitrates; TPH as diesel and motor oil, BTEX; pesticides (EPA 8140 and 8150); and coliform (with E. coli confirmation). The wells shall be sampled according to the following schedule: semi-annually for the first two years, and annually every year thereafter.
    (3) After active reclamation – one (1) year after all heavy equipment work has been completed in the vicinity of the pit, the TPH and BTEX analyses may be discontinued. The wet pit and one upgradient and one downgradient well shall be sampled and analyzed for pH; temperature; nutrients (phosphorous and nitrogen); total dissolved solids; total coliform (with E. coli confirmation); and biological oxygen demand. This monitoring shall be conducted every two (2) years for a ten (10) year period after completion of reclamation.

A report to the Agency and Department of Environmental Health shall be submitted within thirty (30) days of the required groundwater testing.

Additional tests and analysis shall be required only if a new condition is recognized that may threaten water quality or if the results of previous tests fall outside allowable ranges. If at any time during the monitoring period, testing results indicate that sampling parameters exceed Maximum Contaminant Levels (MCLs), as reported in the California Code of Regulations, or established background levels, a qualified professional shall evaluate potential sources of the contaminants. The evaluation shall determine the source and process of migration (surface or subsurface) of the contaminants. A report shall be submitted to the regulatory agencies (the Agency, Yolo County Department of Environmental Health, the Central Valley Regional Water Quality Control Board, and the U.S. Environmental Protection Agency) which identified the source of the detected contaminants and specifies remedial actions to be implemented by the operator for corrective action. If it is determined that the source of water quality degradation is off-site, and the County and the RWQCB are in agreement with this conclusion, the operator shall not be responsible for corrective action.

If corrective action is ineffective or infeasible, the responsible party must provide reparation to affected well owners, either by treatment of water at the wellhead or by procurement of an alternate water supply.

If, at the completion of the mining and reclamation period, water quality has not been impacted, all monitoring wells shall be destroyed in accordance with the California Department of Water Resources Well Standards. If the County, landowner, or other agency wishes to maintain the wells for future water resources evaluation, selected wells may be preserved for this use. Monitoring wells may remain useful for post-mining land uses.

The County may retain appropriate staff or a contract consultant to provide third party critical review of all hydrologic reports related to monitoring.

Section 10-4.403 of the OCSMO provides the following requirements related to haul routes:

Section 10-4.419. Haul Routes

Trucks accessing a mining site to pick up a load, or leaving a mining site to deliver a load, are restricted to the approved/designated haul routes identified in the operator's permit which applies to the route taken from the mining site access/driveway to a state /federal highway. If a truck subsequently exists the state/federal highway while within Yolo County, this too may only occur on an approved/designate haul route. This applies to all truck trips serving the mining site, unless making a local delivery. Those portions of designated truck haul routes that include County-maintained roads shall be posted as such, in accordance with the Public Works Department, to facilitate law enforcement and public safety. Private truck haul routes or conveyors shall be used to transport material within the mining site, in order to reduce impacts to public roads.

Yolo County Environmental Health Department

Routine hazardous materials management in California is administered under the Certified Uniform Program Agency (CUPA) program. The CUPA program was established under California Senate Bill 1082 to reduce the cost and improve the efficiency of hazardous materials regulations. Yolo County's hazardous materials programs are administered and enforced by the YCEHD under the CUPA program. The CUPA program encompasses several hazardous materials programs: Hazardous Materials Management Plans (HMMP) program, California Accidental Release Prevention (CalARP) program, UST programs, aboveground storage tank (AST)

programs, and hazardous waste generation and disposal. YCEHD is regularly evaluated by Cal/EPA to ensure that the CUPA programs are being administered in accordance with State guidelines.

Hazardous Materials Business Plan

Consistent with the California Health and Safety Code regulations noted previously, businesses that store hazardous materials in excess of specified quantities must report their chemical inventories to the YCEHD by preparing a Hazardous Materials Business Plan. Approximately 1,200 facilities in Yolo County are required to file a Hazardous Materials Business Plan with YCEHD. This information informs the community on chemical use, storage, handling, and disposal practices, and is intended to provide essential information to fire fighters, health officials, planners, elected officials, workers, and their representatives to assist in planning for, and responding to, potential exposures to hazardous materials.

The Business Plan must:

- List all the hazardous materials stored at a site;
- Identify emergency response procedures for spills and personnel;
- Identify evacuation plans and procedures; and
- Identify training records for personnel to substantiate annual refresher training.

If hazardous materials are used or stored at a site, all employees are also required to receive hazard communication training. The purpose of the training is to ensure that employees understand the nature of the hazardous materials that they handle and can safely use, store, and dispose of the materials in accordance with Title 8 of the CCR. The hazard communication standard requires that employers must:

- Prepare an inventory of hazardous materials;
- Make Material Safety Data Sheets available to employees;
- Conduct employee training on chemical hazards and safe handling of materials; and
- Ensure that hazardous material containers are properly stored and labeled.

Inspections of businesses that store hazardous materials are performed by YCEHD. The hazard communication requirements are enforced by California Department of Industrial Relations, Division of Occupational Safety and Health (Cal/OSHA).

The proposed project would qualify as a business storing and using hazardous materials. As such, the project would be subject to all of the regulations and laws described above.

4.7.4 IMPACTS AND MITIGATION MEASURES

The following section describes the standards of significance and methodology used to analyze and determine the proposed project's potential impacts related to hazards and hazardous materials. A discussion of the project's impacts, as well as mitigation measures where necessary, are also presented.

Standards of Significance

The significance criteria used for this analysis were developed from Appendix G of the CEQA Guidelines, and applicable policies and regulations of Yolo County. A hazards and hazardous materials impact is considered significant if the proposed project would:

- Create a significant hazard to the public or the environment through the routine handling, transport, use, or disposal of hazardous materials;
- Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the likely release of hazardous materials into the environment;
- Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school;
- 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 it create a significant hazard to the public or the environment;
- For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area;
- Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan;
- Expose people or structures, either directly or indirectly, to the risk of loss, injury or death involving wildland fires; and/or
- If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:
    - Substantially impair an adopted emergency response plan or emergency evacuation plan;
    - Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire;
    - Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment; or
    - Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes.
- Cause a significant environmental impact due to a conflict with applicable plans, policies, or regulations adopted for the purpose of avoiding or mitigating impacts related to hazards and hazardous materials.

Impacts Found Less-than-Significant in Initial Study

The Initial Study prepared for the proposed project (see Appendix A) determined that the implementation of the proposed project would have no impact or a less-than-significant impact related to the issue areas discussed below. Therefore, the impacts are not discussed further in this EIR.

- Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school;

- 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 it create a significant hazard to the public or the environment;
- Expose people or structures, either directly or indirectly, to the risk of loss, injury or death involving wildland fires;
- If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:
    - Substantially impair an adopted emergency response plan or emergency evacuation plan;
    - Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire;
    - Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment; or
    - Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes.

As determined in the Initial Study (see Appendix A), the project site is not located within a Very High or High Fire Hazard Severity Zone (FHSZ). Fire protection services within the project area are provided by the Willow Oak Fire Protection District. The nearest fire station is located directly south of the project site at 18111 CR 94B. The proposed mining activities would reduce total amount of on-site combustible vegetation, thereby preventing fire risks at the nearby residential developments. Upon completion of mining operations, approximately 116 acres of the mining area would be reclaimed to agricultural use, while the remainder of the mining area would be reclaimed to a lake with riparian woodland along the fringes/shoreline. Post-reclamation recreation, parkway, and passive open space uses could result in accidental fire associated with use of trails and open space, however access to dedicated properties will be improved over existing conditions and post-reclamation vegetation load would be improved through reclamation to native species as well as ongoing oversight and management.

Method of Analysis

Analysis of existing on-site conditions was based on information contained within the County's General Plan and the General Plan EIR, as well as site visits. Additional sources of information included the CCAP and the OCSMO. Where potentially significant impacts are identified, this EIR includes mitigation measures to reduce impacts to less-than-significant levels.

Site conditions and impacts for this chapter are based primarily on the Phase I and Limited Phase II ESAs conducted for the proposed project. The goal of a Phase I ESA is to identify whether RECs exist at a property. RECs are defined by ASTM as "the presence or likely presence of any hazardous substances 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, groundwater, or surface water of the property. […]." The Phase I ESA was prepared in accordance with the requirements of the ASTM "Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process E 1527-05."

The Phase I ESA included a review of federal, State, and local environmental databases for information regarding documented and suspected releases of regulated materials within the project site vicinity based upon reference to an environmental database search performed by EDR, an environmental database search firm. In addition, the Phase I ESA included interviews of readily available persons knowledgeable about the site, a review of readily available maps and aerial photographs, and conducting a site visit. The site visit was conducted on June 4, 2007. Photographs of the site were taken during the site reconnaissance.

The Phase II investigation consisted of a geophysical investigation to locate buried objects such as USTs, wells and septic tanks, or any other anomalous objects that may be of potential concern, in the vicinity of the former ranch headquarters. The geophysical investigation was followed by a backhoe investigation where a series of backhoe test pits were excavated at the location of anomalies identified by the geophysical investigation and at several locations within the refuse piles to a maximum depth of the refuse encountered.

The geophysical investigation was conducted on August 6, 2007, and included use of a Geometrics 856 magnetometer to map a magnetic gradient across the area of investigation. Perturbations in the magnetic gradient (anomalies) are formed by buried metal objects that that produce magnetic anomalies with characteristic shapes and magnitudes. Prior to conducting the geophysical investigation, Teichert removed existing vegetation in the vicinity of the former ranch headquarters to provide open accessible areas to perform the investigation. Magnetic data was collected on a grid with data points recorded on 10-foot centers along lines spaced 10 feet apart. The results of the geophysical investigation are included in Appendix I.

The backhoe investigation was conducted on August 9, 2007 by NorCal Construction of Woodland, California. Backhoe test pits were excavated at locations designated by NCE. NCE personnel were present to observe and record conditions within the test pits. A total of 17 test pits were excavated, including six test pits at the locations of the five anomalies noted during the geophysical investigation. In addition, two test pits were also excavated at 11 locations within the refuse piles. Test pits were excavated to a maximum depth at which refuse was encountered. The results of the test pit observations are included in Appendix I.

Project-Specific Impacts and Mitigation Measures

The following discussion of impacts related to hazards and hazardous materials is based on implementation of the proposed project in comparison to existing conditions and the standards of significance presented above.

4.7-1 Create a significant hazard to the public or the environment through the routine handling, transport, use, or disposal of hazardous or acutely hazardous materials. The impact would be *less-than-significant*.

The proposed project would include permitting of the project site as an aggregate mine. Excavated material would be processed at the existing Teichert Woodland Plant facility (to the northeast of the site) which would be expanded to process proposed increased capacity. Upon completion of mining activities, the project site would be reclaimed to agricultural and open space uses. The proposed project would delay reclamation at the Woodland Plant until processing of aggregate from the project site is completed. Proposed mining, processing, and reclamation activities would involve

the use of heavy equipment, which would contain hydraulic fluid, fuels, and oils. The proposed project would require installation of a new water pipe running from the project site to the Woodland Plant, to be located alongside the existing conveyor belt alignment.

The applicant would be required to comply with the California Health and Safety Code and local regulations for the handling, storage, and transportation of hazardous and toxic materials. Pursuant to California Health and Safety Code Section 25510(a), except as provided in subdivision (b),[8] employees or other on-site authorized personnel shall, upon discovery, immediately report any release or threatened release of a hazardous material to the unified program agency (in the case of the proposed project, YCEHD). The employee/authorized personnel shall provide all State, City, or County fire or public health or safety personnel and emergency response personnel with access to the facilities. In the case of the proposed project, the mine operator would be required to notify the YCEHD in the event of an accidental release of a hazardous material, who would then monitor the conditions and recommend appropriate remediation measures.

The YCEHD has confirmed that the Teichert Woodland Plant is currently registered in the CUPA program for hazardous materials, hazardous waste, aboveground storage tanks, and waste tires, and would continue to be registered under the program with approval of the project. The YCEHD has not received reports of any prior substantial hazardous materials releases at the Woodland Plant.[9]

The proposed mining would generally be conducted with the same equipment, technology, and design consideration as utilized or permitted at the Teichert Esparto and Teichert Schwarzgruber operations. Topsoil or "overburden" would be removed and stockpiled. The marketable sand and gravel deposits below would be continuously loaded and hauled to the plant by conveyor. Removal of overburden on the project site would be accomplished using scrapers, motor graders and bull dozers. Overburden would be progressively removed ahead of mining and stockpiled in setback areas and internal storage locations until retrieved for reclamation. The top layers of topsoil would be placed in temporary berms and/or stockpiles and seeded with naturalized annual grasses and forbs. Aggregate above the groundwater level would be harvested by scrapers and dozers. Aggregate mined below the water table would be extracted by a combination of equipment such as excavators, draglines, and potentially a floating dredge. Water trucks would be used to control dust. After mining has ceased on the project site, all mining equipment would be removed from the site. Reclamation of the project site would occur as soon as feasible.

Canal operations and maintenance activities of the YCFCWCD that occur under existing conditions would continue after the proposed relocation of the Moore Canal and removal of a segment of the Magnolia Canal. During the summer irrigation season, the canal road is driven multiple times a day to deliver water, measure flows,

[8] Section 25510(b) states the following: "Subdivision (a) does not apply to a person engaged in the transportation of a hazardous material on a highway that is subject to, and in compliance with, the requirements of Sections 2453 and 23112.5 of the Vehicle Code."

[9] Moushumi Hasan. Personal Communication [email] with Stephanie Cormier, Principal Planner, Yolo County Department of Community Services. June 18, 2020.

check and adjust gates, inspect the canals and infrastructure, perform gate maintenance, control terrestrial and aquatic weeds, and maintain native habitat plantings. During winter, major maintenance occurs, such as removing silt with an excavator, and rebuilding roads, if needed, with bulldozers, dump trucks, backhoes, and graders. Erosion repairs and gate replacements also occur in the winter time. Culverts, bridge crossings, and drop structures also need periodic maintenance or replacement.

During winter rain storms, the canal system receives storm runoff, and the system must be patrolled to find and remove blockages. During non-storm periods in the winter, winter water from Cache Creek is placed (when available and by State permit), into the canals for groundwater recharge purposes.

Canal roads are also traveled for water quality sample collection, groundwater monitoring, access to other canal locations, and similar activities related to delivering water. Temporary storage of equipment and material will also occur along canal rights-of-way, along with burning of downed vegetation and woody debris, when permitted by air quality regulations. Encroachment permits are also sometimes granted for installation of private infrastructure, such as field drains and backwash disposal from pump station filters.

Generally, the proposed project would not produce substantial quantities of hazardous waste, and waste associated with the project would be handled in accordance with applicable federal, State, and local regulations. Hazardous materials used on-site would consist primarily of fuels and oils for operation of mining equipment, similar to what is currently used on the adjacent Woodland Plant site. Given that the project applicant has indicated that the proposed project would involve use or storage of hazardous materials on-site, the applicant would be required by the State to prepare a Hazardous Materials Business Plan, which would document the types and quantities of hazardous materials stored at the project site, along with detailed emergency planning and response procedures in the event of a hazardous materials release. The Hazardous Materials Business Plan must be submitted to the YCEHD prior to initiation of mining activities on the project site. Section 10-4.403 requires mine operators to notify the County of events such as fires, explosions, spills, land or slope failures, or other conditions at the site which could pose a hazard to life or property. Compliance with the requirements of Section 10-4.403 of the OCSMO would further reduce the potential for the proposed operations to result in hazards to the public or the environment.

Processing activities at the Woodland Plant include asphalt production and no change to capacity of this operation is proposed. As promoted by the CCAP and in compliance with job specifications, the plant includes recycling facilities for reuse of asphalt and concrete. Recycled material is inspected for content and quality and to ensure no hazardous materials are present. When material is brought in from jobsites, it is stockpiled in a designated area for crushing/processing, and crushed/processed for reuse. Asphalt remnant material from operating the asphalt plant is also returned to the recycling area for processing and reuse. The crushing and processing results in a marketable product called Recycled Asphalt Pavement (RAP). Each asphalt job includes specifications regarding allowable RAP. This can range from as low as zero to as high as 25 percent. For example, the City of Woodland allows 15 percent RAP

by weight for every job. Use of recycled material in this manner reduces the amount of previously unused raw rock material and asphalt oil (the binding agent in asphalt) needed for the job.

The Woodland Plant also accepts concrete material for recycling. This material is stockpiled and processed separately from the asphalt material, but in the same general recycling area. This material is not used in asphalt; it is used as recycled base rock material and replaces the need for previously unused raw aggregate base material. Thus, new hazards related to asphalt remnant disposal would not occur as a result of the project.

The potential for increases in mosquito populations, and resulting increases in vector-borne diseases, associated with the proposed reclaimed lake is addressed by the County through a standard condition of approval that requires the applicant to coordinate with the Sacramento-Yolo Mosquito and Vector Control District to identify and implement project-specific best management practices for mosquito reduction and control at the proposed reclaimed lake and elsewhere on the project site as appropriate. This condition will be applied to the project if approved.

Based on the above, the proposed project would not create a significant hazard to the public or the environment through the routine handling, transport, use, or disposal of hazardous or acutely hazardous materials. Thus, a ***less-than-significant*** impact would occur.

Mitigation Measure(s)
None required.

4.7-2 Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. The impact would be *significant*.

The Phase I ESA discloses that the project site contains two existing water wells. The applicant proposes to fill and seal the domestic well, and retain the unused agricultural well as a groundwater monitoring well. The domestic well would require abandonment and destruction prior to initiation of mining activities associated with the proposed project in order to ensure that the well does not a pose a hazard to workers or the general public. In addition, the site contains one abandoned gas well. Consistent with DOGGR regulations, a permit would be obtained, the well would be cut off at the maximum depth of proposed excavation, and a cement plug would be placed at least 25 feet below the final elevation.[10] Subsequently, the casing would need to be cut off five to 10 feet below the final ground surface and a steel plate affixed to the top of the casing with the well identifier number welded onto the plate.

A limited Phase II ESA was conducted to evaluate potential hazardous materials associated with the former ranch headquarters within the project site. Within the test

[10] California Division of Oil, Gas, and Geothermal Resources. *Teichert Shifler Mining and Reclamation Project*. August 22, 2019.

pits, NCE did not note any signs of soil staining, odors, obvious signs of containers of agricultural chemicals, or visible sign of spilled chemicals. A deteriorated metal tank of undetermined use was found in one of the test pits; however, signs of soil staining or odors were not noted in the soils around the tank.

The Phase II ESA concluded that the potential exists for the project site to contain a septic tank associated with the former ranch headquarters. However, such a tank was not found as a result of the geophysical investigation or subsequent radar investigations. In addition, NCE concluded that improper disposal of materials has occurred in the vicinity of the former ranch headquarters. Given that the proposed project would include mining activities at the site of the former ranch headquarters, the potential exists for project workers to be exposed to potential hazards.

Per the *California Building Industry Association v. Bay Area Air Quality Management District* (2015) 62 Cal.4th 369 (*CBIA*), the California Supreme Court held that "agencies subject to CEQA generally are not required to analyze the impact of existing environmental conditions on a project's future users. But when a proposed project risks exacerbating those environmental hazards or conditions that already exist, an agency must analyze the potential impact of such hazards on future users. In those specific instances, it is the impact of the project on the environment – and not the impact of the environment on the project – that compels an evaluation of how future residents or users could be affected by exacerbated conditions." (*Id.* at pp. 377-378.).

Given that the project would include mining activities in the vicinity of the existing on-site water and gas wells and the former ranch headquarters, the potential exists for the project to exacerbate existing hazards at the project site, thereby resulting in risks to the environment, project workers, or the general public. Therefore, this analysis assumes that the proposed project could result in a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the likely release of hazardous materials into the environment. As a result, a ***significant*** impact could occur.

Mitigation Measure(s)

Implementation of the following mitigation measures would reduce the above impact to a *less-than-significant* level.

4.7-2(a) *Prior to initiation of ground-disturbing activities within 50 feet of the domestic water well on the project site, the project applicant shall obtain a water well abandonment permit from the Yolo County Environmental Health Division (YCEHD), and coordinate with the YCEHD regarding procedures for abandonment of the on-site domestic water well.*

4.7-2(b) *Prior to initiation of ground-disturbing activities within 50 feet of the natural gas well on the project site, the project applicant shall submit a Notice of Intention (Form OG106) to the California Division of Oil, Gas, and Geothermal Resources (DOGGR) stating the applicant's intent to re-abandon the existing on-site gas well. Subsequent to acquisition of an approved gas well abandonment permit from DOGGR, the project applicant shall retain a licensed contractor to cut off the well at the*

maximum depth of the proposed excavation and install a cement plug at least 25 feet below the final proposed elevation of the well. Subsequently, the casing of the well shall be cut off five to 10 feet below the final ground surface and a steel plate affixed to the top of the casing with the well identifier number, indicated by the last five digits of the API well number, welded onto the plate. The location of the well shall be surveyed for future reference. The project applicant shall submit a copy of the approved well abandonment permit to the Yolo County Department of Community Services. Records of all re-abandonment activities shall be submitted to the Yolo County Department of Community Services and DOGGR.

4.7-2(c) *During removal of overburden associated with the proposed project, potentially hazardous materials identified in the vicinity of the former ranch headquarters on the project site, shall be removed from the site and disposed of in accordance with the following regulations and requirements:*

- *Hazardous materials identified on the project site shall be handled in accordance with Chapter 6.5, Division 20, of the California Health and Safety Code.*
- *Hazardous materials shall be disposed of at an approved disposal site and shall only be hauled by a current California registered hazardous waste hauler using correct manifesting procedures and vehicles displaying a current Certificate of Compliance. The project applicant shall identify by name and address the site where toxic substances shall be disposed of. Disposal shall be coordinated with the Yolo County Environmental Health Division, and the necessary applications shall be filed. The applicant shall provide CEHD with a valid certification from the approved disposal site that the material was delivered.*

The applicant shall notify the Yolo County Department of Community Services and the Yolo County Environmental Health Division when this measure has been fulfilled and provide supporting documentation.

4.7-3 For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area. The impact would be *less than significant*.

The project site lies within airport safety zones identified in the Watts-Woodland Airport CLUP. As shown in Figure 10 of the CLUP (see Figure 4.7-4), the northwestern portion of the project site north of the current alignment of the Moore Canal lies within Safety Area 2 (Approach-Departure Zone), while the remainder of the project site lies within Safety Area 3 (Overflight Zone). It should be noted that non-aircraft related noise is discussed in Chapter 4.10, Noise, of this EIR.

The CLUP lists incompatible land uses within Safety Area 2 as residential development greater than five acres per residence and uses that would attract people, such as shopping centers, restaurants, schools, factories, hospitals, office complexes, stadiums, auditoriums, arenas, recreation facilities, or churches. For Safety Area 3, incompatible uses include any use that would result in large assemblies of people, such as hospitals, stadiums and arenas, auditoriums and concert halls, regional shopping centers, and jails and detention centers. The proposed project would not include any such uses.

The CLUP recognizes certain land uses as hazards to air navigation, including land uses that attract large concentrations of birds within approach-climbout areas.[11] Consequently, CLUP Policy 2.b.3 identifies such uses as incompatible within Safety Areas 1 and 2 (Clear and Approach-Departure Zones). Given that the proposed project would include future reclamation of a portion of the project site with a lake, the potential exists for the final reclamation of the project site to result in increased bird activity at the site. However, the proposed lake area is located outside of the designated boundaries for Safety Areas 1 and 2, as identified in Figure 9 and 10 of the CLUP (see Figure 4.7-3 and Figure 4.7-4 below). Therefore, the project would not create substantial safety hazards related to the creation of new bird habitat.

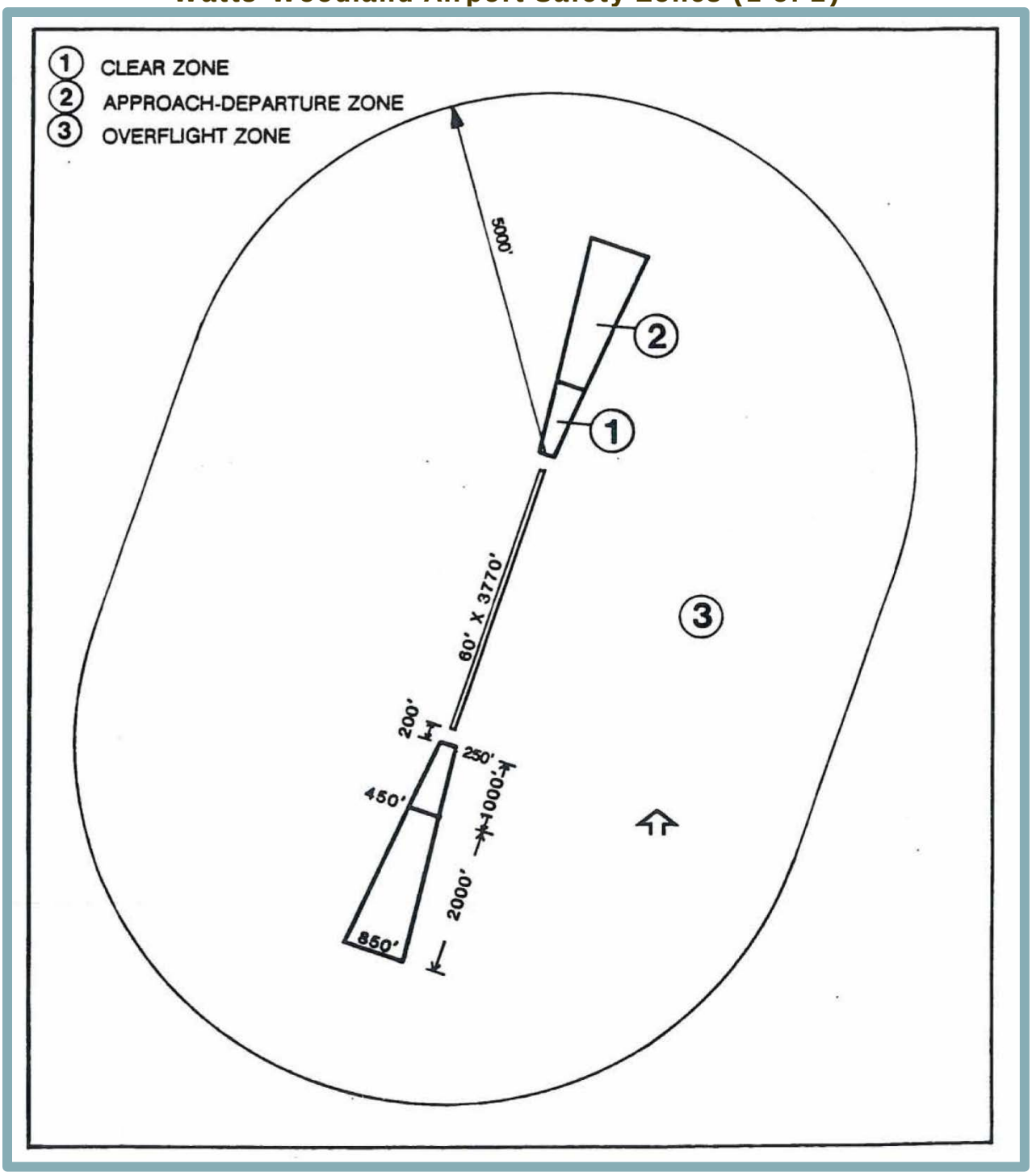
Based on the above, the proposed project would not create a safety hazard for people residing or working in the project area, resulting in a ***less-than-significant*** impact.

Mitigation Measure(s)

None required.

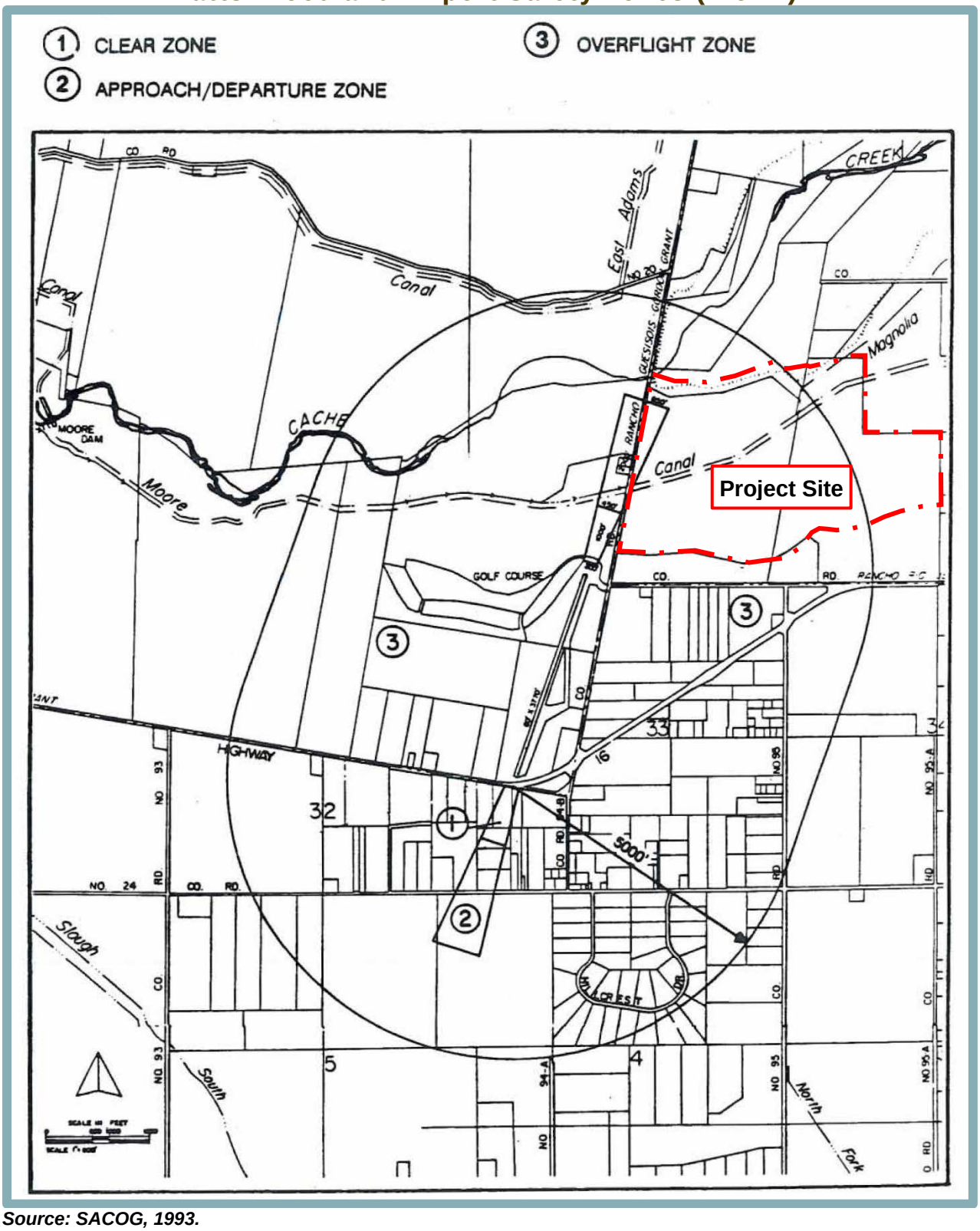
[11] Sacramento Area Council of Governments. *Watts-Woodland Airport, Comprehensive Land Use Plan* [pg. 19]. March 1993.

Figure 4.7-3
Watts-Woodland Airport Safety Zones (1 of 2)



Source: SACOG, 1993.

Figure 4.7-4
Watts-Woodland Airport Safety Zones (2 of 2)



Source: SACOG, 1993.

4.7-4 Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. The impact would be *less than significant*.

Within Yolo County, emergency planning is guided by the 2018 Yolo Operational Area Multi-Jurisdictional Hazard Mitigation Plan, which identifies measures to reduce the impacts of natural and manmade hazards and to facilitate the recovery and repair of structures if damage should occur from hazardous events. As noted previously, per the Yolo County Office of Emergency Services, the project site is located within Evacuation Zones 35 and 36. Within Zones 35 and 36, State Route 16 and County Road 20 are identified as evacuation routes. The nearest identified evacuation rally point is at the Willow Oak Fire Station, located at 18111 County Road 94B, to the southwest of the project site.

The proposed project would not include substantial modifications to the existing roadway system in the project area, including State Route 16 and County Road 20. While the project would add truck traffic to County Road 20, County Road 20 is a designated haul route. Thus, the project would not conflict with the 2018 Yolo Operational Area Multi-Jurisdictional Hazard Mitigation Plan or limit access to evacuation routes in the event of an emergency. Also, the equipment associated with the mining operation could be beneficial to the area in the event of an emergency

Consistent with Section 10-4.419 of the OCSMO, all haul truck traffic associated with the project would be limited to approved haul routes. Furthermore, as noted previously, the project would be required to include preparation of a project-specific Business Emergency Response Plan.

Therefore, the proposed project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan, and a ***less-than-significant*** impact would occur.

Mitigation Measure(s)
None required.

4.7-5 Cause a significant environmental impact due to a conflict with applicable plans, policies, or regulations adopted for the purpose of avoiding or mitigating impacts to hazards and hazardous materials. The impact would be *less than significant*.

Table 4.7-1 below provides an analysis of the proposed project's consistency with applicable policies and regulations that have been adopted for the purpose of avoiding or mitigating environmental effects related to hazards and hazardous materials. It should be noted that consistency with other standards in the SMARA, the County Zoning Ordinance, and the SMRO that are specific to land use and planning issues are discussed in Chapter 4.9, Land Use and Planning, of this EIR. As shown in the table, the proposed project would be generally consistent with applicable standards

related to hazards and hazardous materials. Thus, a ***less-than-significant*** impact would occur.

Mitigation Measure(s)

None required.

Table 4.7-1
Consistency with Applicable Standards

Policy / Regulation	Consistency Discussion
Yolo County General Plan	
Policy HS-4.1 Minimize exposure to the harmful effects of hazardous materials and waste.	As discussed under Impact 4.7-1 above, per Chapter 6.95 of the California Health and Safety Code, the project applicant would be required to prepare and submit a Hazardous Materials Business Plan that would provide information to the local YCEHD regarding the types and quantities of hazardous materials stored at the project site, along with detailed emergency planning and response procedures in the event of a hazardous materials release. Such a plan would minimize exposure of hazardous materials and waste. Therefore, the project would be consistent with this policy.
Policy HS-4.3 Encourage the reduction of solid and hazardous wastes generated in the county.	The proposed project would be required to report chemical inventories to the YCEHD by preparing a Hazardous Materials Business Plan. The Hazardous Materials Business Plan would reduce generation of wastes to the extent feasible. Therefore, the project would be consistent with this policy.
Policy CO-2.15 Encourage the use of mosquito abatement methods that are compatible with protecting fish and wildlife, including native insect pollinators.	The County would include a Condition of Approval that requires the applicant to coordinate with the Sacramento-Yolo Mosquito and Vector Control District to identify and implement project-specific best management practices for mosquito reduction and control at the proposed reclaimed lake and elsewhere on the project site as appropriate. Thus, the proposed project would be consistent with this policy.
Off-Channel Mining Plan	
Action 2.4-2 Hazardous materials business plans (or equivalent) must be submitted annually, as required by the California Health and Safety Code, unless the types of hazardous materials used change, in which case revised business plans must be submitted within thirty (30) days of the change. (See Section 10-4.403 of the Mining Ordinance)	See OCSMO Section 10-4.403 below.
Off-Channel Surface Mining Ordinance	
Section 10-4.403 The operator shall immediately notify the Director of	The project operator would be required to submit a Hazardous Materials Business Plan, to the

(Continued on next page)

Table 4.7-1
Consistency with Applicable Standards

Policy / Regulation	Consistency Discussion
any events such as fires, explosions, spills, land or slope failures, or other conditions at the site which could pose a hazard to life or property. Action shall be immediately undertaken to alleviate the hazard. The operator shall provide a written report of any such event, within thirty (30) days, which shall include, but not be limited to, a description of the facts of the event, the corrective measures used, and the steps taken to prevent a recurrence of the incident. Failure to provide this report shall initiate violation proceedings pursuant to Article 11. This condition does not supersede nor replace any requirement of any other governmental entity for reporting incidents.	YCEHD. As discussed previously, the Hazardous Materials Business Plan must include all of the following: • List all the hazardous materials stored at a site; • Identify emergency response procedures for spills and personnel; • Identify evacuation plans and procedures; and • Identify training records for personnel to substantiate annual refresher training. Submittal of a Hazardous Materials Business Plan to the YCEHD would ensure that the project would be consistent with OCSMO Section 10-4.403.
Section 10-4.415 All internal combustion engine driven equipment and vehicles shall be kept tuned according to the manufacturer's specifications and properly maintained to minimize the leakage of oils and fuel. No vehicles or equipment shall be left idling for a period of longer than is required by law, recommended by the Air District, or ten (10) minutes, whichever is shorter. Fueling and maintenance activities of heavy equipment (except draglines and floating suction dredges) are prohibited within one-hundred (100) feet of open bodies of water during mining and reclamation. All Storm Water Pollution Prevention Plans shall include provisions for releases of fuels during fueling activities for draglines and floating suction dredges.	Off-road equipment used during implementation of the proposed project would be required to comply with the In-Use Off-Road Diesel Vehicle Regulation, which includes restrictions on idling time as well as standards for reducing emissions from off-road equipment. One means of reducing emissions is to keep equipment tuned according to the manufacturer's specification. Furthermore, the proposed mining and reclamation activities would comply with OCSMO standards related to fueling and maintenance of equipment in the vicinity of the proposed mining pit. Thus, the project would comply with this regulation.
Section 10-4.417 All surface mining operations that propose off-channel excavations extending below the groundwater level shall develop and maintain a groundwater monitoring program consisting of two components: water level measurements and water quality testing. A groundwater level monitoring program shall be initiated at least six months prior to the removal of overburden. At a minimum, the groundwater level monitoring program shall consist of three monitoring wells, with at least one well upgradient of the wet pit and one well downgradient of the wet pit. Monitoring programs for proposed mining areas exceeding one-hundred (100) acres (total proposed mining area over the life of the	A condition of approval would be recommended to ensure that the proposed project would comply with all applicable groundwater monitoring and reporting requirements established by OCSMO Section 10-4.417. Therefore, the proposed project would comply with this regulation.

(Continued on next page)

Table 4.7-1
Consistency with Applicable Standards

Policy / Regulation	Consistency Discussion
project) shall include one additional well for each one-hundred (100) acres of wet pit mining. Therefore, wet pit mining areas of 1 to 99 acres would require three (3) wells, 100 to 199 acres would require four (4) wells, 200 to 299 acres would require five (5) wells, and so on. These wells shall be distributed through the vicinity of the wet pit mining area and used for groundwater level measurements. Groundwater levels shall be collected from the monitoring wells on a quarterly basis for six (6) months prior to mining and for the duration of the mining period. All wellheads shall be surveyed with horizontal and vertical control to allow calculation of groundwater elevations and development of groundwater contour maps. Groundwater levels shall be measured with an accuracy of plus or minus 0.01 foot, at minimum. Water quality in the vicinity of each active wet pit mining location shall be evaluated by analyzing samples from selected monitoring wells (one upgradient and one downgradient) and wet pit surface water sampling locations. Since mining may be conducted in phases over a relatively long period of time, pit boundaries may change with time. Selection, and installation if necessary, of downgradient monitoring wells, which would be critical to adequately characterize the groundwater quality in the vicinity of the wet pits, shall be submitted by the operator for review and approval by the County. The selected monitoring wells shall be installed and sampled at least six (6) months prior to the removal of overburden. The downgradient wells shall be located as near to the active wet pit mining areas as is practical. The upgradient wells shall be located an adequate distance from the proposed mining area to ensure that the effect of the wet pit on water quality in the well would be negligible. The water samples from the wet pit shall be collected in a manner so as to ensure that they are representative of water quality within the wet pit. The minimum sampling schedule and required analyses are described below. (a) Groundwater level and pit water surface level measurements shall be performed quarterly in all wells for the duration of mining and reclamation. (b) For monitoring the groundwater quality of proposed wet pit mining, sample collection	

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Table 4.7-1
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and analysis of physical, chemical, and biological constituents shall be conducted according to the following specifications: (1) Prior to the removal of overburden – one upgradient and one downgradient well shall be sampled at least six (6) months prior to the removal of overburden and again at the start of excavation. The samples shall, at minimum, be analyzed for general minerals; inorganics; nitrates; total petroleum hydrocarbons (TPH) as diesel and motor oil, benzene, toluene, ethylbenzene, and xylenes (BTEX); pesticides (EPA 8140 and 8150); and coliform (with E. coli confirmation). (2) During wet pit mining and active reclamation – the wet pit shall be sampled semi-annually for the duration of mining and active reclamation. The samples shall, at minimum, be analyzed for general minerals; inorganics; nitrates; TPH as diesel and motor oil, BTEX; pesticides (EPA 8140 and 8150); and coliform (with E. coli confirmation). One upgradient and one downgradient well shall be analyzed, at minimum, for general minerals; inorganics; nitrates; TPH as diesel and motor oil, BTEX; pesticides (EPA 8140 and 8150); and coliform (with E. coli confirmation). The wells shall be sampled according to the following schedule: semi-annually for the first two years, and annually every year thereafter. (3) After active reclamation – one (1) year after all heavy equipment work has been completed in the vicinity of the pit, the TPH and BTEX analyses may be discontinued. The wet pit and one upgradient and one downgradient well shall be sampled	

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Table 4.7-1
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and analyzed for pH; temperature; nutrients (phosphorous and nitrogen); total dissolved solids; total coliform (with E. coli confirmation); and biological oxygen demand. This monitoring shall be conducted every two (2) years for a ten (10) year period after completion of reclamation. A report to the Agency and Department of Environmental Health shall be submitted within thirty (30) days of the required groundwater testing. Additional tests and analysis shall be required only if a new condition is recognized that may threaten water quality or if the results of previous tests fall outside allowable ranges. If at any time during the monitoring period, testing results indicate that sampling parameters exceed Maximum Contaminant Levels (MCLs), as reported in the California Code of Regulations, or established background levels, a qualified professional shall evaluate potential sources of the contaminants. The evaluation shall determine the source and process of migration (surface or subsurface) of the contaminants. A report shall be submitted to the regulatory agencies (the Agency, Yolo County Department of Environmental Health, the Central Valley Regional Water Quality Control Board, and the U.S. Environmental Protection Agency) which identified the source of the detected contaminants and specifies remedial actions to be implemented by the operator for corrective action. If it is determined that the source of water quality degradation is off-site, and the County and the RWQCB are in agreement with this conclusion, the operator shall not be responsible for corrective action. If corrective action is ineffective or infeasible, the responsible party must provide reparation to affected well owners, either by treatment of water at the wellhead or by procurement of an alternate water supply. If, at the completion of the mining and reclamation period, water quality has not been impacted, all monitoring wells shall be destroyed in accordance with the California Department of Water Resources Well Standards. If the County, landowner, or other	

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Table 4.7-1
Consistency with Applicable Standards

Policy / Regulation	Consistency Discussion
agency wishes to maintain the wells for future water resources evaluation, selected wells may be preserved for this use. Monitoring wells may remain useful for post-mining land uses. The County may retain appropriate staff or a contract consultant to provide third party critical review of all hydrologic reports related to monitoring.	
Section 10-4.419 Trucks accessing a mining site to pick up a load, or leaving a mining site to deliver a load, are restricted to the approved/designated haul routes identified in the operator's permit which applies to the route taken from the mining site access/driveway to a state /federal highway. If a truck subsequently exists the state/federal highway while within Yolo County, this too may only occur on an approved/designate haul route. This applies to all truck trips serving the mining site, unless making a local delivery. Those portions of designated truck haul routes that include County-maintained roads shall be posted as such, in accordance with the Public Works Department, to facilitate law enforcement and public safety. Private truck haul routes or conveyors shall be used to transport material within the mining site, in order to reduce impacts to public roads.	The haul truck traffic associated with the proposed project would be restricted to the haul routes identified in Chapter 3, Project Description, of this EIR, which are currently in use for Teichert's neighboring mining operations. Therefore, the proposed project would be consistent with this regulation.
Surface Mining Reclamation Ordination	
None applicable.	