



City Of Merced Wastewater Collection System Master Plan

DRAFT ENVIRONMENTAL IMPACT REPORT

CHAPTER 3.8 HAZARDS, HAZARDOUS MATERIALS, AND WILDFIRES
September 2020



Prepared for:
City of Merced
678 W 18th Street
Merced, CA 95340

Prepared by:
Stantec Consulting Services Inc.
3875 Atherton Road
Rocklin CA 95765-3716



**CITY OF MERCED WASTEWATER COLLECTION SYSTEM MASTER PLAN UPDATE DRAFT ENVIRONMENTAL
IMPACT REPORT**

Environmental Impact Analysis — Hazards, Hazardous Materials, and Wildfires
September 2020

This page intentionally left blank.

CITY OF MERCED WASTEWATER COLLECTION SYSTEM MASTER PLAN UPDATE DRAFT ENVIRONMENTAL IMPACT REPORT

Environmental Impact Analysis — Hazards, Hazardous Materials, and Wildfires
September 2020

Table of Contents

3.8	HAZARDS, HAZARDOUS MATERIALS, AND WILDFIRES	3.8.1
3.8.1	Basis for Analysis	3.8.1
3.8.2	Regulatory Framework	3.8.2
3.8.3	Environmental Setting	3.8.8
3.8.4	Environmental Impacts	3.8.13
3.8.5	Hazards and Hazardous Materials Mitigation	3.8.32
3.8.6	Abbreviations	3.8.37
3.8.7	References	3.8.38

LIST OF FIGURES

Figure 3.8-1: Potential Hazards Within the Program Study Area.....	3.8.9
--	-------

**CITY OF MERCED WASTEWATER COLLECTION SYSTEM MASTER PLAN UPDATE DRAFT ENVIRONMENTAL
IMPACT REPORT**

Environmental Impact Analysis — Hazards, Hazardous Materials, and Wildfires
September 2020

This page intentionally left blank.

CITY OF MERCED WASTEWATER COLLECTION SYSTEM MASTER PLAN UPDATE DRAFT ENVIRONMENTAL IMPACT REPORT

Environmental Impact Analysis — Hazards, Hazardous Materials, and Wildfires
September 2020

3.8 HAZARDS, HAZARDOUS MATERIALS, AND WILDFIRES

3.8.1 Basis for Analysis

The California Environmental Quality Act (CEQA) Guidelines' Appendix G Environmental Checklist was used during the Notice of Preparation (NOP) scoping process (included in Appendix A) to identify the Program components that have the potential to cause a significant impact. The following potential impacts were determined to warrant further evaluation within this Environmental Impact Report (EIR) to ascertain whether the Program may do the following:

- Create a significant hazard to the public or the environment through the routine 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 release of hazardous materials into the environment.
- Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school.
- Be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5, and as a result, would create a significant hazard to the public or the environment.
- For a project located within an airport land use plan, or where such a plan has not been adopted, within 2 miles of a public or private airport or public use airport, would the project result in 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 a significant 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 impair an adopted emergency response plan or emergency evacuation plan?
 - Would the project exacerbate wildfire risks due to slope, prevailing winds, and other factors, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?
 - Would the project 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?
 - Would the project 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?

The remainder of this section describes the regulatory and environmental setting to support the evaluation of the potential impacts describing the potential impacts to hazards, hazardous materials, and wildfires that may result from implementation of the Program and identifies mitigation for potentially significant impacts, where feasible.

CITY OF MERCED WASTEWATER COLLECTION SYSTEM MASTER PLAN UPDATE DRAFT ENVIRONMENTAL IMPACT REPORT

Environmental Impact Analysis — Hazards, Hazardous Materials, and Wildfires
September 2020

3.8.2 Regulatory Framework

This section discusses the federal and state regulations as well as local policies and objectives that relate to hazards, hazardous materials, and wildfires and are relevant to the Program.

3.8.2.1 Federal

Hazardous Material Management *Resources Conservation and Recovery Act*

The Resources Conservation and Recovery Act (RCRA) established the federal regulatory program for hazardous substances and gives the United States Environmental Protection Agency (USEPA) the authority to regulate the generation, transport, treatment, and disposal of hazardous substances in a “cradle to grave” system. Under RCRA, USEPA regulates the generation, transportation, treatment, storage, and disposal of hazardous substances. This regulatory system includes tracking all generators of hazardous waste.

1984 Hazardous and Solid Waste Amendment Act

RCRA was amended by the 1984 Hazardous and Solid Waste Amendment Act, which prohibited the use of certain techniques for the disposal of certain hazardous wastes (USEPA 2018a). The Emergency Planning and Community Right-to-Know Act of 1986 imposes safety requirements to protect local communities in the event of accidental release of hazardous substances. The requirements provide measures to mitigate or prevent the risks from interaction with hazardous materials, such as handling, storage, and disposal. This law protects human health and the environment by minimizing the present threat and if the unintended release of hazardous materials were to occur (USEPA 2018b). USEPA has delegated fulfillment of many of RCRA’s requirements to the California Department of Toxic Substances Control (DTSC).

Clean Air Act

Regulations under the Clean Air Act (CAA) (42 United States Code [USC] 7401 et seq. as amended) are designed to prevent accidental releases of hazardous materials. The regulations require facilities that store a threshold quantity or greater of listed regulated substances to develop a risk management plan, including hazard assessments and response programs to prevent accidental releases of listed chemicals.

Hazardous Materials Transportation *Hazardous Materials Transportation Act*

The transport of hazardous materials is regulated by the United States Department of Transportation under the Hazardous Materials Transportation Act. To accomplish this, the Federal Aviation Administration, Federal Motor Carrier Safety Administration, Federal Railway Administration, Pipeline and Hazardous Materials Safety Administration, and United States Coast Guard have been given authority to enforce hazardous material transport regulations.

CITY OF MERCED WASTEWATER COLLECTION SYSTEM MASTER PLAN UPDATE DRAFT ENVIRONMENTAL IMPACT REPORT

Environmental Impact Analysis — Hazards, Hazardous Materials, and Wildfires
September 2020

Worker Safety Occupational Safety and Health Administration

The Occupational Safety and Health Act of 1970 created the Occupational Safety and Health Administration (OSHA), which is responsible for protecting the health of workers in events such as during the handling of hazardous materials. OSHA has created regulations to set federal standards of workplace safety including exposure limits, mandatory workplace training, accident and injury reporting, and safety procedures. These regulations are recorded in the Code of Federal Regulations (CFR) Title 29.

Federal Aviation Regulations Federal Aviation Administration

The Federal Aviation Administration (FAA) has jurisdiction over navigable airspace in the public interest as necessary to ensure the safety of aircraft use. Federal Aviation Regulation (FAR), Title 14, Part 77 includes provisions to promote safe and efficient use and preservation of navigable airspace. The FAA FAR Part 77 includes specific requirements for proposed construction or alterations of structures within the vicinity of an airport. Consultation with the FAA would be required for any project that would place structures or construction equipment (i.e., a crane) over 200 feet in height within navigable airspace. Any object of construction equipment more than 200 feet would not necessarily be incompatible with this regulation but would be subject to FAA notification and an aeronautical study to determine whether the proposed structures would constitute a hazard to air navigation. Form 7460-1 (Notice of Proposed Construction or Alteration) would be required 45 days prior to the start date of any proposed construction activities (Title 14 CFR Part 77) to initiate FAA consultation.

3.8.2.2 State

Hazardous Material Management Hazardous Waste Control Act

The Hazardous Waste Control Act created the state's hazardous waste management program. It is similar to but more stringent than the RCRA. The act is implemented by regulations contained in Title 26 of the California Code of Regulations (CCR), which describes the following required aspects for the proper management of hazardous waste: identification and classification; generation and transportation; design and permitting of recycling treatment, storage and disposal facilities; operation of facilities and staff training; and closure of facilities and liability requirements.

These regulations list more than 800 materials that may be hazardous and establish criteria for identifying, packaging, and disposing of such waste. Under the Hazardous Waste Control Act and Title 26, the generator of hazardous waste must complete a manifest that accompanies the waste from generator to transporter to the ultimate disposal location. Copies of the manifest must be filed with the DTSC.

California Environmental Protection Agency and Department of Toxic Substances Control

The California Environmental Protection Agency (CAL EPA) is responsible for creating and enforcing environmental regulations within California. Within CAL EPA is the DTSC, which was formed under the Hazardous Waste Control

CITY OF MERCED WASTEWATER COLLECTION SYSTEM MASTER PLAN UPDATE DRAFT ENVIRONMENTAL IMPACT REPORT

Environmental Impact Analysis — Hazards, Hazardous Materials, and Wildfires
September 2020

Act. DTSC is responsible for regulating hazardous waste, remediating existing contamination, and identifying ways to reduce production of hazardous wastes. DTSC can delegate enforcement responsibilities to local jurisdictions.

Unified Program

The Unified Hazardous Waste and Hazardous Materials Management Regulatory Program (Unified Program) is a unified hazardous materials management program that was established by California's Secretary for Environmental Protection following Senate Bill 1082 (1993). The Unified Program consolidates, coordinates, and makes consistent the administrative requirements, permits, inspections, and enforcement activities of the following programs:

- Hazardous Materials Release Response Plans and Inventories
- California Accidental Release Prevention Program
- Underground Storage Tank Program
- Above-Ground Petroleum Storage Act Program
- Hazardous Waste Generator and Onsite Hazardous Waste Treatment Programs
- California Uniform Fire Code: Hazardous Material Management Plans and Hazardous Material Inventory Statements

These six environmental programs are implemented at the local government level by Certified Unified Program Agencies (CUPAs). CUPAs provide a central permitting and regulatory agency for permits, reporting, and compliance enforcement. California Public Resources Code (PRC) Section 21151.4 sets special requirements for environmental impact reports and negative declarations for projects that involve the construction or alteration of a facility within 0.25 mile of a school that creates the following conditions:

- The project might reasonably be anticipated to emit hazardous air emissions;
- The project would handle an extremely hazardous substance or a mixture containing extremely hazardous substances in a quantity equal to or greater than the state threshold quantity specified in Section 25532(j) of the Health and Safety Code; or
- The project may pose a health or safety hazard to persons who would attend or would be employed at the school.

As part of the CEQA process, the lead agency preparing the EIR must consult with the appropriate school district regarding the potential impact of the project on the school, and the school district must be notified about the project in writing at least 30 days before the proposed certification of the EIR or adoption of the mitigated negative declaration PRC section 21151.4; 14 CCR Section 15186(b)).

Cortese List Government Code Section 65962

Government Code Section 65962 was enacted in 1985 and was amended in 1992. It is used as a planning tool to comply with CEQA and requires information about locations of hazardous materials release sites. It states that through the combined efforts of the DTSC, the Department of Health Services, the State Water Resources Control Board (SWRCB), and local enforcement agencies, a list of potentially hazardous areas and sites will be compiled and

CITY OF MERCED WASTEWATER COLLECTION SYSTEM MASTER PLAN UPDATE DRAFT ENVIRONMENTAL IMPACT REPORT

Environmental Impact Analysis — Hazards, Hazardous Materials, and Wildfires
September 2020

remain up to date (at a minimum, updated annually). The list is consolidated by the Secretary for Environmental Protection and is distributed to each city and county in which sites on the list are located. The list can be found on the DTSC's data management system known as EnviroStor, which includes information from the SWRCB GeoTracker database.

California Department of Transportation

The California Department of Transportation (Caltrans) manages interregional transportation, including the management and construction of the California highway system. In addition, Caltrans is responsible for the permitting and regulation of state roadways and requires that permits be obtained for transportation of oversized loads and certain materials such as hazardous materials, and for construction-related traffic disturbance.

California Public Resources Code

PRC Section 21151.4. (a) An environmental impact report shall not be certified or a negative declaration shall not be approved for any project involving the construction or alteration of a facility within one-fourth of a mile of a school that might reasonably be anticipated to emit hazardous air emissions, or that would handle an extremely hazardous substance or a mixture containing extremely hazardous substances in a quantity equal to or greater than the state threshold quantity specified pursuant to subdivision (j) of Section 25532 of the Health and Safety Code, that may pose a health or safety hazard to persons who would attend or would be employed at the school, unless both of the following occur:

- 1) The lead agency preparing the environmental impact report or negative declaration has consulted with the school district having jurisdiction regarding the potential impact of the Project on the school.
- 2) The school district has been given written notification of the Project not less than 30 days prior to the proposed certification of the environmental impact report or approval of the negative declaration.

(b)As used in this section, the following definitions apply:

(1) "Extremely hazardous substance" means an extremely hazardous substance as defined pursuant to paragraph (2) of subdivision (g) of Section 25532 of the Health and Safety Code.

(2) "Hazardous air emissions" means emissions into the ambient air of air contaminants that have been identified as a toxic air contaminant by the State Air Resources Board or by the air pollution control officer for the jurisdiction in which the Project is located. As determined by the air pollution control officer, hazardous air emissions also means emissions into the ambient air of a substance identified in subdivisions (a) to (f), inclusive, of Section 44321 of the Health and Safety Code.

[Amended by Stats. 2008, Ch. 148, Sec. 1. Effective January 1, 2009]

Worker Safety

Division of Occupational Safety and Health

The Division of Occupational Safety and Health (DOSH or CalOSHA) is responsible for enforcing workplace safety regulations and requirements in California, including hazardous materials requirements recorded under CCR Title 8. These regulations include requirements for safety training, availability of safety equipment, accident and illness

CITY OF MERCED WASTEWATER COLLECTION SYSTEM MASTER PLAN UPDATE DRAFT ENVIRONMENTAL IMPACT REPORT

Environmental Impact Analysis — Hazards, Hazardous Materials, and Wildfires
September 2020

prevention programs, warnings about hazardous substance exposure (such as asbestos), and preparation of emergency action and fire prevention plans.

DOSH also enforces hazard-communication program regulations that contain training and information requirements. Such requirements include procedures for identifying and labeling hazardous substances, communicating information about hazardous substances and their handling, and preparing health and safety plans to protect workers and employees at hazardous waste sites. Under the hazard-communication program, employers must make Material Safety Data Sheets available to employees and document employee information and training programs.

Emergency Response *California Emergency Services Act*

The California Emergency Services Act provides the basic authority for conducting emergency operations following a proclamation of emergency by the governor or appropriate local authorities. Local government and district emergency plans are considered to be extensions of the California Emergency Plan, established in accordance with the Emergency Services Act.

The California Emergency Management Agency (CAL EMA) is the state agency responsible for establishing emergency response and spill notification plans related to hazardous materials accidents. CAL EMA regulates businesses by requiring specific businesses to prepare an inventory of hazardous materials (CCR Title 19). CAL EMA is also the lead state agency for emergency management and is responsible for coordinating the state-level response to emergencies and disasters.

Fire Protection

California state fire safety regulations apply to State Responsibility Areas (SRAs) during the time of year designated as having hazardous fire conditions. The California Department of Forestry and Fire Protection (CAL FIRE) has developed a fire hazard severity scale that considers vegetation, climate, and slope to evaluate the level of wildfire hazard in all SRAs. An SRA is defined as the part of the state where CAL FIRE is primarily responsible for providing basic wildland fire protection assistance. Areas under the jurisdiction of local fire protection services are considered to be Local Responsibility Areas, and areas on federal lands are considered Federal Responsibility Areas.

During the fire hazard season, these regulations include the following: (a) restrict the use of equipment that may produce a spark, flame, or fire; (b) require the use of spark arrestors on any equipment that has an internal combustion engine; (c) specify requirements for the safe use of gasoline-powered tools in fire hazard areas; and (d) specify fire suppression equipment that must be provided onsite for various types of work in fire-prone areas. CAL FIRE has primary responsibility for fire protection within SRAs.

Uniform Fire Code

The Uniform Fire Code (UFC) contains regulations relating to construction, maintenance, and use of buildings. Topics addressed in the code include fire department access, fire hydrants, automatic storage and use, provisions intended to protect and assist fire responders, industrial processes, and many other general and specialized fire-safety requirements for new and existing buildings and the surrounding premises. The code contains specialized technical regulations related to fire and life safety.

CITY OF MERCED WASTEWATER COLLECTION SYSTEM MASTER PLAN UPDATE DRAFT ENVIRONMENTAL IMPACT REPORT

Environmental Impact Analysis — Hazards, Hazardous Materials, and Wildfires
September 2020

3.8.2.3 Local

Merced Vision 2030 General Plan

The City of Merced (City) Vision 2030 General Plan (2030 General Plan), adopted January 3, 2012 (City of Merced 2012) contains several policies that directly or indirectly pertain to hazards and hazardous materials, including the following:

Goal Area S-4: Fire Protection

- **Policy S-4.2.** Maintain a reasonable level of accessibility and infrastructure support for fire suppression, disaster, and other emergency services.

Goal Area S-5: Airport Safety

- **Policy S-5.2.** Prevent the encroachment of potential hazards to flight within the Airport's airspace.

Merced County Airport Land Use Compatibility Plan

The Merced County Airport Land Use Compatibility Plan was developed by the Merced County Airport Land Use Commission and was adopted in 1999 to address compatibility between airports within Merced County and the surrounding land uses. Various safety zones were established based on this plan which include the following:

- **Zone A:** This zone is the Runway Protection Zone where all structures are prohibited.
- **Zone B1:** This zone is the Approach/Departure Zone. In this zone, educational facilities, hospitals, and aboveground storage of hazardous materials are prohibited. There is also a 0.2 unit per acre maximum density requirement for this zone.
- **Zone B2:** This zone is the Extended Approach/Departure Zone. In this zone, educational facilities, hospitals, and aboveground storage of hazardous materials are prohibited. There is a 1.0 unit per acre maximum density requirement for this zone.
- **Zone C:** This zone is the Common Traffic Pattern zone. In this zone, educational facilities, hospitals, and libraries are prohibited. There is an 8 units per acre maximum density requirement for this zone.
- **Zone D:** This zone is for Other Airport Environs and is the outermost zone of the airport. There are no development restrictions for this zone, with the exception of objects over 150 feet in height.

Additionally, the Merced County Airport Land Use Compatibility Plan states that construction activities that could occur within the planning area are subject to the following provisions (Merced County Airport Land Use Commission 2012):

If a project contains proposed structures or other objects that may exceed the height standards defined in FAR Part 77, Subpart C, as applied to each Airport, the project proponent must submit notification of the proposal to the FAA where required by the provisions of FAR Part 77, Subpart B, and by the California Public Utilities Code, Sections 21658 and 21659. The FAA will conduct an "aeronautical study" of the object(s) and determine whether the object(s) would be of a height that would constitute a hazard to air

CITY OF MERCED WASTEWATER COLLECTION SYSTEM MASTER PLAN UPDATE DRAFT ENVIRONMENTAL IMPACT REPORT

Environmental Impact Analysis — Hazards, Hazardous Materials, and Wildfires
September 2020

navigation. The FAA notification requirements apply to all objects including structures, antennas, trees, mobile objects, and temporary objects such as construction cranes.

Merced County Hazardous Waste Management Plan

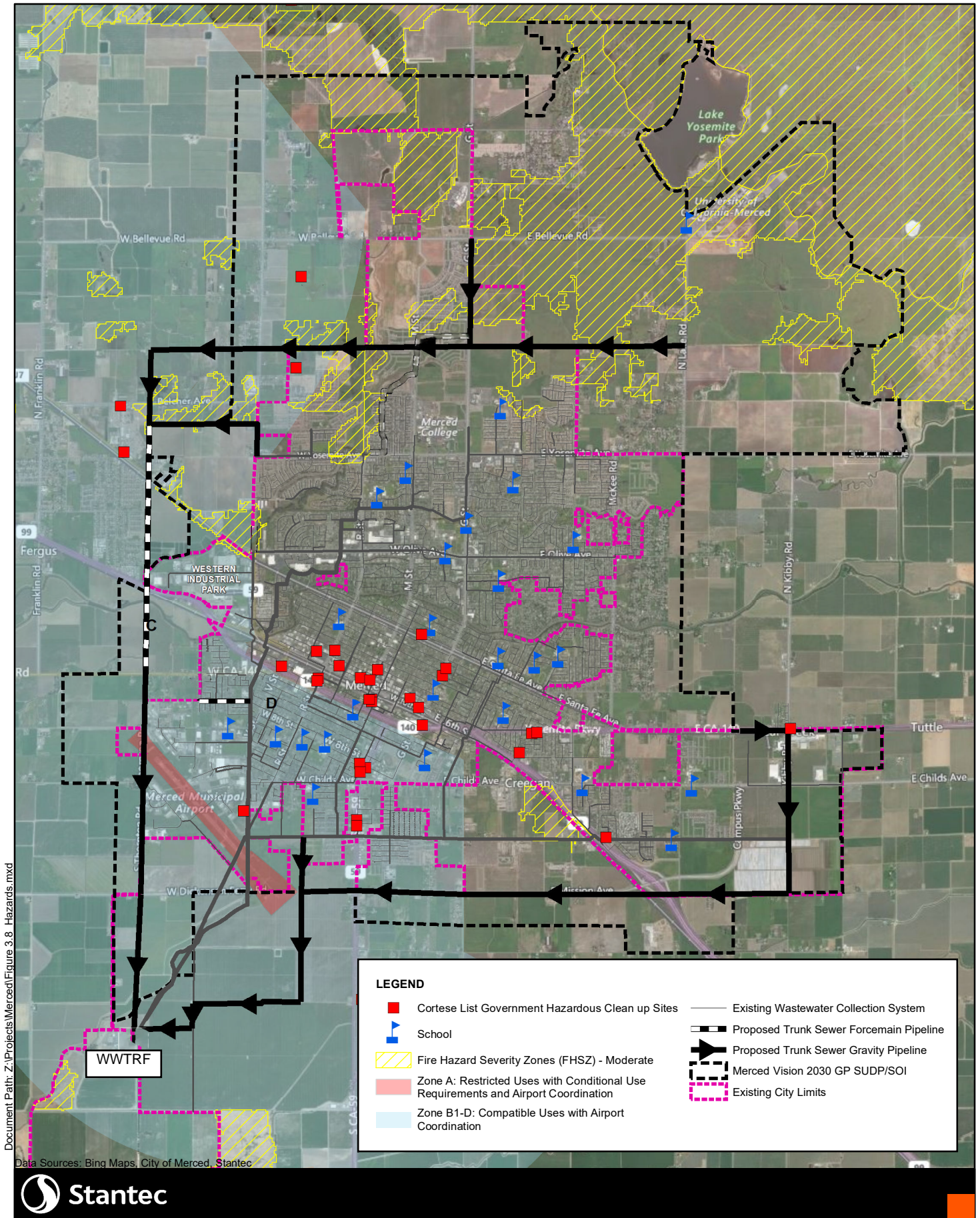
The Merced County Hazardous Waste Management Plan was prepared in 1989 to address waste reduction and onsite treatment, the siting of offsite hazardous waste facilities, transportation of hazardous wastes, cleanup of contaminated sites, and emergency response procedures related to hazards within the Merced County area. The Hazardous Waste Management Plan is enforced by the Merced County Division of Environmental Health in conjunction with the Merced City Fire Department. The Merced County Division of Environmental Health also maintains a list of known hazardous waste sites within the county, which is updated regularly.

City of Merced Local Hazard Mitigation Plan

The City of Merced Local Hazard Mitigation Plan was adopted on March 16, 2015, in an effort to reduce future loss of life and property resulting from disasters, as well as to provide decision-makers with a tool to direct mitigation activities and resources (City of Merced 2015). According to this plan, the City is at the greatest risk from hazardous materials release and flooding, whereas other threats, such as fire exposure, extreme temperatures, and potential dam failures, have a moderate hazard potential within the City (City of Merced 2015).

3.8.3 Environmental Setting

The Program Study Area considered the Specific Urban Development Plan/Sphere of Influence (SUDP/SOI) of the City, which includes mixed uses such as residential, commercial, industrial, agricultural, and open spaces. Identified potential hazards from GeoTracker, EnviroStor database, and other hazards or sensitive receptor data sources within the Program Study Area are shown on Figure 3.8-1.



Document Path: Z:\Projects\Merced\Figure 3.8 Hazards.mxd

Data Sources: Bing Maps, City of Merced, Stantec

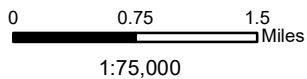


Figure 3.8-1
Potential Hazards Within City of Merced SUDP/SOI
City of Merced - Draft Environmental Impact Report

CITY OF MERCED WASTEWATER COLLECTION SYSTEM MASTER PLAN UPDATE DRAFT ENVIRONMENTAL IMPACT REPORT

Environmental Impact Analysis — Hazards, Hazardous Materials, and Wildfires
September 2020

3.8.3.1 Definition of Terms

Hazardous Materials and Wastes

For purposes of this section, the term “hazardous materials” refers to both hazardous substances and hazardous wastes. A “hazardous material” is defined in the CFR as, “a substance or material that...is capable of posing an unreasonable risk to health, safety, and property when transported in commerce” (49 CFR 171.8). California Health and Safety Code Section 25501 defines a hazardous material as follows:

Hazardous material means any material that, because of its quantity, concentration, or physical, or chemical characteristics, poses a significant present or potential hazard to human health and safety or to the environment if released into the workplace or the environment. “Hazardous materials” include, but are not limited to, hazardous substances, hazardous waste, and any material which a handler or the administering agency has a reasonable basis for believing that it would be injurious to the health and safety of persons or harmful to the environment if released into the workplace or the environment.

Hazardous wastes are defined in California Health and Safety Code Section 25141(b) as wastes that:

Because of their quantity, concentration, or physical, chemical, or infectious characteristics, [may either] cause, or significantly contribute to an increase in mortality or an increase in serious illness [, or] pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, disposed of, or otherwise managed.

Section 25532(j) of the Health and Safety Code defines "regulated substances accident risk" to mean a potential for the accidental release of a regulated substance into the environment that could produce a significant likelihood that persons exposed may suffer acute health effects resulting in significant injury or death.

Section (j) defines "regulated substance" to mean any substance that is either of the following (20 CFR Article 2 Section 25532):

- (1) A regulated substance listed in Section 68.130 of Title 40 of the CFR pursuant to paragraph (3) of subsection (r) of Section 112 of the Clean Air Act (42 USC Section 7412[r][3]).
- (2) An extremely hazardous substance listed in Appendix A of Part 355 (commencing with Section 355.10) of Subchapter J of Chapter I of Title 40 of the CFR that is any of the following:
 - i. A gas at standard temperature and pressure.
 - ii. A liquid with a vapor pressure at standard temperature and pressure equal to or greater than 10 millimeters mercury.
 - iii. A solid that is one of the following:
 - I. In solution or in molten form.
 - II. In powder form with a particle size less than 100 microns.

CITY OF MERCED WASTEWATER COLLECTION SYSTEM MASTER PLAN UPDATE DRAFT ENVIRONMENTAL IMPACT REPORT

Environmental Impact Analysis — Hazards, Hazardous Materials, and Wildfires
September 2020

- III. Reactive with a National Fire Protection Association rating of 2, 3, or 4
 - iv. A substance that the office determines may pose a regulated substances accident risk pursuant to subclause (II) of clause (i) of subparagraph (B) or pursuant to Section 25543.3.

Acute Hazardous Wastes

Acute hazardous wastes have been found to be fatal to humans in low doses or, in the absence of data on human toxicity, it has been shown in studies to have an oral lethal dose 50 toxicity (rat) of less than 50 milligrams per kilogram, an inhalation lethal dose 50 toxicity (rat) of less than 2 milligrams per liter, or a dermal lethal dose 50 toxicity (rabbit) of less than 200 milligrams per kilogram or is otherwise capable of causing or significantly contributing to an increase in serious irreversible or incapacitating reversible illness (CFR 40 261.11).

Asbestos

Naturally occurring asbestos is generally found in serpentine soils within the Sierra Nevada foothills of California and is considered a hazardous material due to exposure related public health concerns (Caltrans 2006). The Naturally Occurring Asbestos Hazard Map was reviewed to determine if the Project would involve construction in areas of relative likelihood for the presence of natural occurring asbestos (California Geological Survey 2011). The majority of Merced County, and specifically the City, is not known for the occurrence of natural occurring asbestos.

In addition to naturally occurring asbestos, many building materials, including pipelines have the potential to contain asbestos cement (AC) and other hazardous materials that could cause damage to the environment and to people, if disturbed. If material containing asbestos are disturbed, tiny fibers can become airborne, which could cause respiratory damage that could lead to lung disease or other pulmonary complications.

AC pipe is a material that was commonly used in the middle portion of the 20th Century, prior to much of the federal and state legislation regulating this hazardous material. AC pipe is most commonly encountered where public water systems were developed or extended in the 1940s through 1960s. It is a piping material that is safe if undisturbed. Risk of exposure is limited to activities that disturb the material causing it to become airborne.

Valley Fever

Coccidioidomycosis, more commonly known as “Valley Fever,” is primarily a disease of the lungs caused by the spores of the *Coccidioides immitis* fungus (“cocci”). The spores can be found in some areas naturally occurring in soils, can become airborne when the soil is disturbed, and can subsequently be inhaled into the lungs. Valley fever is considered endemic in the Central Valley of California, with the highest concentration of known cases of Valley Fever infection occurring in Kern, Kings, San Luis Obispo, Tulare, Madera, and Monterey Counties (Center for Infectious Diseases 2017). Activities or conditions that increase the amount of fugitive dust within these areas, or other regions known to contain the cocci spores, increase the risk of exposure to infection. While Merced County is not listed as one of the top areas of concern for Valley Fever, there have been reported cases of Valley Fever infection within Merced County in 2012 (estimated 60 cases) and 47 reported cases in 2017, meaning that the cocci spores have the potential to occur with the region (Center for Infectious Diseases 2017).

CITY OF MERCED WASTEWATER COLLECTION SYSTEM MASTER PLAN UPDATE DRAFT ENVIRONMENTAL IMPACT REPORT

Environmental Impact Analysis — Hazards, Hazardous Materials, and Wildfires
September 2020

Hazardous Air Pollutants

The USEPA defines hazardous emissions, also known as Hazardous Air Pollutants (HAPs), as those pollutants that are known or suspected to cause cancer or other serious health effects (USEPA 2017). HAPs can come from sources such as gasoline, motor oils, asbestos, and paint strippers and can be inhaled or ingested. Fuels such as diesel and gasoline required for the operation of construction equipment are considered Class 3 flammable liquid hazardous materials, which can lead to fires or explosions if handled incorrectly. Additionally, oils and lubricants for operation of equipment are also considered Class 3 hazardous materials.

3.8.3.2 Schools

There are four school districts within the City limits, the Merced City School District, Merced Union High School District, Weaver Union School District, and the McSwain Union School District, all of which contain a number of individual schools which are shown on Figure 3.8-1. There are no schools within 0.25 mile of the new trunk sewer infrastructure, including the Northern Trunk Sewer Project and Southern Trunk Sewer Project, or the Wastewater Treatment and Reclamation Facility (WWTRF).

3.8.3.3 Cortese List Government Code Section 65962

As discussed in the regulatory setting above, the Cortese list, which is compiled pursuant to Government Code Section 65962, is used to confirm compliance with CEQA requirements, providing a list of known locations of hazardous material release sites. The EnviroStor database, which is managed by the DTSC, and the GeoTracker database, which is managed by the SWRCB, are used to determine the proximity of a project to the nearest hazardous materials site. Active Cortese list cleanup sites, at the time this Draft EIR was written, within and near the Program Study Area are shown on Figure 3.8-1 (DTSC 2018; SWRCB 2018a). As shown on Figure 3.8-1, there is one listed site adjacent to the Southern Trunk Sewer; however, there are no currently listed sites with or directly adjacent to the Northern Trunk Sewer or WWTRF.

3.8.3.4 Emergency Response and Emergency Evacuation Plans

The City of Merced has developed an Emergency Operations Plan that addresses mitigation, planning, and response activities to be applied in various emergency situations. Emergency evacuation plans and routes depend largely on the type and extent of the emergency; however, the local and major roadways within the City provide access for both emergency response personnel and the general public. Additionally, both the Merced Fire Department and the Merced Police Department operate 24 hours a day, seven days a week and provide small- and large-scale emergency assistance within the City (City of Merced 2012).

3.8.3.5 Airports and Airstrips

There is one airport within the City of Merced, the Merced Regional Airport, which is located in the southwest corner of the City. The Castle Airport, which is located approximately three miles to the west of SR 59, is not directly within the City's SUDP/SOI or Program Study Area, however portions of this airport's designated safety zones overlap with the City's SUDP/SOI and Program Study Area (Figure 3.8-1).

CITY OF MERCED WASTEWATER COLLECTION SYSTEM MASTER PLAN UPDATE DRAFT ENVIRONMENTAL IMPACT REPORT

Environmental Impact Analysis — Hazards, Hazardous Materials, and Wildfires
September 2020

The Merced Regional Airport is a publicly owned facility that provides both commercial air and freight air cargo services for the City of Merced, as well as the surrounding areas. The Castle Airport, which was once the location of the Castle Air Force Base, has since been converted for civilian use. The 2030 General Plan land uses surrounding both these airports generally consist of industrial designations in order to be consistent with the Merced County Airport Land Use Compatibility Plan and FAA requirements regarding potential hazards (Merced County Airport Land Use Commission 2012; City of Merced 2012).

3.8.3.6 Fire Hazards

CAL FIRE maintains fire hazard severity zone maps for local responsibility areas and SRAs. Fire hazard is a way to measure physical fire behavior so that people can predict the damage that a fire is likely to cause. The Project is located in a local responsibility area maintained by the City (CAL FIRE 2012). Wildland and urban fires do occur within the City due to the hot, dry summers that occur within the region. According to the Merced Vision 2030 General Plan Draft EIR, the majority of the fires that occur within the City are caused by human activities that involve motor vehicles, equipment, arson, and burning of debris (City of Merced 2010). As shown on Figure 3.8-1, areas in the northern portion of the Program Study Area are included within a moderate fire severity zone, but no high fire severity zones occur in the Program Study Area (CAL FIRE 2007).

3.8.4 Environmental Impacts

This section analyzes the Program's potential to result in significant impacts to hazards and hazardous materials. When a potential impact was determined to be potentially significant, feasible mitigation measures (MMs) were identified to reduce or avoid that impact.

3.8.4.1 Impact Analysis

Impact HAZ-1 Potential to create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.

Impact HAZ-1 Analysis
Program Impacts

Construction

Temporary construction activities associated with implementation of the Program would involve the transport and use of gasoline, diesel fuel, hydraulic fuel, solvents, and oils typically associated with operation of construction equipment and vehicles. These chemicals would be used and stored on construction sites within the Program Study Area during Program construction activities and would be transported along public roadways throughout the Program Study Area. Use and storage would continue as needed during construction projects until reasonable build-out of the 2030 General Plan is met. The use of generators to power equipment such as dewatering pumps may also be required under the Program for deep trenching or other excavations. Federal, state, and local laws governing the handling, storage, and transport of these and other hazardous materials and spill clean ups are discussed in Section 3.8.2, Regulatory Framework, and would be required for these Program activities. These regulations are designed to prevent the improper use of materials and to reduce the risk of exposure to the public. Impacts associated with routine release of hazardous materials during transport, use, or disposal could potentially result in a significant impact

CITY OF MERCED WASTEWATER COLLECTION SYSTEM MASTER PLAN UPDATE DRAFT ENVIRONMENTAL IMPACT REPORT

Environmental Impact Analysis — Hazards, Hazardous Materials, and Wildfires
September 2020

to the public or the environment; however, the City and chosen contractor would be required to comply with all relevant and applicable federal, state, and local laws and regulations governing transport, storage, use, and disposal of hazardous materials during construction and implementation of projects under the Program. Therefore, compliance with these regulations would limit the potential for construction-related impacts from hazardous materials transport, use, or disposal, and potential impacts resulting from construction of the Program would be less than significant.

Operation

Impacts associated with operation of the Program would include things such as the storage, transport, and disposal of potentially hazardous materials associated with operation of pump stations and the WWTRF as well as the movement of trucks and vehicles for maintenance. Release of chemicals from these operational activities would be limited to accidental spills. However, these operational activities would be subject to current regulatory requirements for hazardous materials management associated with the operation of the new and existing infrastructure (Section 3.8.2, Regulatory Framework) and would not change as a result of implementation of the Program. As such, operational impacts would be less than significant.

Level of Significance Prior to Mitigation: Less than Significant

Mitigation Required: None Required

Level of Significance After Mitigation: Less than Significant

Proposed Project: New Trunk Sewer Infrastructure Impacts

Construction and Operation

Installation of the new trunk sewer infrastructure would result in similar impacts related to hazardous materials as described under the Program discussion above. Construction of the new trunk sewer infrastructure would also require work with hazardous materials, which could cause a significant hazard to the public or the environment. However, compliance with federal, state, and local regulations governing hazardous materials (3.8.2, Regulatory Framework) would ensure that hazardous materials are treated appropriately during construction, and therefore, there would be a less than significant impact.

Level of Significance Prior to Mitigation: Less than Significant

Mitigation Required: None Required

Level of Significance After Mitigation: Less than Significant

Proposed Project: WWTRF Expansion Impacts

Construction

Expansion at the existing WWTRF would require the use of hazardous materials similar to those described in the Program discussion above. Construction activities could result in a significant hazard to the public or the environment if these hazardous materials are not handled and managed appropriately. However, compliance with federal, state, and local regulations governing hazardous materials (Section 3.8.2, Regulatory Framework) would ensure that

CITY OF MERCED WASTEWATER COLLECTION SYSTEM MASTER PLAN UPDATE DRAFT ENVIRONMENTAL IMPACT REPORT

Environmental Impact Analysis — Hazards, Hazardous Materials, and Wildfires
September 2020

hazardous materials are handled appropriately during construction of the proposed expansion of the WWTRF, and therefore, impacts would be less than significant.

Operation

Operation of the WWTRF regularly involves routine transport, storage, and use of hazardous materials (i.e., treatment processes and equipment, sodium hydroxide, sodium hypochlorite, etc.). The City maintains hazardous materials data sheets and management plans for these hazardous materials and would continue to do so under implementation of the Program. The proposed expansion of the WWTRF would not significantly alter these existing operations in a manner that would cause a significant hazard to the public or the environment since the operations would maintain current hazardous materials handling practices in compliance with federal, state, and local regulations. Therefore, operational impacts of the expansion of the existing WWTRF would result in a less than significant impact.

Level of Significance Prior to Mitigation: Less than Significant

Mitigation Required: None Required

Level of Significance After Mitigation: Less than Significant

Impact HAZ-1 Findings

Impact HAZ-1 Overall Level of Significance Prior to Mitigation: Less than Significant

Impact HAZ-1 Mitigation Required: None Required

Impact HAZ-1 Overall Level of Significance After Mitigation: Less than Significant

Impact HAZ-2 **Potential to 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.**

Impact HAZ-2 Analysis *Program Impacts*

Construction

The potential for release of hazardous materials into the environment could result from discovery of hazardous materials in the soils excavated during construction or from spills related to construction equipment and activities. The use of heavy construction equipment requires the use of small amounts of hazardous materials, such as oils, fuels, and other potentially flammable substances, which have the potential to be released into the environment if not handled properly. These materials would be used on Program construction sites during construction activities for equipment maintenance. The amount of these materials needed for equipment maintenance would not be enough to cause a significant hazard to the public if released since the quantity of these hazardous materials onsite at any given time would only amount to a refueling truck and the construction equipment. However, given the possibility of accidental release of hazardous materials during construction, a potentially significant impact related to accidental release of hazardous materials could occur prior to mitigation. As such, MM HYD-1, Avoid/Minimize Potential Impacts

CITY OF MERCED WASTEWATER COLLECTION SYSTEM MASTER PLAN UPDATE DRAFT ENVIRONMENTAL IMPACT REPORT

Environmental Impact Analysis — Hazards, Hazardous Materials, and Wildfires
September 2020

from Construction Material Release and MM HAZ-1, Prepare and Implement a Hazardous Materials Release Prevention Plan, would be implemented. These MMs would require the contractor to prepare a Spill Prevention and Contingency Plan and Hazardous Materials Release and Prevention Plan that would include best management practices (BMPs) to control the accidental release of hazardous materials into the environment and would ensure that spills are appropriately cleaned up and would not result in a release of hazardous materials into the environment. Therefore, impacts related to accidental spills and release of hazardous materials would be less than significant with MM HYD-1 and HAZ-1 incorporated.

Valley Fever and Asbestos

During ground disturbing activities associated with the Program, there is also a possibility that hazardous materials, such as asbestos (naturally occurring or AC) or Valley Fever fungal spores, could be disturbed and released into the air. Ground-disturbing activities associated with the Program construction could include excavation, grading, and other earthmoving activities that produce dust throughout the Program Study Area. Valley Fever fungal spores live in the top 2 to 12 inches of soil, so the risk of exposure during construction of the Program would be high if these hazards are present within the soils; thus, a potentially significant impact prior to mitigation could occur. As part of the Worker Environmental Awareness Program (WEAP) included in MM HAZ-2, Worker Environmental Awareness Program (Hazard), workers would be required to participate in a WEAP prior to being allowed to work on the project. The WEAP would inform workers of the potential hazards within the Program Study Area. If appropriate or requested, workers would be provided the appropriate respiratory equipment to prevent inhalation of dust particles. Additionally, MM AIR-2, Implement Hazardous Materials Measures would be implemented to further reduce potentially hazardous dust within the Program Study Area by requiring regular watering of disturbed soils and excavated material throughout all construction activities. MM AIR-2 and MM HAZ-2 would collectively reduce dust, and therefore would reduce the potential of worker and general public exposure to hazardous air particles and would provide workers with the proper equipment and training necessary to reduce potential impacts related to Valley Fever and asbestos to a less than significant level. Therefore, impacts related to the release of asbestos and Valley Fever fungal spores would be less than significant with MM AIR-2 and MM HAZ-2 incorporated.

Operation

Operational release of hazardous materials into the environment would not significantly change from existing conditions. Operations of city wastewater facilities would continue as they currently do but would add the new Program facilities to the operational routine that involves the routine testing and maintenance of pump stations and appurtenances, monitoring of pipelines, and inspections of facilities. Similarly, the WWTRF expansion, which is discussed in further detail in Proposed Project: WWTRF Expansion Impacts below, would not result in substantial releases of potentially hazardous materials with the standard procedures for storage and cleanup that currently exist onsite. No increases in operational release of hazardous materials would occur as a result of operation of the Program. Therefore, operational impacts associated with implementation of the Program would be less than significant.

Because the quantity of hazardous materials on any one construction site within the Program Study Area is limited, appropriate prevention and management practices would be in place as required by local and regional regulatory agencies, and because MM HYD-1, MM AIR-2, MM HAZ-1 and MM HAZ-2 would be implemented during

CITY OF MERCED WASTEWATER COLLECTION SYSTEM MASTER PLAN UPDATE DRAFT ENVIRONMENTAL IMPACT REPORT

Environmental Impact Analysis — Hazards, Hazardous Materials, and Wildfires
September 2020

construction, the potential for impacts from construction and operational related accidental spills or releases of hazardous materials would be less than significant with mitigation incorporated.

Level of Significance Prior to Mitigation: Potentially Significant

Mitigation Required: MM HYD-1, MM AIR-2, MM HAZ-1 and MM HAZ-2

Level of Significance After Mitigation: Less than Significant

Proposed Project: New Trunk Sewer Infrastructure Impacts

Construction

Installation of the new trunk sewer infrastructure would also result in similar impacts related to release of hazardous materials as described under the Program discussion above. As such MM HYD-1, MM HAZ-1, MM HAZ-2, and MM AIR-2 would also be required for the new trunk sewer infrastructure installation. In particular, the new trunk sewer infrastructure would likely require work in overland portions of the Program Study Area, which could produce more dust, and potential hazards than work within previously disturbed areas and within the existing roadways. Additionally, the new pump station associated with the Northern Trunk Sewer would be placed in a previously undisturbed area, which could result in dust containing Valley Fever spores. As such, MM HAZ-2 would be required to inform and properly equip construction workers for work with potentially hazardous pollutants. MM AIR-2 would ensure that dust generated during construction is kept at a minimum by including regular watering of disturbed soils and trucks transporting soil material. Additionally, MM HYD-1 and MM HAZ-1 would require the contractor to prepare a Spill Prevention and Contingency Plan and Hazardous Materials Prevention Plan that would include BMPs to control the accidental release of hazardous materials into the environment, ensuring that spills are appropriately cleaned up and would not result in a release of hazardous materials into the environment. These MMs would be implemented throughout construction areas and activities associated with the new trunk sewer and would reduce potential impacts related to accidental release or exposure to hazardous materials or pollutants to a less than significant level. Therefore, impacts related to the release of hazardous materials into the environment from the new trunk sewer infrastructure would be less than significant with mitigation incorporated.

Operation

Similar to the Program discussion above, operation of the new trunk sewer infrastructure would not result in a substantial change from existing operations of wastewater collection infrastructure that currently exists in the City. Therefore, operational impacts related to release of hazardous materials into the environment from the new trunk sewer infrastructure would be less than significant.

Level of Significance Prior to Mitigation: Potentially Significant

Mitigation Required: MM HYD-1, MM HAZ-1, MM HAZ-2, and MM AIR-2

Level of Significance After Mitigation: Less than Significant

CITY OF MERCED WASTEWATER COLLECTION SYSTEM MASTER PLAN UPDATE DRAFT ENVIRONMENTAL IMPACT REPORT

Environmental Impact Analysis — Hazards, Hazardous Materials, and Wildfires
September 2020

Proposed Project: WWTRF Expansion Impacts

Construction

Expansion of the existing WWTRF would result in similar potential for the release of hazardous materials during construction as described in the Program discussion above. Accidental spills of potentially hazardous materials as a result of construction activities at the WWTRF could occur, and similar to the discussion of the Program, could have a significant effect if left unmitigated. Thus, MM HYD-1 and MM HAZ-1 would be required to prevent the release of hazardous materials from construction activities through the implementation of a Spill Prevention and Contingency Plan and Hazardous Material Release and Prevention Plan. Additionally, although the regularly disturbed WWTRF footprint includes agricultural lands and paved facilities that would be at low risk for asbestos and Valley Fever spores exposure, there would still be a possibility for exposure due to new ground disturbing activities and dust creating a small potential for a significant impact if not mitigated by MM HAZ-2 and MM AIR-2 as described for the Program. The WEAP required by MM HAZ-2 would educate workers on the risks associated with Valley Fever spores and asbestos and on how to properly reduce risk of exposure and MM AIR-2 would implement hazardous materials measures by requiring regular watering of disturbed soils and excavated material throughout all construction activities mitigating risks to a less than significant level. Therefore, impacts from construction at the WWTRF would be less than significant.

Operation

Additionally, operational spills associated with lubricants or other materials and chemicals (i.e., sodium hydroxide, sodium aluminate, sodium hypochlorite, and polyaluminum chloride, amongst others) used during operation of the WWTRF, including at pump stations and control facilities that would be contained within the WWTRF footprint, would follow standard procedures for storage and cleanup of spilled materials (as required and enforced by the federal and state regulations regarding hazardous materials, transport, storage, and handling as described in Section 3.8.2, Regulatory Framework and the operational National Pollutant Discharge Elimination System permit [See Chapter 2.0, Project Description] stipulations of the WWTRF). As a result, potential spills would not be in amounts substantial enough to result in significant hazards to the public.

Therefore, overall construction and operational impacts associated with expansions at the WWTRF would be considered less than significant with MM HYD-1, MM HAZ-1, MM HAZ-2, and MM AIR-2 incorporated.

Level of Significance Prior to Mitigation: Potentially Significant

Mitigation Required: MM HYD-1, MM HAZ-1, MM HAZ-2, and MM AIR-2

Level of Significance After Mitigation: Less than Significant

Impact HAZ-2 Findings

Impact HAZ-2 Overall Level of Significance Prior to Mitigation: Potentially Significant

Impact HAZ-2 Mitigation Required: MM HYD-1, MM AIR-2, MM HAZ-1, and MM HAZ-2

Impact HAZ-2 Overall Level of Significance After Mitigation: Less than Significant

CITY OF MERCED WASTEWATER COLLECTION SYSTEM MASTER PLAN UPDATE DRAFT ENVIRONMENTAL IMPACT REPORT

Environmental Impact Analysis — Hazards, Hazardous Materials, and Wildfires
September 2020

Impact HAZ-3 Potential to emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school.

Impact HAZ-3 Analysis *Program Impacts*

Construction

Construction of Program facilities has the potential to result in emissions of toxic air contaminants/HAPs in the form of diesel particulate matter emissions from diesel-fueled internal combustion engines. Additionally, other potentially hazardous materials present within soils, such as Valley Fever spores or asbestos, could be disturbed during construction activities and could become airborne and adversely affect nearby schools. As shown on Figure 3.8-1, there are a number of schools within the Program Study Area, and although no schools occur within 0.25 mile of the new truck sewer infrastructure or WWTRF, other future Program activities could occur within 0.25 mile of schools. As a result, potentially hazardous materials and emissions could be emitted near existing or new schools in the region, resulting in a potentially significant impact prior to mitigation. As discussed under Impact HAZ-2, MM AIR-2, Implement Hazardous Materials Measures, would be required during construction to reduce potentially hazardous construction-related dust and the potential for hazardous airborne particles to be released. Additionally, MM HAZ-3, Minimize Construction Emissions, would also include specific instructions for handling construction equipment, such as limiting idling times, which would limit the amount of toxic air contaminants released into the air near schools. Other emission-reducing requirements would include the use of late model engines, low-emission diesel products, alternative fuels, and other options as they become available. Further, given the relatively linear nature of pipeline infrastructure, construction activities, including ground disturbance and use of construction equipment, would be temporary at any one particular location within the Program Study Area, which would further reduce any potential impact to schools.

Hazardous materials used during construction would be typical of common construction activities and are discussed in Impacts HAZ-1 and HAZ-2. They would be handled by the contractor in accordance with applicable federal, state, and local regulations for hazardous substances. Additionally, the amount of these materials needed for onsite equipment maintenance at any given time would only amount to a refueling truck and the construction equipment, and thus would not be enough to cause a significant hazard to the public or any nearby schools if released.

Further, PRC Section 21151.4 requires that projects located within 0.25 mile of a school that might reasonably be anticipated to emit hazardous air emissions, that would handle an extremely hazardous substance or a mixture containing extremely hazardous substances in a quantity equal to or greater than the state threshold quantity specified pursuant to subdivision (j) of Section 25532 of the Health and Safety Code, or that may pose a health or safety hazard to persons who would attend or would be employed at the school, would either require the City or chosen contractor to consult with the school or give written notification to the school. There are numerous schools located within the Program Study Area. The City would comply with PRC Section 21151.4, would notify appropriate school personnel if construction activities would require work with hazardous materials or emissions within 0.25 mile of a school, and would follow applicable rules and regulations governing transport and use of hazardous materials as discussed herein. Therefore, the construction of the Program would have a less than significant impact to schools with compliance of PRC Section 21151.4 and with MM AIR-2 and MM AIR-3 incorporated.

CITY OF MERCED WASTEWATER COLLECTION SYSTEM MASTER PLAN UPDATE DRAFT ENVIRONMENTAL IMPACT REPORT

Environmental Impact Analysis — Hazards, Hazardous Materials, and Wildfires
September 2020

Operation

Operation of the Program would continue to use hazardous materials onsite as a part of the treatment process; however, the potential for release of these chemicals into the air or ground would be limited since the site is designed for proper storage and use of the chemicals as well as the fact that the hazardous materials onsite such as solvents and oils are used in limited quantities and the WWTRF is further than 0.25 mile away from an existing or planned school. Thus, operational impacts associated with the Program would be less than significant.

Therefore, the potential for the implementation of the Program to generate hazardous emissions within 0.25 mile of a school during both construction and operation would be less than significant with MM AIR-2 and MM AIR-3 incorporated.

Level of Significance Prior to Mitigation: Potentially Significant

Mitigation Required: MM AIR-2 and MM AIR-3

Level of Significance After Mitigation: Less than Significant

Proposed Project: New Trunk Sewer Infrastructure Impacts

Construction and Operation

As shown on Figure 3.8-1, the new trunk sewer infrastructure would be placed largely on the outer portions of the Program Study Area and largely within existing or planned roadways. Figure 3.8-1 further shows that schools are generally concentrated near the center portion of the City. No schools occur within 0.25 mile of proposed construction activities associated with the new trunk sewer infrastructure and no schools. Additionally, development of the SUDP/SOI would require development of additional schools in the Program Study Area, but to date none are proposed within 0.25 mile of the new trunk sewer infrastructure. Therefore, the new trunk sewer infrastructure would not result in hazardous materials or emissions within 0.25 mile of an existing or proposed school. There would be no impact.

Level of Significance Prior to Mitigation: No Impact

Mitigation Required: None Required

Level of Significance After Mitigation: No Impact

Proposed Project: WWTRF Expansion Impacts

Construction and Operation

As shown on Figure 3.8-1, the existing WWTRF footprint is not located within 0.25 mile of an existing or proposed school. As such, the expansion of the WWTRF would not result in hazardous materials or emissions within 0.25 mile of an existing or proposed school. There would be no impact.

Level of Significance Prior to Mitigation: No Impact

CITY OF MERCED WASTEWATER COLLECTION SYSTEM MASTER PLAN UPDATE DRAFT ENVIRONMENTAL IMPACT REPORT

Environmental Impact Analysis — Hazards, Hazardous Materials, and Wildfires
September 2020

Mitigation Required: None Required

Level of Significance After Mitigation: No Impact

Impact HAZ-3 Findings

Impact HAZ-3 Overall Level of Significance Prior to Mitigation: Potentially Significant

Impact HAZ-3 Mitigation Required: MM AIR-2 and MM AIR-3

Impact HAZ-3 Overall Level of Significance After Mitigation: Less than Significant

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

Impact HAZ-4 Analysis *Program Impacts*

Construction

The Program Study Area contains a number of currently active listed sites on the Cortese list database as potentially hazardous (DTSC 2018; SWRCB 2018a). As shown on Figure 3.8-1, the highest concentration of these sites are located around the central area of the City and along the State Route (SR) 99 and SR 59 corridors. Typically, gas stations, autobody shops, and other mechanical and industrial operations contain the highest proportion of hazardous sites, with what are known as leaking underground storage tanks being the most common type of hazardous cleanup site.

Working directly within an active Cortese-listed site would be avoided where possible; however, due to the high proportion of active Cortese-listed sites within the City and the potential of these sites occurring near Program facilities, a potentially significant impact related to potential release of hazards to the public or the environment could occur prior to mitigation. As such, MM HAZ-3, Cortese List Site Coordination, would be required for any construction work that would occur within or in close proximity of an active Cortese-listed site. MM HAZ-3 would require review of an updated Cortese list query by a Registered Professional Geologist who would determine if Program activities would impact listed sites and the appropriate actions to take, such as remediation of the site, if Program activities could not avoid a listed site and if construction activities would further exacerbate the potential risk of release of contamination (e.g., through movement of contaminated soils or waters during trenching). Therefore, the potential for construction of Program facilities to result in a significant hazard to the public or the environment to be located on a site defined by Government Code Section 65962.5 would be considered less than significant with mitigation incorporated.

Operation

Once operational, the Program components would largely be located underground, in fixed locations, and would not result in any ongoing impacts related to location within a Cortese-listed site. Therefore, there would be no operational impacts.

CITY OF MERCED WASTEWATER COLLECTION SYSTEM MASTER PLAN UPDATE DRAFT ENVIRONMENTAL IMPACT REPORT

Environmental Impact Analysis — Hazards, Hazardous Materials, and Wildfires
September 2020

Level of Significance Prior to Mitigation: Potentially Significant

Mitigation Required: MM HAZ-3

Level of Significance After Mitigation: Less than Significant

Proposed Project: New Trunk Sewer Infrastructure Impacts

Construction

Similar to the impacts described for the Program above, the new trunk sewer infrastructure could require work within close proximity to Cortese-listed sites, which could result in a significant hazard to the public or the environment if not treated appropriately. However, as shown on Figure 3.8-1, the number of currently active Cortese-listed sites that could be affected by the new proposed trunk sewer infrastructure is limited to one site on the corner of Kibby Road and Central Yosemite Avenue for the Southern Trunk Sewer. This site is labeled as the General Electric Company - Kendall Site (SL 185092894) and is located on approximately 5 acres of land that contains groundwater and soil contaminated with volatile organic compounds (SWRCB 2018b). As such, trenching and excavation activities associated with placement of the new Southern Truck Sewer in this area could potentially come into contact with contaminated soils and groundwater, and could potentially release these contaminants into the surrounding area, causing a potentially significant impact prior to mitigation. Construction activities that would occur within this site would be required to comply with MM HAZ-3 to prevent further release of hazards to the public and the environment. Additionally, as specified in MM HAZ-3, a Registered Professional Geologist would be required to perform an updated query of listed sites and determine if they would be affected by construction activities. As such, currently listed Cortese sites would not result in a significant hazard to the public or the environment from the implementation of the new trunk sewer infrastructure. Therefore, with implementation of MM HAZ-3, construction impacts related to location of new trunk sewer infrastructure activities on a Cortese listed site would be less than significant.

Operation

Similar to the Program discussion above, once operational, the new trunk sewer infrastructure would largely be located underground, in fixed locations, and would not result in any ongoing impacts related to location within a Cortese-listed site. Therefore, there would be no operational impacts associated with the new trunk sewer infrastructure.

Level of Significance Prior to Mitigation: Potentially Significant

Mitigation Required: MM HAZ-3

Level of Significance After Mitigation: Less than Significant

Proposed Project: WWTRF Expansion Impacts

Construction and Operation

There are no active Cortese-listed sites in the proximity of the exiting WWTRF. Therefore, there would be no impacts resulting from the expansion of the WWTRF related to Cortese-listed sites.

CITY OF MERCED WASTEWATER COLLECTION SYSTEM MASTER PLAN UPDATE DRAFT ENVIRONMENTAL IMPACT REPORT

Environmental Impact Analysis — Hazards, Hazardous Materials, and Wildfires
September 2020

Level of Significance Prior to Mitigation: No Impact

Mitigation Required: None Required

Level of Significance After Mitigation: No Impact

Impact HAZ-4 Findings

Impact HAZ-4 Overall Level of Significance Prior to Mitigation: Potentially Significant

Impact HAZ-4 Mitigation Required: MM HAZ-3

Impact HAZ-4 Overall Level of Significance After Mitigation: Less than Significant

Impact HAZ-5 **Potential to be located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public or private 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.**

Impact HAZ-5 Analysis *Program Impacts*

Construction

Implementation of the Program would involve construction and placement of pump stations, pipelines, and expansion of the WWTRF within 2 miles of the Merced Regional Airport and within the safety compatibility zones of both the Castle Airport and the Merced Regional Airport. Safety impacts resulting from construction of Program facilities could include the use of construction equipment with a height above 200 feet (i.e., a crane) within airport flight paths, as well as construction worker exposure to increased airport noise for work immediately adjacent to the airport. Additionally, any construction-related nighttime lighting could cause a potential safety risk to pilots if in the direct line of sight during takeoff or landing of aircraft.

Generally, construction activities near the airport would be temporary, and construction workers would not be exposed to prolonged or excessive noise or hazards from the airport due to the sporadic nature of flights and operational activities of the airport. As shown on Figure 3.8-1, the safe zones for the two airports are limited to the western edge of the Program Study area. Additionally, any nighttime lighting required for the construction of the Program would be limited and would likely not occur directly within the line-of-sight of pilots taking off or landing. However, because some of the pipeline and pump station construction activities would occur within the safety compatibility zones of these airports, a potentially significant impact related to safety conflicts from construction activities could occur prior to mitigation. As such, to reduce potential safety conflicts between construction equipment and airport operations, MM HAZ-4, Coordination with Airports, would be implemented and would require coordination with the airport, compliance with local and regional airport safety plans, notification of the proposal to the FAA, and compliance with any measures resulting from the FAA's aeronautical study. Implementation of MM HAZ-4 would reduce potential safety conflicts with the airports to a less than significant level.

Additionally, exposure to the operation of construction equipment can sporadically expose construction workers to increased noise. The addition of airport noise could intensify this intermittent noise exposure. However, the impacts of

CITY OF MERCED WASTEWATER COLLECTION SYSTEM MASTER PLAN UPDATE DRAFT ENVIRONMENTAL IMPACT REPORT

Environmental Impact Analysis — Hazards, Hazardous Materials, and Wildfires
September 2020

increased noise are not anticipated to be significant with standard safety procedures and protocols for construction workers. Therefore, noise impacts from construction activities and the two airports would be less than significant.

Operation

Operation of constructed Program components would not result in safety hazards or have the potential to generate excessive noise exposure (which as described further in Section 3.11, Noise, as not significant). The Program would not involve the placement of people living in or near airports within the City. Additionally, all aboveground facilities, such as pump stations and structures at the WWTRF, would consist of small structures that would be similar in size and scale to a typical residential house and would not be greater than 200 feet tall. Maintenance activities associated with the Program would require occasional work within 2 miles of the Merced Regional Airport, but this work would occur as needed and would not result in a significant change from existing maintenance activities associated with the wastewater collection system in the City. Therefore, operational activities associated with the Program would be less than significant.

Therefore, overall impacts associated with the implementation of the Program during both construction and operations would be less than significant with MM HAZ-4 incorporated.

Level of Significance Prior to Mitigation: Potentially Significant

Mitigation Required: MM HAZ-4

Level of Significance After Mitigation: Less than Significant

Proposed Project: New Trunk Sewer Infrastructure Impacts

Construction

As shown on Figure 3.8-1, installation of the new trunk sewer infrastructure, including the Northern Trunk Sewer, Southern Trunk Sewer, and Northern Trunk Sewer pump station would require construction activities within the safety compatibility zones of the Merced Regional Airport and Castle Airport. As described for implementation of the Program, construction activities within the safety compatibility zones of these airports could potentially cause workers to be exposed to temporary excessive noise levels or safety hazards from airport operations if construction equipment would exceed 200 feet in height or result in additional construction lighting that could adversely affect pilots during takeoff and landing of aircrafts, thus resulting in a potentially significant impact prior to mitigation. As such, implementation of MM HAZ-4 would be required to coordinate with these airports, conduct an aeronautical study, and implement measures from the aeronautical study if deemed necessary through coordination with these airports. Further, because construction activities are not anticipated to require any construction equipment exceeding 200 feet in height, and because any nighttime work and associated construction lighting is expected to be minimal in the safety compatibility zones of these airports, coordination with the airports is expected to be minimal for the new trunk sewer infrastructure construction activities, and would likely result in a no hazard determination from the FAA. Any construction activities outside of the safety compatibility zones of these airports (i.e., in the eastern portions of the Program Study Area) would not require any consultation with the airports and would result in a less than significant impact related to safety hazards. Therefore, with implementation of MM HAZ-4, construction impacts would be less than significant.

CITY OF MERCED WASTEWATER COLLECTION SYSTEM MASTER PLAN UPDATE DRAFT ENVIRONMENTAL IMPACT REPORT

Environmental Impact Analysis — Hazards, Hazardous Materials, and Wildfires
September 2020

Operation

Once the new trunk sewer infrastructure is operational, it would largely be located underground and would have no effect on the airports in the region. The new pump station associated with the Northern Trunk Sewer would be located aboveground; however, it would consist of a small structure that is similar in size and scale to a typical residence and would be no more than 2,000 square feet in size. Therefore, this new pump station would not result in any permanent safety hazard related to being located within an airport safety compatibility zone. Therefore, operational impacts related to the new trunk sewer infrastructure would be less than significant.

Level of Significance Prior to Mitigation: Potentially Significant

Mitigation Required: MM HAZ-4

Level of Significance After Mitigation: Less than Significant

Proposed Project: WWTRF Expansion Impacts

Construction

The WWTRF footprint is located approximately 2 miles south of the Merced Regional Airport and is located within the Merced County Airport Land Use compatibility zone D. Construction activities associated with the proposed expansion of the WWTRF could have the potential to occur within 2 miles of the Merced Regional Airport and within the compatibility zone D of this airport. The Merced County Airport Land Use Compatibility Plan states that “this zone [D] is for Other Airport Environs and is the outermost zone of the airport. There are no development restrictions for this zone, with the exception of objects over 150 feet in height.” No construction equipment or structures associated with the expansion of the WWTRF would exceed 150 feet. Therefore, the expansion of the WWTRF would not result in an incompatible use. Therefore, impacts associated with construction of the WWTRF expansion would be less than significant.

Operation

Once the new facilities at the WWTRF are constructed, the heights and lighting of these new facilities would be consistent with the existing structures of the WWTRF and would not result in any substantial height or lighting impacts to pilots operating aircrafts from the Merced Regional Airport. The increase in number of structures would not be discernible to aircraft taking off or landing at the Merced Regional Airport. Therefore, operational impacts related to the expansion of the WWTRF would be less than significant.

Level of Significance Prior to Mitigation: Less than Significant

Mitigation Required: None Required

Level of Significance After Mitigation: Less than Significant

Impact HAZ-5 Findings

Impact HAZ-5 Overall Level of Significance Prior to Mitigation: Potentially Significant

CITY OF MERCED WASTEWATER COLLECTION SYSTEM MASTER PLAN UPDATE DRAFT ENVIRONMENTAL IMPACT REPORT

Environmental Impact Analysis — Hazards, Hazardous Materials, and Wildfires
September 2020

Impact HAZ-5 Mitigation Required: MM HAZ-4 and MM HAZ-2

Impact HAZ-5 Overall Level of Significance After Mitigation: Less than Significant

Impact HAZ-6 Potential to impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.

Impact HAZ-6 Analysis *Program Impacts*

Construction

Construction of the Program would involve work within and adjacent to the City's right-of-way (ROW), which would potentially involve work within emergency access routes and construction vehicles entering and exiting the ROW for transport of construction materials and debris to and from individual sites and staging areas throughout the Program Study Area. Additionally, construction activities associated with the WWTRF expansion would involve the transport of materials along the Gove Road, West Dickenson Ferry Road, and Thornton Road ROWs. This construction could potentially block emergency response vehicles traveling along roadways or access to roadways and driveways for emergency vehicles, and thus, could potentially impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan prior to mitigation. Therefore, MM TRA-1, Prepare and Implement a Traffic, Pedestrian, and Bicycle Control Plan, would be required to allow for adequate emergency ingress and egress throughout construction activities that would use public ROWs. The Traffic Control Plan would include coordination and proper notification of emergency response agencies (i.e., the Merced Fire Department and the Merced Police Department) of any detours or road closures that may be required during construction. Therefore, with implementation of MM TRA-1, potential construction impacts to emergency access would be reduced to a less-than-significant level.

Operation

Operation of the Program components would not impair or physically interfere with an adopted emergency response plan or emergency evacuation plan because once constructed, the majority of the Program components would be located belowground with access that would not impede emergency vehicle movement. The new Program components, including aboveground facilities such as pump stations, would be consistent with existing wastewater collection system infrastructure in the City, and operation of these facilities would not interfere with traffic flow beyond periodic maintenance requirements. These maintenance activities would be sporadic and would require minimal trips on the local roadways within the Program Study Area. Therefore, operational impacts related to an adopted emergency plan would be less than significant.

Level of Significance Prior to Mitigation: Potentially Significant

Mitigation Required: MM TRA-1

Level of Significance After Mitigation: Less than Significant

CITY OF MERCED WASTEWATER COLLECTION SYSTEM MASTER PLAN UPDATE DRAFT ENVIRONMENTAL IMPACT REPORT

Environmental Impact Analysis — Hazards, Hazardous Materials, and Wildfires
September 2020

Proposed Project: New Trunk Sewer Infrastructure Impacts

Construction

Similar to the Program discussion above, the new trunk sewer infrastructure would require work directly within roadways that could impair implementation of or physically interfere with adopted emergency plans or emergency evacuation plans. New trunk sewer infrastructure improvements would largely occur around the outer edges of the Program Study Area, where traffic is slightly reduced and overall residential densities are lower, which would mean that impacts to emergency response and evacuations would likely be slightly less for construction of these new trunk sewer improvements. Specifically, Thornton Road, Cardella Road, Belcher Avenue, G Street, Kibby Road, Mission Avenue, and Dickenson Ferry Road would be used for the majority of the new trunk sewer infrastructure placement and would require temporary restricted access along these ROWs for pipeline placement. As such, in order to allow for adequate flow for emergency personnel, MM TRA-1 would be required to allow for adequate emergency ingress and egress throughout construction activities along public ROWs. Therefore, construction impacts associated with new trunk sewer infrastructure would be less than significant with mitigation incorporated.

Operation

Similar to the Program discussion, once operational, the new trunk sewer infrastructure would largely be located underground and would have an inconsequential effect to emergency response or evacuation during access to manholes or other below ground infrastructure. The Northern Trunk Sewer pump station would be located outside of the ROW and would not result in any interference with emergency response or evacuations. Therefore, there would be no operational impacts associated with the new trunk sewer infrastructure.

Level of Significance Prior to Mitigation: Potentially Significant

Mitigation Required: MM TRA-1

Level of Significance After Mitigation: Less than Significant

Proposed Project: WWTRF Expansion Impacts

Construction and Operation

Construction and operation associated with the WWTRF expansion would not impair implementation of or physically interfere with adopted emergency response plans since the expansion would be substantially limited to work within the existing footprint of the WWTRF. As such, work at the WWTRF would not interfere with or substantially alter emergency response or evacuation plans. Truck haul trips to and from the WWTRF along Gove Road, West Dickenson Ferry Road, and Thornton Road could cause minor additions of vehicles to local roadway traffic; however, if required, these would be anticipated to generate approximately two additional trips a day and would not impact the roadway in a way that would impede emergency response or evacuations. No road closures or detours would be required for construction and operation of the WWTRF expansion, and project-related vehicles would not block existing streets within the area. Therefore, impacts related to construction and operation of the expansion of the WWTRF would be less than significant.

CITY OF MERCED WASTEWATER COLLECTION SYSTEM MASTER PLAN UPDATE DRAFT ENVIRONMENTAL IMPACT REPORT

Environmental Impact Analysis — Hazards, Hazardous Materials, and Wildfires
September 2020

Level of Significance Prior to Mitigation: Less than Significant

Mitigation Required: None Required

Level of Significance After Mitigation: Less than Significant

Impact HAZ-6 Findings

Impact HAZ-6 Overall Level of Significance Prior to Mitigation: Potentially Significant

Impact HAZ-6 Mitigation Required: MM TRA-1

Impact HAZ-6 Overall Level of Significance After Mitigation: Less than Significant

Impact HAZ-7 Potential to expose people or structures either directly or indirectly, to a significant loss, injury or death involving wildland fires.

Impact HAZ-7 Analysis *Program Impacts*

Construction

The urban and rural areas within the Program Study Area would be subject to limited risk of wildfires and their associated impacts resulting from Program construction activities due to the built-up nature of these areas (i.e., limited fuels that could cause a wildfire). Construction of the Program would involve the use of construction equipment that could cause the unintentional release of sparks or heat from construction equipment into nearby flammable material, such as brush or grasses. In particular, construction of pipelines or undisturbed areas such as new pump station locations could include construction activities near grasses or other flammable woody vegetation. However, all Program facilities, would be constructed in compliance with all applicable local, state, and federal requirements, including the California Fire Code, which limits the potential for construction equipment to spark a wildland or urban fire. by requiring the implementation of fire protection systems, means of adequate ingress and egress of construction equipment and personnel, and implementation of fire-resistive construction equipment. Additionally, the majority of construction activities would occur within existing paved ROWs and within existing disturbed areas and built-up areas (with gravel, concrete, pavement, and asphalt) where groundcover vegetation is minimal and less prone to flammability. This would limit the potential for construction of Program components to expose people or structures to risks from wildfires. Therefore, construction of the Program would have a less than significant impact related to wildland fires.

Operation

The infrastructure-related nature of the Program limits operational use to employees at the WWTRF and performing operations and maintenance activities on pump stations, pipelines, and appurtenances. The majority of facilities themselves would be located underground and would not be subject to risk of damage due to wildfires. The above ground facilities would on occasion have people located within them but would not regularly provide habitation or work accommodation shelter. Aboveground features, such as pump stations or new structures at the WWTRF, would be constructed in compliance with California Fire Code specifications related to structural fire safety, including

CITY OF MERCED WASTEWATER COLLECTION SYSTEM MASTER PLAN UPDATE DRAFT ENVIRONMENTAL IMPACT REPORT

Environmental Impact Analysis — Hazards, Hazardous Materials, and Wildfires
September 2020

installation of fire sprinklers, where necessary, and use of flame-resistant building materials. As noted for the Construction impacts, wildfire sensitivity is and would continue to be low within Program facilities due to the vegetation free paved or gravel operational sites. While the overall fire risk in Merced is moderate, the Program components would limit risk of exposing people or structures to wildfires by use of inflammable materials such as pavement and gravel during site design and California Fire Code compliance. Therefore, operational impacts related to exposure of structures to significant loss from wildfires would be less than significant.

Level of Significance Prior to Mitigation: Less than Significant

Mitigation Required: None Required

Level of Significance After Mitigation: Less than Significant

Proposed Project: New Trunk Sewer Infrastructure Impacts

Construction

Construction of the new trunk sewer infrastructure would involve similar impacts related to wildfires as described in the Program discussion above. However, because the new trunk sewer infrastructure would largely occur within the outer portions of the Program Study Area, the potential for construction activities to occur within areas with brush or other flammable groundcover would be more likely because there is less built-up environment (i.e., areas consisting of pavement, concrete, and other non-flammable materials) and more open grass lands and areas with more vegetation (i.e., agricultural fields). As discussed in the Program discussion above, the contractors chosen for the Program would be required to comply with all local, state, and federal requirements governing fire control, and construction equipment would be operated, stored, and maintained in accordance with these regulations to prevent fires. Specifically, the California Fire Code requires implementation of fire protection systems, means of adequate ingress and egress of construction equipment and personnel, and implementation of fire-resistive construction equipment, which would limit the possibility of construction related fires to occur throughout construction activities. Therefore, construction of the new trunk sewer infrastructure would result in a less than significant impact related to loss from wildfires.

Operation

As discussed in the Program discussion above, any new structures, including the Northern Trunk Sewer pump station, would be constructed in accordance with the California Fire Code requirements and would install fire sprinklers and use flame-resistant building materials as needed to reduce the flammability potential of the new structure with limited potential to expose people or structures to risk of wildfire. Therefore, operational impacts associated with the new trunk sewer infrastructure would be less than significant.

Level of Significance Prior to Mitigation: Less than Significant

Mitigation Required: None Required

Level of Significance After Mitigation: Less than Significant

CITY OF MERCED WASTEWATER COLLECTION SYSTEM MASTER PLAN UPDATE DRAFT ENVIRONMENTAL IMPACT REPORT

Environmental Impact Analysis — Hazards, Hazardous Materials, and Wildfires
September 2020

Proposed Project: WWTRF Expansion Impacts

Construction and Operation

Construction and operation of the expansion of the existing WWTRF would result in similar risk and potential exposure to wildfires as those described for the Program above. Construction activities at the WWTRF would occur within the existing footprint of the WWTRF, which consists of paved and gravel areas. The potential of sparks from construction activities would be limited in this area. Additionally, all new structures at the WWTRF would be constructed in compliance with the California Fire Code and would include installation of fire sprinklers and use of flame-resistant building materials where necessary to reduce the potential for flammability of any new structures. Additional facilities at the site would also be designed similarly to the existing facility with pavement and gravel ground cover throughout the site. Therefore, there would be a less than significant impact.

Level of Significance Prior to Mitigation: Less than Significant

Mitigation Required: None Required

Level of Significance After Mitigation: Less than Significant

Impact HAZ-7 Findings

Impact HAZ-7 Overall Level of Significance Prior to Mitigation: Less than Significant

Impact HAZ-7 Mitigation Required: None Required

Impact HAZ-7 Overall Level of Significance After Mitigation: Less than Significant

Impact HAZ-8 If located in or near a state responsibility area or lands classified as very high fire hazard severity zones:

- Impair an adopted emergency response plan or emergency evacuation plan;
 - Exacerbate wildfire risks due to slope, prevailing winds, and other factors, 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 downstream flooding or landslides, as a result of, runoff, post-fire slope stability, or drainage change.
-

CITY OF MERCED WASTEWATER COLLECTION SYSTEM MASTER PLAN UPDATE DRAFT ENVIRONMENTAL IMPACT REPORT

Environmental Impact Analysis — Hazards, Hazardous Materials, and Wildfires
September 2020

Impact HAZ-8 Analysis *Combined Program/Proposed Project Impacts*

Construction

The City limits are not located within an SRA or in a region that is considered to have a very high fire severity zone. Some smaller portions of the Program Study Area are located in moderate fire severity zones, as designated by CAL FIRE (Figure 3.8-1) within largely undeveloped areas near the outskirts of the City (CAL FIRE 2007). Construction activities associated with the Program may take place in these moderate severity areas depending on development that occurs within the area, and could involve work that could cause sparks from operation of machinery. However, as discussed under Impact HAZ-7, all construction activities would be required to comply with the California Fire Code specifications; standard construction safety precautions; and local, state, and federal regulations governing fire suppression. These regulations would be implemented throughout construction activities associated with the Program and would reduce the potential for construction equipment to cause fires from sparks. Specifically, the California Fire Code requires implementation of fire protection systems, means of adequate egress of construction equipment and personnel, and implementation of fire-resistant construction equipment, which would limit the possibility of construction related fires to occur through construction activities. Therefore, impacts related to fire hazards as they relate to construction would be less than significant.

Operation

Once the Program is constructed, the majority of the Program components would be located underground and would not be affected by any potential fires in the area, nor would they contribute to increased risk for fire. Aboveground features, such as pump stations and structures at the WWTRF, would be constructed in compliance with the California Fire Code, which would require installation of fire sprinklers and use of non-flammable building materials, as necessary. Therefore, operational impacts related to fire hazards would be considered less than significant.

Level of Significance Prior to Mitigation: Less than Significant

Mitigation Required: None Required

Level of Significance After Mitigation: Less than Significant

Impact HAZ-8 Findings

Impact HAZ-8 Overall Level of Significance Prior to Mitigation: Less than Significant

Impact HAZ-8 Mitigation Required: None Required

Impact HAZ-8 Overall Level of Significance After Mitigation: Less than Significant

3.8.5 Hazards and Hazardous Materials Mitigation

Mitigation Measure TRA-1: Prepare and Implement a Traffic, Pedestrian, and Bicycle Control Plan

See MM TRA-1, Section 3.15, Transportation.

Mitigation Measure AIR-2: Implement Hazardous Materials Measures

See MM AIR-2, Section 3.3, Air Quality.

Mitigation Measure AIR-3: Minimize Construction Emissions

See MM AIR-3, Section 3.3, Air Quality.

Mitigation Measure HYD-1: Avoid/Minimize Potential Impacts from Construction Material Release

See MM HYD-1, Section 3.9, Hydrology and Water Quality.

Mitigation Measure HAZ-1: Prepare and Implement a Hazardous Materials Release Prevention Plan

The City shall create and implement a Hazardous Materials Release and Prevention Plan (HMRP Plan) to reduce the risk of sensitive receptors from being exposed to hazardous materials during construction. The HMRP Plan shall identify control measures to prevent the release of hazardous materials, as well as a detailed action plan outlining how to respond to an incidental spill in compliance with all local, state, and federal regulations relating to the handling of hazardous materials. The HMRP Plan shall be incorporated into the stormwater pollution prevention plan and consistent with the best management practices identified under the Hydrology and Water Quality Section and required under MM HYD-1 to reduce the impact of spilled hazardous materials. The HMRP Plan must meet containment details as identified in MM HYD-1 and identify spill containment materials necessary to adequately respond to a hazardous materials spill as set forth in MM HYD-1.

Mitigation Measure HAZ-1 Implementation

Responsible Party: The City is responsible for verifying and documenting that the HMRP Plan meets all applicable requirements. The selected construction contractor is responsible for following the HMRP Plan and implementing the actions in the event of a spill.

Timing: HMRP Plan preparation is required prior to construction. The HMRP Plan shall be implemented throughout construction.

Monitoring and Reporting Program: The HMRP Plan shall be developed by the construction contractor and is required to be kept onsite during construction. Additionally, the contractor must provide the City a copy and copies must be available for quick reference and review at the project site and at the City offices. The contractor must ensure that all construction workers involved in the operation and movement of

CITY OF MERCED WASTEWATER COLLECTION SYSTEM MASTER PLAN UPDATE DRAFT ENVIRONMENTAL IMPACT REPORT

Environmental Impact Analysis — Hazards, Hazardous Materials, and Wildfires
September 2020

construction equipment are familiar with the HMRP Plan and that the HMRP Plan is appropriately followed throughout construction.

Standards for Success: Hazardous materials release prevention and adherence to HMRP Plan conditions and release prevention practices.

Mitigation Measure HAZ-2: Worker Environmental Awareness Program (Hazards)

The purpose of a Worker Environmental Awareness Program (WEAP) is to educate personnel (i.e., construction workers) about the existing onsite and surrounding resources, the measures required to protect these resources, and strategies for avoidance of potential hazards within these sites. The WEAP, developed by the City, shall include materials and information on potentially sensitive biological and cultural resources, air quality protection measures, and potential hazards resulting from construction within the Project area, and applicable precautions that personnel should take to reduce potential impacts.

The WEAP presentation shall be given to all personnel who may be exposed to site hazards or may harm sensitive environmental resources as identified within the WEAP mitigation measures (e.g., exposure to dust-generating or ground-disturbing activities, work within non-biologically cleared areas, or equipment operators who may encounter sensitive species). The WEAP presentation shall be given prior to the start of construction and as necessary throughout the life of the Project as new personnel arrive onsite. The City and the contractor are responsible for ensuring all onsite personnel attend the WEAP presentation, receive a summary handout, and sign a training attendance acknowledgement form to indicate that the contents of the program are understood and to provide proof of attendance. Each participant of the WEAP presentation shall be responsible for maintaining their copy of the WEAP reference materials and for making sure that other onsite personnel are complying with the recommended precautions. The contractor shall keep the sign-in sheet onsite and shall submit copies of the sign-in sheet to the City's Project Manager, who will keep it on file at City offices.

For the hazards and hazardous materials portion of the WEAP presentation, the following information and implementation steps shall be prepared, presented, and executed prior to and during construction to prevent exposure and raise awareness of potential site hazards:

- Inform personnel about potential hazards within the Project area, including but not limited to, both naturally occurring and man-made asbestos, including asbestos cement (AC), present within soils as well as Valley Fever spores (*Coccidioides immitis*) and the likelihood of presence within site-specific soils. Information given should include the following:
 - Providing context as to where these hazards could occur during construction and how to handle them if they are encountered (such as in the case of encountering AC pipelines or other structures with AC);
 - Outlining ways to prevent exposure (outlined below);
 - Informing personnel that the appropriate respiratory equipment can be provided upon request to further prevent exposure to dust particles;
 - Informing personnel about the symptoms of exposure to potential hazards, including asbestos and Valley Fever. Symptoms of Valley Fever exposure could include but are not limited to fever, cough, chills, and night sweats, which appear 1 to 3 weeks after exposure. Symptoms of asbestos exposure (i.e., Asbestosis) occur

CITY OF MERCED WASTEWATER COLLECTION SYSTEM MASTER PLAN UPDATE DRAFT ENVIRONMENTAL IMPACT REPORT

Environmental Impact Analysis — Hazards, Hazardous Materials, and Wildfires
September 2020

- over a much longer period of time (10 to 40 years after exposure) and could include but are not limited to shortness of breath, tightness in chest, chest pain, and appetite loss;
- Informing personnel about appropriate actions to take if symptoms of exposure occur, including regular doctor checkups (i.e., for personnel working regularly within the construction or industrial settings where exposure to asbestos is high), and seeking emergency medical care if symptoms for Valley Fever persist or get worse;
 - Inform personnel about potentially hazardous sites within the Project areas and how to identify hazardous materials sites. Signs of potential contamination within soils could include stained soils, discolored or oily water, previously unknown underground storage tanks, etc. Work should be stopped if any of these signs are identified within the Project area, and MM HAZ-3 should be implemented before work shall resume.

Mitigation Measure HAZ-2 Implementation

Responsible Party: The City and chosen contractor

Timing: Prior to construction and throughout construction activities as new personnel arrive on the Project site

Monitoring and Reporting Program: Development of a WEAP presentation and handout packet in accordance with this mitigation measure and any other resource-specific WEAP requirements. A sign in sheet completed for all workers on the construction site shall be kept on file at the Project site, and copies shall be submitted to the City's Project Manager to be kept on file at City offices.

Standards for Success: Limit exposure of personnel to potential hazards during construction through prescribed safety precautions. If exposure cannot be avoided, education of personnel for immediate recognition of health symptoms to act quickly and seek appropriate medical or emergency care to limit long-term harm.

Mitigation Measure HAZ-3: Updated Active Cortese List Site Identification and Hazardous Site Remediation

The City shall conduct a review of the Cortese list database within 30 days of the start of construction to identify sites within 0.5 mile of Project activities to identify Cortese sites designated as 'Active'. A qualified professional (i.e., a Registered Professional Geologist) shall conduct a review of these Active sites to determine if the specific contaminants of the Active site would interfere with Project construction activities or if construction workers could be exposed to contaminants of the Active site. If, based on the educated opinion of the qualified professional, hazardous sites would not be encountered by construction activities, then no further action is required. If it is determined by the qualified professional that an Active site has potential to be present in the location of proposed construction activities, then the City shall implement the following steps:

1. The qualified professional (i.e., a Registered Professional Geologist) shall examine the Active site and work with the City to determine the site's potential for interactions with Project activities.
2. If the site has the potential to interfere with construction activities, the City shall contact, as applicable, the United States Environmental Protection Agency or regulating authority, Merced County Environmental Health Department, the site owner, and/or the responsible party to identify the clean-up measures being undertaken and

CITY OF MERCED WASTEWATER COLLECTION SYSTEM MASTER PLAN UPDATE DRAFT ENVIRONMENTAL IMPACT REPORT

Environmental Impact Analysis — Hazards, Hazardous Materials, and Wildfires
September 2020

the timeline for clean-up. The qualified professional shall then make recommendations on the appropriate course of action, such as personal protection equipment for construction workers, further project specific site investigations, project site remediation, or other methods that would limit the potential for human or environmental exposure to Active hazardous materials contamination sites;

3. These recommendations shall then be submitted to the applicable agency(s). This course of action shall be evaluated and approved by the appropriate regulatory agency (e.g., Merced County Environmental Health Department);
4. The appropriate course of action (i.e., further investigation, remediation, or other methods) shall take place prior to the start of any construction activities within the area;
5. Once the hazardous site is determined by the qualified professional and the Health Department to no longer pose a threat to human health or the environment, then construction work can begin or continue;
6. The City shall be responsible for appropriate notification of regulatory agencies such as the Central Valley Regional Water Quality Control Board (CVRWQCB) and the Department of Toxic Substances Control (DTSC) if new sites are discovered or if previously known sites result in a status change (i.e., site is cleaned up).

Mitigation Measure HAZ-3 Implementation

Responsible Party: The City.

Timing: The updated Cortese list query shall be performed no more than 30 days prior to the start of construction and updated query searches shall be performed throughout construction if construction were to be delayed for a duration greater than one year or new sites are reasonably foreseeable to interact with the Project site.

Monitoring and Reporting Program: The Registered Professional Geologist shall submit a technical memorandum to the City to be kept on file that includes the updated query list of Active Cortese listed sites and the potential for interaction with Project construction. If previously unknown hazardous materials sites are encountered during construction, then a Registered Professional Geologist shall be retained to analyze the site and report necessary further action steps. The City shall submit appropriate documentation of any hazardous sites encountered to the CVRWQCB and the DTSC for updating of the Cortese-listed sites database.

Standards for Success: Project construction activities shall not interact with hazardous sites such that release of hazardous materials that could impact human health or the environment could occur.

Mitigation Measure HAZ-4: Coordination with Airports

The City shall coordinate with the Federal Aviation Administration (FAA) at least 45 days prior to the start of construction activities for any construction activities that would occur within an airport compatibility zone that have the potential to result in construction equipment (i.e. a crane) that would potentially exceed 200 feet. The City shall submit Form 7460-1, "Notice of Proposed Construction or Alteration" to the FAA to obtain a no hazard determination from the FAA. If the FAA responds with a hazard determination, the City will work with the FAA to remedy the potential hazard before the start of construction. If the FAA response is a no hazard determination, then no further

CITY OF MERCED WASTEWATER COLLECTION SYSTEM MASTER PLAN UPDATE DRAFT ENVIRONMENTAL IMPACT REPORT

Environmental Impact Analysis — Hazards, Hazardous Materials, and Wildfires
September 2020

action is required. If the FAA does make a hazard determination, additional precautions and measures as required by FAA will be obtained to comply with FAA requirements. Additional ongoing coordination may be required to ensure that proposed construction activities within a compatibility zone of the airports (specifically Merced Regional Airport) do not disrupt airport operations and appropriate notice is provided to aviators within the airport.

Mitigation Measure HAZ-2 Implementation

Responsible Party: The City.

Timing: 45 days prior to the start of construction.

Monitoring and Reporting Program: The City shall prepare and submit Form 7460-1 to the FAA and follow up with the FAA in order to receive either a no hazard or hazard determination.

Standards for Success: Result in no hazards during construction or operations of the Project to either Merced Regional airport or Castle Airport.

CITY OF MERCED WASTEWATER COLLECTION SYSTEM MASTER PLAN UPDATE DRAFT ENVIRONMENTAL IMPACT REPORT

Environmental Impact Analysis — Hazards, Hazardous Materials, and Wildfires
September 2020

3.8.6 Abbreviations

AC	Asbestos Cement
BMPs	Best Management Practices
CAA	Clean Air Act
CAL EPA	California Environmental Protection Agency
CAL EMA	California Emergency Management Agency
CAL FIRE	California Department of Forestry and Fire Protection
CalOSHA	Division of Occupational Health and Safety
Caltrans	California Department of Transportation
CCR	California Code of Regulations
CEQA	California Environmental Quality Act
CFR	Code of Federal Regulations
City	City of Merced
CUPA	Certified Unified Program Agency
DOSH	Division of Occupational Safety and Health
DTSC	California Department of Toxic Substances Control
EIR	Environmental Impact Report
FAA	Federal Aviation Administration
FAR	Federal Aviation Regulation
HAP	Hazardous Air Pollutants
HMRP Plan	Hazardous Materials Release and Prevention Plan
MMs	Mitigation Measures
NOP	Notice of Preparation
OSHA	Occupational Safety and Health Administration
PRC	Public Resources Code
RCRA	Resources Conservation and Recovery Act
ROW	right-of-way
SR	State Route
SRA	State Responsibility Area
SUDP/SOI	Specific Urban Development Plan/Sphere of Influence
SWRCB	State Water Resources Control Board
Unified Program	Unified Hazardous Waste and Hazardous materials Management Regulatory Program
UFC	Uniform Fire Code
USC	United States Code
USEPA	United States Environmental Protection Agency
WEAP	Worker Environmental Awareness Program

CITY OF MERCED WASTEWATER COLLECTION SYSTEM MASTER PLAN UPDATE DRAFT ENVIRONMENTAL IMPACT REPORT

Environmental Impact Analysis — Hazards, Hazardous Materials, and Wildfires
September 2020

WWTRF	Wastewater Treatment and Reclamation Facility
2030 General Plan	Merced Vision 2030 General Plan

3.8.7 References

- California Department of Forestry and Fire Protection (CAL FIRE). 2007. Draft Fire Hazard Severity Zones in LRA- Merced County. http://frap.fire.ca.gov/webdata/maps/merced/fhszl06_1_map.24.pdf. Accessed October 2018.
- _____. 2012. State Responsibility Areas for Fire Protection- Merced County. http://frap.fire.ca.gov/data/frapgismaps/sra11_2/sramap.24.pdf. Accessed October 2018.
- California Geological Survey. 2011. Reported Historic Asbestos Mines, Historic asbestos Prospects, and other Natural Occurrences of Asbestos in California. ftp://ftp.consrv.ca.gov/pub/dmg/pubs/ms/59/MS59_Plate.pdf. Accessed October 2018.
- California Department of Transportation (Caltrans). 2006. An Overview of Naturally Occurring Asbestos. www.dot.ca.gov/hq/env/haz/docs/noa/h160.doc. Accessed October 2018.
- Center for Infectious Diseases. 2017. Epidemiologic Summary of Coccidioidomycosis in California. <https://www.cdph.ca.gov/Programs/CID/DCDC/CDPH%20Document%20Library/CocciEpiSummary2017.pdf>. Accessed November 2018.
- City of Merced. 2015. Local Hazard Mitigation Plan. <https://www.cityofmerced.org/civicax/filebank/blobdload.aspx?BlobID=14849>. Accessed October 2018.
- _____. 2012. Merced Vision 2030 General Plan. <https://www.cityofmerced.org/departments/development-services/planning-division/merced-vision-2030-general-plan#:~:text=The%20Merced%20Vision%202030%20General%20Plan%20was%20adopted%20on%20January,which%20can%20be%20downloaded%20below>. Accessed June 2018.
- _____. 2010. Merced Vision 2030 General Plan Draft Program Environmental Impact Report. <https://www.cityofmerced.org/civicax/filebank/blobdload.aspx?BlobID=9183>. Accessed June 2018.
- Department of Toxic Substance Control (DTSC). 2018. EnviroStor Database. <https://www.envirostor.dtsc.ca.gov/public/map/?myaddress=Merced%2C+California>. Accessed November 2018.
- Merced County Airport Land Use Commission. 2012. Merced County Airport Land Use Compatibility Plan. http://web2.co.merced.ca.us/pdfs/planning/aluc/alucp_july2012/2012_mer_alucp_entire_document.pdf. Accessed October 2018.
- State Water Resources Control Board (SWRCB). 2018a. GeoTracker Database. <https://geotracker.waterboards.ca.gov/map/?CMD=runreport&myaddress=merced>. Accessed November 2018.

CITY OF MERCED WASTEWATER COLLECTION SYSTEM MASTER PLAN UPDATE DRAFT ENVIRONMENTAL IMPACT REPORT

Environmental Impact Analysis — Hazards, Hazardous Materials, and Wildfires
September 2020

- _____. 2018b. General Electric Company Kendall Site (SL 185092894).
https://geotracker.waterboards.ca.gov/profile_report.asp?global_id=SL185092894. Accessed November 21, 2018.
- United States Environmental Protection Agency (USEPA). 2018a. Resource Conservation and Recovery Act (RCRA) Overview. <https://www.epa.gov/rcra/resource-conservation-and-recovery-act-rcra-overview>. Accessed October 2018.
- _____. 2018b. Emergency Planning and Community Right-to-Know Act (EPCRA). <https://www.epa.gov/epcra/what-epcra>. Accessed October 2018.
- _____. 2017. What are Hazardous Air Pollutants? <https://www.epa.gov/haps/what-are-hazardous-air-pollutants>. Accessed October 2018.

**CITY OF MERCED WASTEWATER COLLECTION SYSTEM MASTER PLAN UPDATE DRAFT ENVIRONMENTAL
IMPACT REPORT**

Environmental Impact Analysis — Hazards, Hazardous Materials, and Wildfires
September 2020

This page intentionally left blank.