

## ***Section 3.8***

### ***Hazards and Hazardous Materials***

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This environmental issue focuses on the impacts of a project with respect to hazards. The creation of new hazardous conditions or activities that will result in people or property being exposed to existing hazards is the primary area of focus under this environmental issue. Hazards include, but are not limited to, hazardous materials, hazards associated with aircraft and airports or wildland fires. An additional concern is the consistency of a project with emergency response plans or emergency evacuation plans.

#### ***3.8 1 Environmental Setting***

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##### ***Regulatory Environment***

California's economic well-being and quality of life depend in many ways on the production and use of manufactured goods. However, manufacturing often requires large volumes of chemicals and generates hazardous waste. Hazardous waste ranges from familiar substances, such as solvents and waste oil, to sophisticated compounds such as polychlorinated biphenyls and dioxins. More than 10 million tons of hazardous waste are generated in California each year.

In 1986, the California legislature passed legislation requiring each county to develop a hazardous waste management plan and requiring all cities to either adopt the county plan by reference in their general plans or adopt their own plan. The Stanislaus County Board of Supervisors has adopted the Stanislaus County Hazardous Waste Management Plan. The plan addresses waste reduction and onsite treatment, the siting of off-site hazardous waste facilities, public and industry education, transportation of hazardous wastes, cleanup of contaminated sites, and emergency response procedures. The plan also recommends a series of goals, policies, and implementation actions to deal with hazardous waste throughout the county.

The Stanislaus County Environmental Health Division, which oversees the enforcement of the plan, maintains an up-to-date list of known hazardous waste sites within the county. Cleanup of sites that exceed state standards for contamination by toxic materials is required prior to development or reuse of the site. The State Department of Health Services monitors the cleanup process.

The Stanislaus County Fire Department and Environmental Health Division work with the county to prevent the uncontrolled release of toxic substances into the environment by conducting inspections of toxic materials facilities, enforcing storage and use requirements, and educating local businesses on proper storage and handling of hazardous materials. The fire department responds to uncontrolled releases within the city limits, identifies the category of chemicals involved, contains the spill if possible, oversees cleanup activities, and makes sure that the site is safe to be occupied again.

The county Hazardous Waste Management Plan deals with detailed emergency response procedures under various conditions for hazardous materials spills. The city also works

with the State Department of Health Services to establish cleanup plans and to monitor the cleanup of known hazardous waste sites within the city.

The Uniform Building Code (UBC) and the Uniform Fire Code (UFC) work together as companion documents to regulate building construction and related items such as the care of vacant lots and the storage of flammable liquids. Generally, the UBC regulates new construction and the UFC covers the maintenance of the construction. Each year the Fire Prevention Bureau and engine companies conduct inspections and eliminate Uniform Fire Code violations that could contribute to the cause and severity of a fire. The inspection program primarily targets the high and medium hazard occupancies.

### ***Hazardous Sites***

One source of information on hazardous materials in the city of Waterford Planning Area can be found in the central Valley RWQCB's Site Cleanup and Leaking Underground Storage Tank lists (State Water Resources Control Board 2001). These lists, updated quarterly, identify sites by name and street address, identify the pollutants of concern, and identify the agency overseeing cleanup activities.

Hazardous substances include both hazardous wastes and hazardous materials. In general, a material or waste is classified as hazardous if it is one of more than 700 chemicals specifically listed in the California Code of Regulations; if it contains one of these chemicals; or if it is reactive, ignitable, corrosive, or toxic. Because of their potential threat to public health and the environment, hazardous substances are closely regulated by federal, state, and local laws that focus on controlling their production, handling, storage, transportation, and disposal.

Federal and state environmental laws provide that all property owners be required to pay for cleanup, when necessary, of contamination by hazardous materials on or originating from their land. Because of the potential liability, purchasers or developers of commercial, industrial, or agricultural property should perform environmental assessments before development or purchase. In addition to being liable for cleanup, the owner can be responsible for toxic effects on human health, and measures should be taken to avoid exposing people to hazardous materials.

Although there is already a list of sources of hazardous materials in the project area, there may be other sources that have yet to be identified. Gas stations and industrial activities located next to the roadways in the planning areas may have released hazardous materials to the environment. Farms and other agricultural activities may have also released hazardous materials to the environment. To determine the full extent of possible hazardous materials sources, Phase I and Phase II hazardous materials site assessments would need to be completed for suspect parcels in and adjacent to specific project areas. These assessments are beyond the scope of this program-level analysis.

The first step in identifying sources of hazardous materials is to conduct a database search of federal, state, and local agency records. A database search is the principle source of information to verify the presence of hazardous materials/wastes in the

Waterford urban planning area. The results of these searches include lists of sites with known, potential, or existing hazardous materials in a specified search area. Individual sites can occur on several lists for the same reason and are sometimes repeated under different names on the same list.

A summary of the databases that should be searched is presented below. Lists such as the National Priorities List of Superfund Sites (NPL), the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS), Annual Workplan (AWP), the CAL-SITES Database, Cortese, the Toxic Pit List, and the aforementioned Leaking Underground Storage Tank list indicate sites with known soil and/or groundwater contamination or high potential for contamination.

### ***Emergency Operations Plan***

The City of Waterford has adopted an *Emergency Operations Plan*. This Plan accomplishes the following:

- Establishes the emergency management organization required to mitigate any significant emergency or disaster affecting the city of Waterford,
- Identifies the policies, responsibilities and procedures required to protect the health and safety of the city of Waterford, public and private property and the environmental effects of natural and technological emergencies and disasters,
- Establishes the operation concepts and procedures associated with Initial Response Operations (field response) to emergencies, the Extended Response Operations (city and county Emergency Operations Center (EOC) activities) and the recovery process.

The *Waterford Emergency Operations Plan* is prepared and maintained in accordance with federal and state law and periodically is reviewed and updated to reflect changes in circumstances with respect to disaster relieve, response and clean-up procedures.

The purpose of the *Emergency Operations Plan* is to provide emergency planning/organization and response. The document deals with emergency management, law enforcement, traffic control, fire, medical, rescue, radiological material, and shelter.

The Construction and Engineering section deals basically with emergency repairs, route recovery, and post-event inspection of facilities; and the Movement section deals with evacuation procedures. The plan is designed to prepare the community for responding to an emergency situation in a highly organized and efficient way so that chaotic situations are avoided.

### ***Emergency Evacuation Routes***

Earthquakes, fires, and flooding are all hazards that require planned evacuation routes to move residents to safer ground. For the most part, Highway 132 would be used for evacuation. However, alternative routes, such as the Oakdale-Waterford Highway are available for emergency evacuation of the city and its surrounding environs.

Intra-city routes would be regulated by the California Highway Patrol in conjunction with county sheriff and city police. For more detailed information on evacuation routes see the Stanislaus County General Plan. The city endorses and abides by the Office of Emergency Services "Multi-Hazard Functional Plan" as amended.

### ***Wildland Fires***

Wildland fires occur from a combination of climatic, vegetative and physiographic conditions and have the potential to cause loss of life and property damage. Wildland fire hazards exist in varying degrees throughout Stanislaus County, mostly outside urban areas. The Valley's long, dry summers and extensive vegetation makes for a fire season that extends from late spring to early fall. Irrigated agricultural land, however, is less susceptible to wildland fires than grazing areas.

### ***3.8.2 Environmental Impacts***

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As a result of policies of the general plan update, uses and activities may be proposed or undertaken within the city of Waterford that could result in the use of hazardous materials or create a hazardous condition within the city. Some man-made improvements could result in hazardous conditions within the city's urban center.

#### ***A. Thresholds of Significance***

Appendix "G" of the CEQA Guidelines addresses potential impacts on Hazards & Hazardous Materials as follows:

#### ***Would the project:***

- 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 one-quarter mile of an existing or proposed school?
- Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?
- For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?
- For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?
- Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?
- Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?

## ***ASSESSMENT OF HAZARDOUS MATERIALS***

### **DEFINITION OF HAZARDOUS MATERIAL**

A hazardous material, which because of its quantity, concentration, or physical, chemical, or infectious characteristics, may either:

- a) Cause, or significantly contribute to an increase in mortality or an increase in serious irreversible, or incapacitating reversible illness; or
- b) Pose a substantial present or potential hazard to human health or environment when improperly treated, stored, transported, or disposed of, or otherwise managed.

A hazardous material also includes any of the criteria for the identification of a hazardous waste adopted by the State Department of Health Services pursuant to Section 25141, Division 20, Chapter 6.5 of the California Health and Safety Code. Hazardous waste includes, but is not limited to, Resource Conservation and Recovery Act (RCRA) hazardous waste. Unless expressly provided otherwise, the term hazardous waste shall be understood to also include extremely hazardous waste and acutely hazardous waste.

### **DEFINITION OF TERMS**

*Underground Storage Tanks (UST)* Any one or combination of tanks, including pipes connected thereto, which are used for the storage of hazardous substances as defined in the California Health and Safety Code, Division 20, Chapter 6.7, and which are substantially or totally beneath the surface of the ground.

Underground Storage Tank does not include any of the following:

1. A tank with a capacity of 1,100 gallons or less which is located on a farm and which stores motor vehicle fuel used primarily for agricultural purposes and not for resale.
2. A tank which is located on a farm or at the residence of a person, which has a capacity of 1,100 gallons or less, and which stores home heating oil for consumptive use on the premises where stored.
3. Structures such as sumps, separators, storm drains, catch basins, oil field gathering lines, refinery pipelines, lagoons, evaporation ponds, well cellars, separation swaps, lined and unlined pits, sumps and lagoons. Sumps which are a part of a monitoring system required under Section 25291 or 24292 and sumps or other structures defined as underground storage tanks under the federal act are not exempted by this section. Structures identified in this paragraph may be regulated by the board and any regional board pursuant to the Porter-Cologne Water Quality Control Act (Division 7 [commencing with Section 13000] of the Water Code) to ensure that they do not pose a threat to water quality.

*Pipeline* - means any pipeline or system of pipelines which is used in connection with the storage of hazardous substances and which is not intended to transport hazardous substances in interstate or intrastate commerce or to transfer hazardous materials in bulk.

*Existing Underground Storage Tank* - means any underground storage tank that is not a new underground storage tank. The term includes any underground storage tank which has contained a hazardous substance in the past and, as of January 1, 1984, had the physical capability of being used again (i.e., it had not been removed or completely filled with an inert solid).

NOTE: For a more complete list of definitions, the reader is directed to California Health and Safety Code, Division 20, Chapter 6.5.

#### THRESHOLD CRITERIA

The storage, handling and disposal of potentially hazardous material shall be in conformance with the requirements set forth in the following regulations:

- Enabling Legislation California Administrative Code (CAC), Title 22, Division 4, Chapter 30.
- California Health and Safety Code, Division 20, Chapter 6.5.
- California Health and Safety Code, Division 20, Chapter 6.7 (Underground Storage of Hazardous Substances) and the California Code of Regulations Title 23, Chapter 3, Subchapter 26 (California Underground Storage Tank Regulations).
- Local county Permit Requirements, (Hazardous Substances), (Hazardous Wastes Producers).

The above state legislation and local ordinances have been enacted for the purpose of preventing contamination from, and improper storage, handling and disposal of, hazardous wastes. It is the intent of these regulations to establish procedures that will ensure that the generators of hazardous wastes employ technology, and destruction of their hazardous wastes prior to disposal.

#### **ASSESSMENT OF AVIATION HAZARDS**

##### DEFINITION OF ISSUE:

*Aviation hazard* is defined as the potential loss of life and/or property due to an aircraft accident. It is further defined as anything or act which increases, or may cause to increase, the hazard or risk of aircraft accidents to a greater degree than that which may occur characteristically as the result of mechanical failure, pilot error or inclement weather.

Incompatible land uses near airports include those associated with residential development, retail centers with high density uses, schools, churches, refineries and mobile home parks. The purpose of establishing land use restrictions in safety zones around an airport is to minimize the number of people exposed to aircraft crash hazards and unwanted aircraft generated noise. To achieve those objectives, decision-makers must limit the number of persons in an area and limit the area covered by structures occupied by people. Each additional person in an area near an airport becomes subject to a certain crash hazard risk by virtue of being located in the airport sphere of influence.

**THRESHOLD CRITERIA:**

A review of aviation hazards, as those hazards relate to proposed development of properties near private or public airports, will focus on compliance with the Comprehensive Land Use Plan and pre-established federal criteria set forth in Federal Aviation Regulation Part 77 (Obstruction Standards), as well as those recommendations for good land-use planning made by state and county government agencies. Special attention should be given to all residential development within two (2) miles of either type of airport, as well as churches, schools and high commercial purpose buildings to be located within the same sphere of influence.

***ASSESSMENT OF IMPACTS ON EMERGENCY RESPONSE PLANS***

**DEFINITION OF ISSUE**

An Emergency Response Plan is a plan for a community, regional or state response to an emergency resulting from a natural or man-made disaster.

**THRESHOLD CRITERIA**

Any project that is inconsistent with an Emergency Response Plan, or creates obstacles to the orderly public agency response to a natural or man-made disaster is considered to have a significant impact.

***ASSESSMENT OF WILDLAND FIRE HAZARDS***

**DEFINITION OF ISSUE:**

Wildland fire hazard is defined as the potential loss of life and/or property due to fire in a rural or non-urbanized area designed as a Wildland Fire Hazard Area by the California Department of Forestry. Uniform Building Code identifies high fire hazard areas as any area within 500 feet of uncultivated brush, grass, or forest covered land wherein an authorized representative of the fire department or county fire marshall determines that a potential fire hazard exists due to the presence of such flammable growth.

**THRESHOLD CRITERIA**

A project will have a significant adverse wildland fire impact when located within:

- A Wildland Fire Hazard area and does not comply with California Department of Forestry regulations and standards and/or
- An area addressed in the Uniform Building Code building and safety requirements for structures and does not comply with UBC and Uniform Fire Code regulations and standards and/or
- An area subject to any local weed abatement program which calls for the clearing of brush, flammable vegetation, or combustible growth located within minimum distance of structures or buildings and does not comply with those standards.

***B. Potential Significant Impacts:***

***Hazards and Hazardous Materials Impacts Found Not to be Potentially Significant:***

As a result of project analysis, based on data collected in the evaluation of the city's general plan implementation, the following aspects of a potential hazards and hazardous

materials impact are found not to exist or exist at levels well below any reasonable expectation that a significant adverse impact is likely to result:

- *Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?*

Adoption and implementation of the general plan will not result in the routine transport, use or disposal of hazardous materials that would be in violation of any federal, state or local standard established for the safe handling, transport and 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?*

Adoption and implementation of the general plan will not result in any reasonably foreseeable upset or accident condition involving the release of hazardous materials into the environment in violation of any federal, state or local standard established for the safe management and containment of hazardous materials.

- *Emit hazardous emission or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?*

Adoption and implementation of the general plan will not result in the handling or emission of hazardous materials within one-quarter mile of an existing or proposed school facility that would be in violation of any federal, state or local standard established for the safe handling, transport and disposal of hazardous materials.

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

The city and its expansion area contain several identified hazardous sites, most involving underground storage tanks. All of these sites are within the built urban environment of the city and are under the management of the Stanislaus County Department Environmental Resources in compliance with the environmental health laws of the state of California. These sites are managed under state regulations to assure that they do not create a significant hazard to the public or the environment.

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

The city and the area surrounding the city and its growth area do not contain any airports or airstrips.

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

The city and the area surrounding the city and its growth area, do not contain any private airports or airstrips.

- *Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?*

Adoption and implementation of the general plan will not result in the impairment of the implementation of any emergency response plan. The general plan will provide one of the key implementation strategies for designing emergency evacuation plan for the city and region through the designation of the city's street system in accordance with the Functional Classification System.

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

The unincorporated and/or undeveloped areas adjacent to the city of Waterford's urban planning area are predominantly irrigated cropland. As the city annexes rural areas, agricultural management practices sometimes result in weeds and grasses to grow in such a manner as to create a fire hazard. Wildland fire hazards are reduced by enforcement of city building and fire codes, use of green belting, prescription burning to control fuel load, weed abatement, and implementation of other fire safe practices. As a result, the wildland fire hazards in or near the city of Waterford are minimal.

*Hazards and Hazardous Materials Impacts Found to be Potentially Significant:*

As a result of project analysis, based on data collected in the evaluation of the city's proposed general plan, no potential hazards and hazardous materials impact are expected to result in a significant adverse environmental impact due to project implementation:

***C. Proposed General Plan Goals & Policies:***

The Safety Chapter of the Waterford General Plan contains the following goals and policies regarding hazards:

***Goal Area - General Disaster Preparedness***

***Policy***

- ***S-1.1*** Develop and maintain emergency preparedness procedures for the city.

***Goal Area- Fire and Hazardous Material Safety for the Residents of the city and For Those Working in Fire Suppression***

**Policy**

- **S-6.1** Prevent injuries and environmental contamination due to the uncontrolled release of hazardous materials.

**Goal Area- Hazardous Materials Safety for city Residents**

**Policy**

- **S-6.2** Ensure that hazardous materials are cleaned up before a property is developed or redeveloped.

***Other Hazardous Materials Regulations***

California regulations governing hazardous materials are, at least, as stringent as federal regulations. The state has been granted primacy (primary responsibility for oversight) by EPA to administer and enforce hazardous waste management programs. State regulations also have detailed planning and management requirements to ensure that hazardous materials are properly handled, stored, and disposed of to reduce human health risks. California regulations pertaining to hazardous waste management are published in the CCR, previously called the California Administrative Code. Title 26, administered by Cal-EPA, is the largest state code and incorporates all the regulations that deal with toxic materials from other titles.

**Relevant Plans, Policies, and Regulations**

***Federal Hazards Regulations***

Resource Conservation and Recovery Act. The Resource Conservation and Recovery Act (RCRA) of 1976 (substantially amended in 1984), administered by EPA, is the principal federal legislation regulating hazardous waste. RCRA imposes reporting, permitting, and operation control requirements on those who generate, treat, store, or dispose of hazardous materials or hazardous waste. RCRA is implemented by Title 40 of the CFR. The recent amendments to this act involve stringent monitoring of landfills and regulation of underground storage tanks for hazardous materials and hazardous wastes.

Comprehensive Environmental Response, Compensation, and Liability Act. In response to cleaning up pre-RCRA hazardous waste sites, Congress enacted the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) in 1980 (commonly referred to as “Superfund”). Consequently, abandoned hazardous waste sites had to be inspected and cleaned up, and the waste had to be properly disposed. Superfund Amendments and Reauthorization Act The risk to those exposed to hazardous waste as a result of RCRA and CERCLA was addressed in the Superfund Amendments and Reauthorization Act (SARA) of 1986. As a result of SARA, the federal Occupational Safety and Health Administration (OSHA) published hazardous waste clean-up regulations in Section 29 CFR 1910.120.

Federally Reported Environmental Data National Priorities List of Superfund Sites The NPL is EPA’s database of more than 1,200 sites designated for priority cleanup under the Superfund program. NPL sites may encompass relatively large areas.

Resource Conservation and Recovery Information System (RCRIS)

The RCRIS is an EPA database that includes selective information on sites that generate, transport, store, treat, and/or dispose of hazardous waste as defined by RCRA. Identification on this list does not indicate that there has been an impact on the environment.

Comprehensive Environmental Response, Compensation and Liability Information System CERCLIS is an EPA database that contains information on potential hazardous waste sites that have been reported to EPA by states, municipalities, private companies, and individuals, pursuant to Section 103 of CERCLA. CERCLIS contains sites that are either proposed for or on the NPL, as well as sites that are in the screening and assessment phase for possible inclusion on the NPL.

Corrective Action Report (CORRACTS) CORRACTS is an EPA database that identifies hazardous waste handlers with RCRA corrective action activity.

RCRA Administrative Action Tracking System (RAATS) RAATS is an EPA database that contains records based on enforcement actions issued under RCRA pertaining to major violators, and includes administrative and civil actions brought by EPA.

PCB Activity Database System (PADS) PADS is an EPA database that identifies generators, transporters, commercial storers, and/or brokers and disposers of polychlorinated biphenyls (PCBs) who are required to notify EPA of such activities.

***D. Short-Term Impacts:***

Adoption of the general plan will result in the drafting and adoption of implementing policies and provisions, such as zoning standards, that will be utilized in the review of development proposals and to regulate normal land uses. These actions and regulations will not have any adverse impacts on the hazard environment of the area but will lead to improved regulation of development with respect to potential hazards and hazardous materials impacts.

***E. Long-Term Impacts:***

Growth and development within the urban area of the city will result in urban activities that will involve the storage and handling of hazardous materials that could expose people or property to a hazard. The regulatory environment, which involves federal, state and local regulations and standards, is based on scientific based risk assessment standards and implemented to minimize the hazard risks that may occur.

***F. Cumulative Impacts:***

Urbanization will result in the conversion of farmland to urban uses which will, in turn, place new development on land that was previously used for farming. Agricultural chemicals, including fertilizer, pesticides and herbicides will no longer be applied in the manner that they are normally used in a commercial agricultural operation. New development, along with the use of household chemicals, and landscape maintenance, will replace traditional agricultural activities.

***G. Secondary Impacts:***

As a result of regulatory standards for hazardous materials, it is expected that there will be an increase in the cost of construction and development on sites that contain hazardous materials or for businesses that use, store or handle such materials. These costs will be uniform within the region and the state and are not expected to be significant in most cases or create any substantial adverse economic impact that would hamper normal growth and development within the city.

***3.8.3 Mitigation Measures***

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As part of the city's development review program, individual development projects are typically required to prepare hazards studies to evaluate the project potential for containing hazardous materials. As a result of these studies, specific project level mitigation measures may be required as part of the project's conditions of approval. Other special state and federal regulations regulate the storage, use and management of hazardous materials to a degree that it is highly unlikely that new risks are created. No mitigation is proposed or required as there are no significant adverse impacts likely to result from the adoption and implementation of the City of Waterford General Plan Update.

***3.8.4 Level of Significance After Mitigation***

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Projects that are undertaken in a manner that is consistent with the policies and standards of the City of Waterford General Plan, and that comply with all appropriate federal, state and local Uniform Building Code (UBC) construction, Uniform Fire Code (UFC), OSHA or State Department of Health Services regulations, will not result in the creation of a significance adverse physical impact from hazardous conditions in the city.