

5.10 PUBLIC HEALTH AND SAFETY

This Section addresses safety issues associated with the accidental release of hazardous materials, the use of recycled water, wildland fire hazards, and emergency evacuation. When necessary, mitigation measures have been recommended to avoid or lessen potential impacts.

EXISTING CONDITIONS

REGULATORY SETTING - FEDERAL

Hazardous Materials

According to the U.S. Environmental Protection Agency (EPA), a "hazardous" waste is defined as one "which because of its quantity, concentrations, or physiochemical or infectious properties, may either increase mortality or produce irreversible or incapacitating illness, or pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, or disposed of, or otherwise managed" (U.S. Public Health and Welfare Code Section 6903). Special handling and management are required for materials and wastes that exhibit hazardous properties. Treatment, storage, transport, and disposal of these materials are highly regulated by the Federal, State, and local governments. Compliance with Federal and State hazardous materials laws and regulations minimizes the potential risks to the public presented by these potential hazards.

The Federal hazardous waste laws are generally referred to as the Resource Conservation and Recovery Act (RCRA). These laws provide the "cradle to grave" regulation of hazardous wastes. Businesses, institutions, and other entities that generate hazardous waste are required to identify and track their hazardous waste from the point of generation until it is recycled, reused, or disposed of.

Recycled Water

Two federal acts regulate the discharge and use of recycled water or wastewater: the Clean Water Act and the Safe Drinking Water Act.

<u>Clean Water Act.</u> Federal requirements relevant to the discharge of recycled water, or wastewater, and any other liquid wastes to "navigable waters" are contained in the 1972 amendments to the Federal Water Pollution Control Act of 1956, commonly known as the federal Clean Water Act (CWA). The CWA created the U.S. Environmental Protection Agency (USEPA) and established the National Pollutant Discharge Elimination System (NPDES), a permit system for discharge of contaminants to navigable waters. NPDES requires that all municipal and industrial dischargers of liquid wastes apply for and obtain a permit prior to initiating discharge.

<u>Safe Drinking Water Act.</u> Federal requirements relevant to the use of recycled water for groundwater recharge are contained in the 1986 amendments to the Safe Drinking Water Act (SDWA) of 1974. The SDWA focuses on regulation of drinking water and control of public health risks by establishing and enforcing maximum contaminant levels (MCLs) for various compounds in drinking water. The 1986 amendments also established requirements for

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protection of groundwater supplies through wellhead protection programs and regulation of underground injection of wastes.

<u>Administration</u>. In the State of California, the administration and enforcement of the NPDES and SDWA programs have been delegated to the state.

North Coast Area Plan

PLANNING AREA STANDARDS

The NCAP contains special "standards" for the North Coast Planning Area that are mandatory requirements for development, designed to handle identified problems in a particular rural area, or to respond to concerns in an individual community. The criteria for application of the Planning Area standards are discussed in detail in Section 5.1 (Land Use and Planning). The NCAP standards are presented below according to the location in the planning area where they apply (i.e., Cambria Urban or Rural). The NCAP standards¹ regarding public health and safety that are relevant to the proposed Project are:

Cambria Urban Area

Community Wide (CW):

CW-4 <u>Limitation on Development</u>.

- A. Water Service in Cambria..... Until such time as may be otherwise authorized through a coastal development permit approving a major public works project involving new potable water sources for Cambria, new development not using CCSD connections or water service commitments existing as of November 15, 2001 (including those recognized as "pipeline projects" by the Coastal Commission on December 12, 2002 in coastal development permits A-3-SLO-02-050 and A-3-SLO-02-073, shall assure no adverse impacts to Santa Rosa and San Simeon Creeks.....
- C. <u>Supplemental Water Supply Standards</u>. Any major public works water supply project to support new development within the CCSD service area shall be subject to the following approval standards and findings:.....
 - 4. <u>Fire Safety</u>. The project shall demonstrate that water storage and delivery systems will be adequate to meet the fire safety and other public health and safety needs of new development supported by the project, consistent with the protection of other coastal resources.
 - 5. Other Public Service Capacities. The maximum level of development supported by the project shall not exceed that supported by other available public services, including wastewater treatment capacity and road capacity. The project shall not induce growth beyond that level necessary to maintain acceptable road Levels of Service and circulation

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¹ It is noted that the sub-sections of the NCAP Standards that are not relevant to this issue area have been presented in summary form; refer to the 2007 NCAP for the text in its entirety.



to protect coastal access and recreation opportunities, and provide for public safety (e.g., fire evacuation).....

- CW-9 <u>Cambria Fire Department Review</u>. All new development shall comply with applicable state and local Cambria fire codes. Prior to application acceptance, land use and building permit applications shall include a fire plan review from the Cambria Fire Department.
- CW-12 <u>Landscaping</u>. All areas of the site disturbed by project construction shall be revegetated with native, drought and fire resistant species that are compatible with the habitat values of the surrounding forest.....
 - B. <u>Prohibited Plant Materials</u>. Non-native, invasive, fire prone, and water intensive (e.g., turf grass) landscaping shall be prohibited on the entire site. A list of prohibited plants, such as Pampas grass and Scotch broom, is available from the Department of Planning and Building. Use of plants listed in the California Invasive Plant Council (Cal IPC) Invasive Plant Inventory is prohibited.

REGULATORY SETTING - STATE OF CALIFORNIA

Hazardous Materials

The primary responsibility for implementing RCRA is assigned to the EPA although individual states are encouraged to seek authorization to implement some or all RCRA provisions. The responsibility for implementation of RCRA was given to California EPA's Department of Toxic Substances Control (DTSC) in August 1992. The DTSC is also responsible for implementing and enforcing California's own hazardous waste laws, which are known collectively as the Hazardous Waste Control Law. Although similar to RCRA, the California Hazardous Waste Control Law and its associated regulations define hazardous waste more broadly and so regulate a larger number of chemicals. Hazardous wastes regulated by California but not by EPA are called "non-RCRA hazardous wastes."

The Unified Program (UP) was created in 1993 by Senate Bill 1082 to consolidate, coordinate, and make consistent the administrative requirements, permits, inspections, and enforcement activities for environmental and emergency management programs. The Unified Program is implemented at the local government level by Certified Unified Program Agencies (CUPAs). The implementing agency with jurisdiction over Cambria is the San Luis Obispo County (County) Certified Unified Program Agency (CUPA), which is administered by the County's Environmental Health Department (EHD).

The State's Accidental Release Prevention Law provides for consistency with Federal laws (i.e., the Emergency Preparedness and Community Right-to-Know Act and the Clean Air Act) regarding accidental chemical releases and allows local oversight of both the State and Federal programs. State and Federal laws are similar in their requirements; however, the California threshold planning quantities for regulated substances are lower than the Federal quantities. Local agencies may set lower reporting thresholds or add additional chemicals to the program. The Accidental Release Prevention Law is implemented by the CUPA and requires that any business, where the maximum quantity of a regulated substance exceeds the specified threshold quantity, register with the County as a manager of regulated substances and prepare

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a Risk Management Plan. A Risk Management Plan must contain an offsite consequence analysis, a five-year accident history, an accident prevention program, an emergency response program, and a certification of the truth and accuracy of the submitted information.

Chapter 6.95, Section 25503(a), of the California Health and Safety Code, and Title 19 of the California Code of Regulations (CCR) §2729, et seq., require businesses that handle a hazardous material or mixture containing a hazardous material in reportable quantities to establish and implement a Hazardous Materials Business Plan for emergency response to a release or threatened release of a hazardous material. Businesses in the County submit their plans to the County's EHD, which makes the plans available to emergency response personnel. The Business Plan must identify the type of business, location, emergency contacts, emergency procedures, mitigation plans, and chemical inventory at each location.

Recycled Water

State requirements for production, discharge, distribution, and use of recycled water are contained in:

- California Water Code, Division 7 Water Quality, Sections 1300 through 13999.16 (Water Code);
- ◆ California Administrative Code, Title 22 Social Security, Division 4 Environmental Health, Chapter 3 Reclamation Criteria, Sections 60301 through 60475 (Title 22); and
- ◆ California Administrative Code, Title 17 Public Health, Chapter 5, Subchapter 1, Group 4 Drinking Water Supplies, Sections 7583 through 7630 (Title 17).

In addition, guidelines for production, distribution, and use of recycled water have been prepared or endorsed by state agencies administering the recycled water regulations.

<u>Water Code</u>. The Water Code contains requirements for the production, discharge, and use of recycled water. The Porter-Cologne Water Quality Control Act (Division 7 of the California Water Code), which was promulgated in 1969, established the State Water Resources Control Board (SWRCB) as the state agency with primary responsibility for the coordination and control of water quality, water pollution, and water rights (Division 7, Chapter 1).

Nine Regional Water Quality Control Boards (RWQCB) were established to represent the SWRCB regionally and carry out the enforcement of water quality and pollution control measures (Division 7, Chapter 4). In addition, each RWQCB was required to formulate and adopt water quality control plans and establish requirements for waste discharge to waters of the state. In 1972, Chapter 5.5 was added to Division 7 to provide the RWQCBs with the authority to carry out the provisions of the Federal CWA. Cambria is under the jurisdiction of the Central Coast RWQCB, which has issued a Waste Discharge Requirements (WDR) to the CCSD.

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² The minimum reportable quantities are 500 pounds for a solid, 55 gallons for a liquid, and 200 cubic feet of a gas at standard temperature and pressure. Some acutely hazardous materials are reportable at much lower quantities.



Division 7, Chapter 7 - Water Reclamation, was included in the Porter-Cologne Water Quality Control Act in 1969. Subsequent amendments required the State Department of Health Services (DHS) to establish water reclamation criteria, gave the RWQCB the responsibility of prescribing specific water reclamation requirements for water, which is used or proposed to be used as recycled water, provided for the regulation of injection of waste into the ground, and required the use of recycled water, if available, rather than potable water for irrigation of greenbelt areas. In addition to Division 7, Chapter 7, Sections 1210 through 1212 of the Water Code, added in 1980, focus on the ownership of treated wastewater and require that the owner of a wastewater treatment plant obtain approval from the SWRCB prior to making any change in the point of discharge, place of use, or purpose of use of treated wastewater.

<u>California Administrative Code (Title 22)</u>. In 1975, Title 22 was prepared by DHS in accordance with the requirements of Division 7, Chapter 7 of the Water Code. In 1978, Title 22 was revised to conform with the 1977 amendment to the Federal CWA. The requirements of Title 22, as revised in 1978, 1990, and 2001, regulate production and use of recycled water in California. Title 22 requirements are summarized in Figure 3-1 of the Final Report – Task 3: Recycled Water Distribution System Master Plan.

Title 22 establishes the quality and/or treatment processes required for an effluent to be used for a specific non-potable application. The following categories of recycled water are identified:

- Disinfected tertiary recycled water;
- Disinfected secondary 2.2 recycled water;³
- Disinfected secondary 23 recycled water;⁴ and
- ♦ Undisinfected secondary recycled water.

In addition to recycled water uses and treatment requirements, Title 22 addresses sampling and analysis requirements at the treatment plant, preparation of an engineering report prior to production or use of recycled water, general treatment design requirements, reliability requirements, and alternative methods of treatment.

A draft regulation issued April 23, 2001 specifically addresses Groundwater Recharge Reuse. The regulations address requirements for the engineering report and monitoring and reporting for projects that use recycled water for groundwater recharge.

<u>California Administrative Code (Title 17)</u>. Title 17 focuses on the protection of drinking (potable) water supplies through control of cross-connections with potential contaminants, including non-potable water supplies such as recycled water. Title 17, Group 4, Article 2 - Protection of Water System, Table 1, specifies the minimum backflow protection required on the potable water system for situations in which there is potential for contamination to the potable water supply. Recycled water is addressed as follows:

♦ An air-gap separation is required on "Premises where the public water system is used to supplement the recycled water supply."

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 $^{^{3}}$ The 2.2 refers to the coliform count requirement for the water – 2.2 MPN/100 mL.

⁴ The 23 refers to the coliform count requirement for the water – 23 MPN/100 mL.



- ♦ A reduced pressure principle backflow prevention device is required on "Premises where recycled water is used...and there is no interconnection with the potable water system."
- A double-check valve assembly may be used for "Residences using recycled water for landscape irrigation as part of an approved dual plumbed use area established pursuant to Sections 60313 through 60316 unless the recycled water supplier obtains approval for the local public water supplier, or [DHS] if the water supplier is also the supplier of the recycled water, to utilize an alternative backflow prevention plan that includes an annual inspection and annual shutdown test of the recycled water and potable water systems pursuant to subsection 60316(a)."

<u>Guidelines</u>. To assist in compliance with Title 22, DHS has prepared a number of guidelines for production, distribution, and use of recycled water. Additionally, DHS recommends use of guidelines prepared by the California-Nevada Section of the American Water Works Association (AWWA). These guidelines are summarized in the Final Report – Task 3: Recycled Water Distribution System Master Plan.

Wildland Fires

The California Department of Forestry (CDF) and Fire Protection provides fire protection for State Responsibility Areas and, as the County Fire Department, protects most unincorporated areas within the County. CDF/County Fire has identified wildland fires as a risk to residents of the County. To mitigate this risk, CDF/County Fire initiated a Fire Management Plan in 1999. This plan is updated yearly and its goals are to 1) increase the safety to residents and firefighters during wildland fires; and 2) reduce the costs and losses associated with wildland fires.

The Fire Management Plan is a dynamic living document, responding to ever changing environmental and social conditions. The Fire Management Plan utilizes the following strategies to accomplish the goals listed above:

- Collaboration with Stakeholders;
- ♦ Risk Assessment of Wildland Urban Interface Areas (WUI);
- Development of an Action Plan; and
- Monitor Effectiveness of programs and projects.

CDF/County Fire staff also performs a comprehensive "Risk Assessment." Risk is assessed at the County, community, and individual home level. For the countywide analysis, CDF/County Fire staff utilizes the CDF "Assets at Risk Assessment." This assessment, which is based on the best available data, utilizes Geographical Information Systems (GIS) to determine areas of high, medium, and low assets at risk. According to the analysis, portions of Cambria were identified as areas where assets were at high risk. However, it was determined that the accuracy of some of the base data was not complete and continued analysis was deemed necessary. Because of these limitations, the assessment was augmented with expertise from field Battalion Chiefs, how were able to identify additional areas. Based on the list, Battalion 1 identified the Cambria WUI as a top (Priority #3) target area needing mitigation to reduce the risks. The CDF and Fire Protection were also responsible for generating the State's list of

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⁵ The County of San Luis Obispo is divided into 5 battalions; a Battalion Chief administers each battalion.



communities at risk. Cambria was identified as one of the County's communities at risk. ⁶ To address the special risks associated with communities, CDF/County Fire staff conducted community wildland protection plans (CWPP) during 2005 in Cambria and other areas of the County.

Because Cambria was identified as a community at risk and a top target area within Battalion 1, CDF/County Fire Staff, in cooperation with the Cambria Fire Safe Council Focus Group, Cambria Fire, and other effected stakeholders, are conducting a Community Wildfire Protection Plan (CWPP). A component of this plan will be an action program to address issues identified during the community risk assessment. Cambria currently has a fuel treatment plan in place. The East/West Fuel Break, which was constructed using hand removal of fuels and chipping, was completed in 2003. This plan will be reevaluated during the CWPP process and additional fuel treatment projects will be initiated.

<u>California Department of Forestry/County Fire Inspections</u>. CDF/County Fire has an inspection process in place to assure compliance with fire and safety codes. This includes both new construction and maintenance inspections of existing development. Fire prevention staff, as part of the County building permit process, inspects new construction. The maintenance inspection program, including the State's LE-38 program and the local hazard abatement programs, are conducted by both fire prevention staff and by fire engine companies. CDF/County Fire field Battalion Chiefs manage the hazard reduction inspection program (LE-38 program). Engine companies are responsible for performing inspections within their initial attack areas.

REGULATORY SETTING - SAN LUIS OBISPO COUNTY

Hazardous Materials

The County EHD regulates storage and reporting of hazardous materials pursuant to state and federal requirements. Proper storage of hazardous materials to prevent contamination of water resources is required.

A Hazardous Materials and Waste Program has been established in the County to protect the public and the environment from the release of hazardous wastes by regulating industries that generate hazardous waste. Program objectives are accomplished through inspection, surveillance, incident investigation, and assistance to industry, enforcement, and public education. Elements of the Program include:

- ♦ Release Response Plans;
- ♦ California Accidental Release Prevention;
- Underground Storage Tanks;
- Hazardous Waste Generator;
- Tiered Permitting;
- ♦ Above Ground Storage Tanks; and
- Hazardous Materials Response Team.

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⁶ California Department of Forestry and Fire Protection/San Luis Obispo County Fire Department 2005 Fire Management Plan, Page 20.



Wildland Fires

<u>San Luis Obispo County General Plan</u>. All development being reviewed by County Planning Staff is also reviewed by the fire department to ensure that projects are designed within the parameters of the County adopted *General Plan*. This document includes the Safety Element, access requirements, housing density, allowable occupancy use, community water system requirements, and property setback requirements. This review confirms that the proposed development has secondary access, proper water storage, and defensible space around the development and will use fire safe construction materials prior the subdivision of lands.

<u>Fire and Building Codes</u>. The County has adopted with amendments, the California Fire Code (CFC) and the California Building Code (CBC) into local ordinance. These regulations have many requirements for the protection of the citizens from wildland urban interface fires including:

- Water requirements;
- Minimum access road requirements;
- Roofing requirements;
- Construction requirements;
- ♦ Hazard Abatement; and
- ♦ Turnaround requirements.

REGULATORY SETTING - COMMUNITY OF CAMBRIA

Wildland Fires

The Cambria Fire Department (CFD) provides fire protection, prevention, rescue, and emergency medical services to the community of Cambria. It also conducts ongoing fire and safety inspections on existing buildings, including schools and other public facilities. Training and public education programs, and a major fuel hazard reduction program are also conducted by the CFD.

The CFD works closely with the County to ensure that all new building and remodel projects comply with State fire and safety codes and environmental regulations. Because Cambria has many homes that are in close proximity to one another and interface with a wildfire susceptible area, high flows to support firefighting are critical. On September 26, 2002 the CCSD Board approved the 2000 and 2001 editions of the Uniform Fire Code (Ordinance No. 03-2002). This approval provides amendments requiring residential sprinklers on new construction and remodels that add 25 percent more area to an existing residence.

Natural and Other Hazards

The San Luis Obispo County Office of Emergency Services is committed to serving the public before, during, and after times of emergency and disaster by promoting effective coordination between agencies and encouraging emergency preparedness of the public and organizations involved in emergency response.

In compliance with the Federal Disaster Mitigation Act of 2000 ("DMA 2000"), the County has developed a Local Hazard Mitigation Plan (LHMP). The LHMP addresses natural hazards throughout the County (i.e., wild land fires, flooding potential, and earthquakes) and how such

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hazards might be mitigated. While DMA 2000 requires that local communities address only natural hazards, the Federal Emergency Management Agency (FEMA) recommends that local comprehensive mitigation plans address man-made and technological hazards to the extent possible. Towards that goal, the County has addressed an expansive set of hazards:

- ♦ Wildfire;
- ♦ Flooding;
- Extreme Weather;
- ◆ Tsunami;
- ♦ Earthquakes;
- ◆ Fault Rupture/Groundshaking/Liquefaction;
- Coastal Storm/Coastal Erosion;
- ♦ Landslides/Rockslides:
- ♦ Naturally-Occurring Biological Threats; and
- Insect Infestation.

Refer to Section 5.9 (Hydrology and Water Quality) for a discussion regarding potential flooding conditions. Refer to Section 5.8 (Geology and Soils) for a discussion regarding potential geologic and seismic hazards (i.e., tsunami, earthquakes, fault rupture, groundshaking, liquefaction, landslides/rockslides).

EXISTING CAMBRIA WASTEWATER TREATMENT PLANT

The CCSD provides wastewater treatment and disposal services to Cambria and the San Simeon State Camp Grounds. The CCSD operates the Cambria Wastewater Treatment Plant (WWTP), a 1.0 million gallon per day (MGD) extended aeration activated sludge secondary facility located in Cambria (southwest of the intersection of Windsor Boulevard and State Highway 1). The current dry weather flow of the plant is approximately 650,000 gallons per day (gpd). The system includes 65 miles of collection system and ten remote pump stations. The original treatment plant was constructed in 1970. In 1995, a major upgrade was completed to improve the plant's ability to reliably meet the discharge requirements required by the Regional Water Quality Control Board (RWQCB).

To meet Cambria's existing water demand, CCSD operates several wells that withdraw water from shallow aquifers along San Simeon and Santa Rosa Creeks. Presently, the treated wastewater effluent is percolated into the ground between the San Simeon well field and the Pacific Ocean to create a hydraulic barrier that slows the fresh water underflow in the San Simeon Creek aquifer. This mound of fresh water also prevents seawater intrusion into the San Simeon aquifer during the summer months and maintains down-gradient surface flows.

The amount of water required to maintain the hydraulic mound varies seasonally. Because of the lowered potable well-field levels during the dry season, down-gradient percolation of the entire wastewater effluent flow may not be desired or necessary. Accordingly, a portion of the wastewater effluent may be available for recycled water use. Plant operations staff has estimated that during the dry season months, approximately 250,000 gallons per day (gpd) may be required to be percolated into the aquifer to maintain the hydraulic barrier. This assumption allows for a conservative estimate of barrier needs and recycled water availability. Based on a dry weather flow of 650,000 gpd, approximately 400,000 gpd of wastewater effluent would be

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available for recycled water use during the dry months.⁷ Despite the need to constantly supply the mound with 250,000 gpd of effluent, more water is available for recycled water use during wet months due to the higher plant flow (1 mgd) and reduced impacts to the down-gradient stream flows.

CCSD's operation of its percolation ponds is subject to conditions of a Waste Discharge Requirements (WDR) Order (Order 01-100 adopted by the RWQCB on December 7, 2001).

SIGNIFICANCE CRITERIA

Appendix G of the California Environmental Quality Act (CEQA) Guidelines contains the Initial Study Environmental Checklist form used during preparation of the Project Initial Study, which is contained in Appendix 15.1 (Initial Study/Notice of Preparation). The Initial Study includes questions regarding public health and safety. The issues presented in the Initial Study Checklist have been utilized as thresholds of significance in this Section. Accordingly, a project may create a significant environmental impact if it would:

- ♦ Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials; refer to Section 7.0 (Effects Found Not to be Significant).
- ♦ 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.
- 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 for people residing or working in the area; refer to Section 7.0 (Effects Found Not To Be Significant).
- For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the Planning Area; refer to Section 7.0 (Effects Found Not To Be Significant).
- ♦ Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.

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⁷ It is noted that this number may require further refinement through subsequent study due to potential habitat concerns within the downstream lagoon area; a portion of the treated wastewater plant effluent may be deemed necessary to support critical habitat; refer to Section 5.6 (Biological Resources).



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

IMPACTS AND MITIGATION MEASURES

HAZARDOUS MATERIALS

❖ IMPLEMENTATION OF THE PROPOSED WATER MASTER PLAN IMPROVEMENTS WOULD NOT CREATE A SIGNIFICANT HAZARD TO THE PUBLIC OR THE ENVIRONMENT THROUGH THE ROUTINE TRANSPORT, USE, OR DISPOSAL OF HAZARDOUS MATERIALS, OR CONDITIONS INVOLVING ACCIDENTAL RELEASE OF HAZARDOUS MATERIALS. THE PROPOSED PROJECT WOULD NOT CREATE A SIGNIFICANT HAZARD TO THE PUBLIC OR THE ENVIRONMENT BY BEING LOCATED ON A SITE, WHICH IS INCLUDED ON A LIST OF HAZARDOUS MATERIALS SITES. A LESS THAN SIGNIFICANT IMPACT IS ANTICIPATED FOLLOWING IMPLEMENTATION OF THE RECOMMENDED MITIGATION, AND COMPLIANCE WITH THE SAN LUIS OBISPO COUNTY AND STATE REGULATORY FRAMEWORK.

Impact Analysis:

Potable and Recycled Water Distribution Systems

Reported Hazardous Waste Sites. Implementation of the proposed distribution pipelines may traverse an unidentified hazardous waste site. Undocumented potentially hazardous conditions (e.g., underground storage tanks (USTs), leaking USTs, and individual septic systems) may exist in the development sites of the proposed storage reservoirs and pump stations, and along other pipeline segments. These potential impacts are considered significant unless mitigated. With implementation of the recommended mitigation involving a site-specific Phase I Environmental Site Assessment (ESA), removal and proper disposal of tanks, and remediation, if necessary, potential impacts in this regard would be reduced to less than significant levels. Through the County's development review process, future improvements would also be evaluated to determine the environmental safety conditions for their establishment and operation.

Following implementation of the recommended mitigation and compliance with relevant State and County regulatory requirements regarding hazardous materials, the proposed potable and recycled water system improvements would result in a less than significant impact regarding the potential accidental release of hazardous materials.

Wastewater Treatment Plant. Sodium hypochlorite, a chemical compound, is used in the effluent disposal process at the existing WWTP.⁸ After secondary treatment, plant effluent is disinfected with sodium hypochlorite before it gravity flows to the effluent pump station. Sodium hypochlorite is a safer disinfectant for water than the chlorine gas, which is used at thousands of WWTPs across the United States. However, hypochlorite is a strong oxidizer. The products of

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⁸ A solution of sodium hypochlorite is frequently used as a disinfectant and as a bleaching agent; often it is simply called "bleach," though other chemicals are sometimes given that name as well.



the oxidation reactions are corrosive, and can burn skin and cause eye damage, particularly when used in concentrated forms.

The WMP proposes to add disinfection and tertiary treatment to the existing WWTP in order to meet Title 22 regulations for using recycled water. Accordingly the existing WWTP must be modified to include these treatment processes. Tertiary treatment consists of coagulation/flocculation, sedimentation, filtration, and disinfection. A number of tertiary filtration systems are available, as described in Section 3.0 (Project Description). The proposed advanced treatment facilities at the existing WWTP would not alter the existing disinfecting process or introduce the use of new potentially hazardous chemicals into the process. Plant operations would continue to be subject to the County EHD regulations regarding storage and reporting of hazardous materials pursuant to State and Federal requirements, as presented above. Following compliance with relevant County, State, and Federal regulatory requirements, the proposed tertiary treatment improvements to the existing WWTP would result in a less than significant impact regarding the routine transport, use, or disposal of hazardous materials, or conditions involving the accidental release of hazardous materials.

Water Demand Management

This Project component involves improvements to the current conservation program and regulations, which would not result in impacts from the accidental release of hazardous materials.

Seawater Desalination

<u>Desalination Plant Site</u>. The proposed seawater desalination facility site is not a listed hazardous waste site, according to the County's list of Identified Hazardous Waste Sites. The site is presently used for CCSD's perculation pond operation, which does not result in contamination. A less than significant impact would occur in this regard.

<u>Desalination Operations</u>. For this component, the seawater must undergo pre- and post-treatment before it can be pumped into the distribution system. The pretreatment steps may include filtration, a pH adjustment system, and the addition of sulfuric acid and an anti-scalant. Post-treatment steps include disinfection, blending, and carbon dioxide stripping. To comply with DHS requirements, sodium hypochlorite would be added to the RO permeate during the disinfection process. Also, caustic soda would be added during the RO permeate blending process.

Use of these chemicals and plant operations would be subject to the County EHD regulations regarding storage and reporting of hazardous materials pursuant to State and Federal requirements, as presented above. Through the County's development review process, the seawater desalination facility would be evaluated to determine the environmental safety conditions for its establishment and operation. The proposed desalination facility would be subject to compliance with relevant County, State, and Federal regulatory requirements regarding hazardous materials. A future project-specific EIR/EIS would need to further determine the potential impacts associated with hazardous materials after more details become known regarding the desalination facility. Additionally, the EIR/EIS would analyze alternative desalination facility sites.

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Mitigation Measures:

PHS-1 Prior to implementation of the proposed Water Master Plan improvements, qualified personnel shall conduct, as needed, a formal Phase I Environmental Site Assessment following the most recent Standards of the American Society for Testing and Materials.

PHS-2 Plant operations at the existing WWTP and the proposed seawater desalination plant shall be subject to San Luis Obispo County EHD regulations regarding storage and reporting of hazardous materials, pursuant to State and Federal requirements. The CCSD shall comply with relevant County, State, and Federal regulatory requirements regarding hazardous materials.

Level of Significance: Less Than Significant Impact.

RECYCLED WATER/WASTEWATER TREATMENT PLANT

❖ IMPLEMENTATION OF THE PROPOSED WATER MASTER PLAN IMPROVEMENTS COULD CREATE A RISK TO THE PUBLIC FROM EXPOSURE TO RECYCLED WATER. COMPLIANCE WITH THE FEDERAL, STATE, AND SAN LUIS OBISPO COUNTY REGULATORY REQUIREMENTS WOULD RESULT IN LESS THAN SIGNIFICANT IMPACTS.

Impact Analysis:

Potable and Recycled Water Distribution Systems

The proposed potable water distribution system would not involve the use of recycled water; therefore, implementation of these improvements would not result in a potential increased risk from exposure to recycled water.

The WMP proposes the use of recycled water to diversify the water supply options for the CCSD. More specifically, the proposed recycled water system would involve adding tertiary treatment to the existing WWTP, distribution pipelines, storage reservoirs, and pump stations; refer to Section 3.0 (Project Description). These proposed improvements would enable the CCSD to divert a portion of the water that is currently percolated into the San Simeon Creek aquifer to various irrigation sites throughout Cambria. Of the potential uses, approximately 99 acre-feet were considered for possible service with highly treated wastewater effluent due to their proximity to a proposed distribution pipeline. Of the 99 acre-feet of likely irrigation sites identified, 50 acre-feet in new demands out of the CCSD's existing hydraulic mound area were identified.

State requirements for production, discharge, distribution, and use of recycled water are contained in California Water Code (Division 7) and California Administrative Code (Titles 17 and 22). In particular, Title 22 establishes the quality and/or treatment processes required for an effluent to be used for a specific non-potable application. To meet Title 22 requirements for production and use of recycled water, the WMP proposes to add disinfection and tertiary treatment to the existing WWTP. Also, implementation of the proposed recycled water system may require the following permits/approvals:

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- CCSD's current WDR, which was issued by the RWQCB, would need to be amended for the proposed recycled water diversions.
- Prior to incorporation of a recycled water system, the CCSD must obtain approval from the SWRCB.
- Due to the potential impact of the percolated water on down-gradient stream flow, an appropriative water rights diversion permit may be required to allow alternate use of recycled water that is currently percolated into the San Simeon Creek aquifer.

Following compliance with relevant Federal, State, and County regulatory requirements regarding the use of recycled water, potential impacts due to increased risk from exposure to recycled water would be less than significant.

It is noted that numerous studies have been conducted on the potential for airborne pathogens to be transported within the aerosol mist from of sprinkler-applied secondary-treated effluent. However, the proposed recycled water distribution system would irrigate with disinfected tertiary-treated effluent, which would reduce the potential transport of pathogens to less than significant. The proposed recycled water distribution system would produce tertiary disinfected effluent, which is the same quality of water that is typically applied to golf courses and municipal medians by sprinkler systems throughout the State. DHS allows spray-application of disinfected tertiary effluent near residences and places with high public exposure (e.g., parks, play grounds, and school yards), although, recycled water users are restricted from over-spraying and producing runoff. DHS has determined that application of tertiary treated water by sprinkler systems is not detrimental to public health.

Water Demand Management

This Project component involves improvements to the current conservation program and regulations. A potential risk from exposure to recycled water would not occur.

Seawater Desalination

This Project component involves development of seawater desalination system adjacent to the existing San Simeon State Camp Grounds. A potential health risk from exposure to recycled water would not occur. Refer to Section 5.12 (Water Resources) for a discussion of potential impacts associated with potable water (treated seawater) quality.

Mitigation Measures:

PHS-3 The CCSD shall comply with relevant Federal, State, and San Luis Obispo County regulatory requirements regarding the use of recycled water, including California Water Code (Division 7) and California Administrative Code (Titles 17 and 22) regarding production, discharge, distribution, and use of recycled water.

Level of Significance: Less Than Significant With Mitigation Incorporated.

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LOCAL HAZARD MITIGATION PLAN

❖ IMPLEMENTATION OF THE PROPOSED WATER MASTER PLAN IMPROVEMENTS WOULD NOT IMPAIR IMPLEMENTATION OF OR PHYSICALLY INTERFERE WITH THE SAN LUIS OBISPO COUNTY LOCAL HAZARD MITIGATION PLAN. COMPLIANCE WITH THE STATE AND SAN LUIS OBISPO COUNTY REGULATORY REQUIREMENTS WOULD RESULT IN LESS THAN SIGNIFICANT IMPACTS.

Impact Analysis:

Potable and Recycled Water Distribution Systems

It is not anticipated that implementation of the proposed potable and recycled water system components at existing water facilities (e.g., the WWTP, reservoir sites, pump stations, etc.) would interfere with the County's Emergency Response Plan, since construction activities would be contained within the existing sites. However, access and circulation at construction sites within public rights of way and common areas would be temporarily disrupted with implementation of the proposed Project components. Short-term alterations to present circulation patterns would occur along the proposed pipeline alignments due to temporary lane closures or detours, which would occur during the construction phase. It is noted that specific access and circulation impacts would be dependent upon the final improvement plans for WMP facilities. Implementation of the proposed improvements could interfere with an emergency response or evacuation, if an emergency arose during the construction phase.

Through the County's development review process, future WMP improvements would be evaluated to determine the appropriate permits for authorizing their use and the conditions for their establishment and operation. Also, placement of adequate warning signs and devices would be required during construction of the proposed water facilities in compliance with County Code. With the County's discretionary review of future WMP improvements through the established procedures, and compliance with State and County regulatory and Code requirements, implementation of the proposed WMP would not significantly interfere with the County's Local Hazard Mitigation Plan.

Water Demand Management

This Project component involves improvements to the current conservation program and regulations, which would not interfere with the County's Local Hazard Mitigation Plan.

Seawater Desalination

Construction of the seawater and seawater concentrate return pipelines could require temporary lane closures or detours at Highway 1 and San Simeon Creek Road. To prevent closure of Highway 1, mitigation is recommended requiring that piping be bored and jacked under the Highway, wherever feasible. Compliance with State and County regulatory and Code provisions would be required. A focused environmental review of the potential construction-related short-term impacts to access and circulation A future project-specific EIR/EIS would need to further determine the potential construction-related impacts to access and circulation and consistency with the County's Local Hazard Mitigation Plan after more details become known regarding the desalination facility. Additionally, the EIR/EIS would analyze alternative desalination facility sites.

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Mitigation Measures:

PHS-4 To prevent closure of Highway 1, piping shall be bored and jacked under the Highway, wherever feasible.

PHS-5 The CCSD shall comply with San Luis Obispo County Code requirements, including Code Section 13.08.070 (Safety Requirements) and Section 15.610.020 (Notice to Public of Temporary Restriction of Use of or Temporary Closing of Highway) regarding the placement of adequate warning signs and devices, and the County's Local Hazard Mitigation Plan.

Level of Significance: Less Than Significant With Mitigation Incorporated.

WILDLAND FIRES

♦ IMPLEMENTATION OF THE PROPOSED WATER MASTER PLAN IMROVEMENTS WOULD NOT EXPOSE PEOPLE OR STRUCTURES TO A SIGNIFICANT RISK INVOLVING WILDLAND FIRES. A BENEFICIAL IMPACT IS CONCLUDED IN THIS REGARD.

Impact Analysis:

Potable and Recycled Water Distribution Systems

Implementation of the proposed WMP would not increase the exposure of people or structures to a significant risk of loss, injury, or death involving wildland fires, because it does not involve the development of new housing or businesses.

As discussed in Section 5.12 (Water Resources), CCSD's water supply could be exhausted during an extended drought. Further, analysis "determined that the current groundwater supply was marginal to inadequate to provide a 90 percent level of reliability for water demand in the year 1999 (3,796 connections). The proposed WMP involves implementation of various conjunctive water supply alternatives that would address the community's existing water supply shortage, as well as provide additional water supplies.

Because Cambria was identified as one of the County's communities at risk of wildland fires, the increased availability and reliability of water resulting from implementation of the proposed WMP is considered a beneficial impact. Further, because Cambria has many homes that are in close proximity to one another and interface with a wildfire susceptible area, high water flows to support firefighting are critical. The proposed Potable and Recycled Water Distribution Systems components of the WMP have addressed this issue through enhancement of fire-fighting capabilities by increasing fire flows beyond current system capacities. A beneficial impact is concluded in this regard. Additionally, all future development would be subject to compliance with NCAP Standard CW-4 (C.4) (Limitation on Development – Fire Safety), which addresses water storage and delivery systems, and Standard CW-9 (Cambria Fire Department Review), which addresses Fire Code compliance. Compliance with CW Standard CW-12 (Landscaping), which prohibits fire prone plant materials would also be required.

The Buildout Reduction Program (BRP) described in Section 3.0 (Project Description) anticipates continued implementation of current CCSD and County programs to retire and/or

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merge residential lots. The main features of the proposed Program are outlined in Table 5.13-3 (Summary of Buildout Reduction Program). As outlined in Table 5.13-3, of the 3,357 residential lots to remain undeveloped, the BRP estimates that 1,526 total lots are non-buildable. In addition, lots that are in steep "fire chimneys," which are forested and tend to draw fire up, may be given a higher priority by land conservancies seeking the voluntary retirement of future development rights. The BRP also estimates that 879 total residential lots would be retired and/or merged voluntarily by the lot owner.

Water Demand Management

Refer to the Potable and Recycled Water Distribution Systems discussion above.

Seawater Desalination

Refer to the Potable and Recycled Water Distribution Systems discussion above.

Mitigation Measures:

PHS-6 Compliance with the following North Coast Area Plan Standards shall be required:

Cambria Urban Area

Community Wide (CW):

CW-4 (Limitation on Development)

CW-12 (Landscaping)

Category Specific (CS):

The CS Standards that are specific to each land use category; refer to Chapter 7 (Planning Area Standards) of the NCAP.

Rural Area Standards

Category Specific (CS):

The CS Standards that are specific to each land use category; refer to Chapter 7 (Planning Area Standards) of the NCAP.

Level of Significance: Less Than Significant With Mitigation Incorporated.

CUMULATIVE IMPACTS

❖ THE WATER MASTER PLAN PROJECT, COMBINED WITH FUTURE DEVELOPMENT WITHIN THE NORTH COAST AREA, COULD INCREASE THE PUBLIC'S EXPOSURE TO HAZARDOUS SUBSTANCES AND/OR WILDLAND FIRES. COMPLIANCE WITH FEDERAL, STATE, AND SAN LUIS OBISPO COUNTY REGULATORY REQUIREMENTS, ON A PROJECT-BY-PROJECT BASIS, WOULD REDUCE CUMULATIVE IMPACTS TO A LESS THAN SIGNIFICANT LEVEL.

Impact Analysis: Through the County's development review process, all future North Coast Area development would be evaluated on a case-by-case basis to determine the environmental safety conditions for their establishment and operation. Compliance with Federal, State, and County requirements would ensure that potential contamination or exposure

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to hazardous substances is avoided or controlled to minimize the risk to the public on a case-bycase basis, as the cumulative Projects are constructed.

Cumulative use of recycled water throughout the North Coast area would be subject to State requirements for production, discharge, distribution, and use pursuant to California Water Code (Division 7) and California Administrative Code (Titles 17 and 22). In particular, compliance with Title 22, which establishes the quality and/or treatment processes required for an effluent to be used for a specific non-potable application, would be required. The potential cumulative impacts due to increased risk from exposure to recycled water would be less than significant following compliance with relevant Federal, State, and County regulatory requirements that govern the use of recycled water.

The CDF and County Fire have identified wildland fires as a risk to residents of the County. Therefore, cumulative development within the North Coast Area would increase the potential exposure of people and structures to a significant risk involving wildland fires. The proposed WMP is anticipated to result in beneficial impacts in this regard, since the availability and reliability of water would increase with Project implementation. Further, the potential risks of wildland fires would be mitigated to a less than significant level by measures that are already being implemented by State, County, and local entities. Namely, the Fire Management Plan initiated by the CDF/County Fire in 1999 to increase the safety to residents and firefighters during wildland fires would continue to be updated yearly. Also, future development would be subject to compliance with the County's adopted Fire and Building Codes, which include many requirements for the protection of the citizens from wildland urban interface fires. As part of the County building permit process, the CDF/County Fire would continue to conduct inspections (of both new construction and maintenance inspections of existing development) to assure compliance with the adopted Codes. The CFD would continue to conduct ongoing fire and safety inspections on existing buildings, including schools and other public facilities. Training and public education programs, and a major fuel hazard reduction program would also continue.

Mitigation Measures: No mitigation measures are recommended beyond compliance with the established regulatory requirements on a project-by-project basis.

Level of Significance: Less Than Significant Impact.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

No unavoidable significant impacts related to public health and safety have been identified resulting from implementation of the proposed Project.

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