

**ALAMEDA COUNTY COMMUNITY DEVELOPMENT AGENCY
PLANNING DEPARTMENT**



STAFF REPORT

TO Members of the Alameda County Planning Commission
RE Safety Element
HEARING DATE June 18, 2012

GENERAL INFORMATION

The following is an overview of the draft document to be discussed.

STAFF RECOMMENDATION

Take public testimony, review and provide comments on the draft Man Made Hazards chapter.

STAFF ANALYSIS

On May 21, 2012, the Commission heard a presentation from staff explaining the need to update the County's Safety Element and describing a process and timeline for its preparation. The Commission voted to proceed with the project as recommended by staff with the exception that the Commission, and not a subcommittee thereof, would review drafts of the Element.

The chapter before the Commission today describes those hazards that are man made, such as: hazardous waste and materials, and aviation hazards. The chapter provides an overview of the hazard, an assessment of its potential impacts, a review of current State, regional and local programs and policies which address the hazard, and a series of goals, policies and action intended to mitigate the hazard. Staff has consulted with numerous County agencies and departments, including but not limited to: the Zone 7 Water Agency, the County's Public Works and General Services Agencies in preparing the draft chapter, and will continue to do so throughout the preparation of the Element.

NEXT STEPS

Staff will bring the draft Chapter on Emergency Preparedness to the July 16, 2012 hearing.

ATTACHMENTS

Man Made Hazards [Draft]
Safety Element Workplan

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CHAPTER 2: MAN MADE HAZARDS

1.0 PURPOSE AND INTENT

This chapter describes man made hazards present within unincorporated Alameda County and goals, policies and actions intended to minimize loss due to hazardous materials and aviation.

2.0 HAZARDOUS MATERIALS

2.1. Introduction

Residential, commercial and industrial activities are all potential sources of hazardous waste. Hazardous materials include those substances that may be described as toxic, infectious, ignitable, corrosive or reactive. In the urban unincorporated areas, common sources of hazardous waste are gasoline service stations, dry cleaners, automotive repair businesses, machine shops, printers and photo processors. Other sources include plant nurseries, building supply yards, hospitals and medical office buildings, paint stores, and welding shops. In most cases, these uses are confined to major traffic corridors. In the non-urbanized portion of the County hazardous waste is generated through agricultural and mining related activities.

2.2. Regulatory Oversight for the Creation, Containment and Disposal of Hazardous Waste

The production, storage, transport and disposal of hazardous waste is regulated by federal, state and local laws designed to protect human health and the environment. The various agencies that enforce these laws include, but are not limited to, the U.S. Environmental Protection Agency, the California Environmental Protection Agency, the California Department of Transportation (Caltrans), and the Alameda County Department of Environmental Health. In those cases where there is evidence of contamination of ground and surface water, the State and Regional Water Resources Control Boards have oversight. The Bay Area Air Quality Management District would respond to the release of airborne contaminants to ensure compliance with applicable rules and regulations.

The California Environmental Quality Act (CEQA)

CEQA provides a mechanism for investigating potential impacts arising from the transport use or disposal of hazardous materials. CEQA requires identification of projects that would:

- 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.

Once these risks are known, the project applicant must either propose project alternatives or take appropriate actions to reduce the impact to acceptable levels.

Hazardous Materials Program¹

The Hazardous Materials / Waste Program for waste generation was established by the County Board of Supervisors in 1985 and recognized by the State of California Department of Toxic Substances Control (DTSC) through a Memorandum of Understanding. In quick succession the county's hazardous materials management plan program, underground storage tank program, tiered permitting program, and risk management program also started.

The Alameda County Department of Environmental Health (ACDEH) Certified Unified Program Agency (CUPA) is the administrative agency that coordinates and enforces numerous local, state, and federal hazardous materials management and environmental protection programs in the county. The CUPA administers the following programs:

Hazardous Materials Business Plan Program: Chapter 6.95 of the Health and Safety Code establishes minimum statewide standards for Hazardous Materials Business Plans (HMBP's). HMBP's contain basic information on the location, type, quantity, and health risks of hazardous materials and/or waste. Each business shall prepare a HMBP if that business uses, handles, or stores a hazardous material and/or waste or an extremely hazardous material in quantities greater than or equal to the following:

- 55 gallons for a liquid

¹ This information was obtained from the Department of Environmental Health website <http://www.acgov.org/aceh/hazard/index.htm>

- 500 pounds of a solid
- 200 cubic feet for any compressed gas
- Threshold planning quantities of an extremely hazardous substance

Hazardous Waste Generator Program: The Hazardous Waste Generator Program regulates businesses that generate any amount of a hazardous waste. Proper handling, recycling, treating, storing and disposing of hazardous waste are key elements to this program.

Underground Storage Tank Program: The Underground Storage Tank (UST) Program regulates the construction, operation, repair and removals of UST systems used to store hazardous materials and/or waste.

California Accidental Release Program: The California Accidental Release Program (Cal ARP) requires any business that handles more than threshold quantities of an extremely hazardous substance to develop a Risk Management Plan (RMP). The RMP is implemented by the business to prevent or mitigate releases of regulated substances that could have off-site consequences through hazard identification, planning, source reduction, maintenance, training, and engineering controls.

Tiered Permitting: The Tiered Permitting Program regulates the onsite treatment of hazardous waste.

Aboveground Storage Tanks: Facilities with a single tank or cumulative aboveground storage capacities of 1,320 gallons or greater of petroleum-based liquid product (gasoline, diesel, lubricants, etc.) must develop a Spill Prevention Control and Countermeasure plan (SPCC). An SPCC plan must be prepared in accordance with the oil pollution prevention guidelines in the Federal Code of Regulations (40 CFR, 112). This plan must include procedures, methods, and equipment at the facility to prevent discharges of petroleum from reaching navigable waters. A Registered Professional Engineer must certify an SPCC plan and a complete copy of the plan must be maintained on site.

The ACDEH CUPA program has jurisdiction in the following communities: Alameda, Albany, Castro Valley, Dublin, Emeryville, Piedmont, Newark, San Lorenzo, Sunol, and the unincorporated areas of Fremont, Hayward, Livermore, Pleasanton, San Leandro and parts of Byron, Mountain House and Tracy.

Household Hazardous Waste²

The Alameda County Household Hazardous Waste Program is operated as a partnership between the Alameda County Department of Environmental Health and StopWaste.org. Household hazardous wastes

² For more information about this program please go to the following website
<http://www.stopwaste.org/home/index.asp?page=293>

include leftover paint, solvents, antifreeze, used oil and batteries, cleansers, pesticides and pool chemicals. Alameda County has implemented provisions of its Household Hazardous Waste Plan that called for the development of three permanent facilities for household waste collection and recycling in Oakland, Hayward, and Livermore. These facilities collect, identify, sort, store, pack, and recycle or dispose of all hazardous wastes (except radioactive waste and explosives) delivered by residents of Alameda County and small businesses.

Emergency Response

The Alameda County Fire Department would respond to any discharge of hazardous waste.

2.3. Goals, Policies and Implementing Actions

Goal 1.	Minimize residents' exposure to the harmful effects of hazardous materials and waste.
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Policies

- P1. Uses involving the manufacture, use or storage of highly flammable (or toxic) materials and highly water reactive materials should be located at an adequate distance from other uses and should be regulated to minimize the risk of on-site and off-site personal injury and property damage. The transport of highly flammable materials by rail, truck, or pipeline should be regulated and monitored to minimize risk to adjoining uses. (Source: Seismic Safety and Safety Element, pg. 8-9)
- P2. The County shall strive to reduce hazardous waste using the following hierarchy of waste management strategies:
- Reduce the sources of hazardous waste.
 - Recycle and reuse hazardous waste.
 - Treat or incinerate residual hazardous waste.
 - Place reduced or untreatable waste in secure land disposal units. (Source: Eden Area Plan, pg. 8-23)
- P3. The County shall minimize risks of exposure to or contamination by hazardous materials by educating the public, establishing performance standards for uses that involve

hazardous materials, and evaluating soil and groundwater contamination as part of development project review.

- P4. New or expanding businesses shall be required to demonstrate compliance with the hierarchy of waste management strategies listed in Policy 1 of this Goal as a condition of receiving land use and business permits. (Source: Eden Area Plan, pg. 8-24)
- P5. All existing hazardous waste generators shall be required to implement the hazardous waste management hierarchy listed in Policy 2 of this Goal to the maximum extent feasible, both technically and economically. (Source: Eden Area Plan, pg. 8-24)
- P6. Adequate separation shall be provided between areas where hazardous materials are present and sensitive uses such as schools, residences and public facilities. (Source: Eden Area Plan, pg. 8-24)
- P7. The County shall assist the Alameda County Waste Management Authority with the implementation of the *Alameda County Integrated Waste Management Plan* and the *Alameda County Hazardous Waste Management Plan*. (Source: Eden Area Plan, pg. 8-24)
- P8. Developers shall be required to conduct the necessary level of environmental investigation to ensure that soil, groundwater and buildings affected by hazardous material releases from prior land uses and lead or asbestos in building materials will not have a negative impact on the natural environment or health and safety of future property owners or users. This shall occur as a pre-condition for receiving building permits or planning approvals for development on historically commercial or industrial parcels. (Source: Eden Area Plan, pg. 8-24)
- P9. The safe transport of hazardous materials through the unincorporated areas shall be promoted by implementing the following measures:
- Maintain formally-designated hazardous material carrier routes to direct hazardous materials away from populated and other sensitive areas.
 - Prohibit the parking of empty or full vehicles transporting hazardous materials on County streets.
 - Require new pipelines and other channels carrying hazardous materials avoid residential areas and other immobile populations to the extent possible.

- Encourage businesses to ship hazardous materials by rail. (Source: Eden Area Plan, pg. 8-24)
- P10. Emergency response plans shall be submitted as part of all use applications for any large generators of hazardous waste. (Source: Eden Area Plan, pg. 8-25)
- P11. To the extent feasible, the County shall continue to support the removal of hazardous wastes from the solid waste stream in unincorporated Alameda County in accordance with Countywide plans. (Source: Eden Area Plan, pg. 8-25)

Actions

- A1. Enforce applicable provisions of the Zoning Ordinance and Building Code. (Source: Seismic Safety and Safety Element, pg. 9)
- A2. Utilize zoning to segregate potentially hazardous uses. Hazardous materials should be located so that they are not affected by disasters such as fire, floods, and earthquakes. (Source: Seismic Safety and Safety Element, pg. 9)
- A3. Enforce the Alameda County Solid Waste Management Plan. (Source: Seismic Safety and Safety Element, pg. 9)
- A4. Cooperate with the Alameda County Waste Management Authority and Alameda County Department of Environmental Health to implement the hierarchy of waste management strategies listed in Policy 2 of this Goal. (Source: Eden Area Plan, pg. 8-25)
- A5. Continue to implement local siting criteria in order to implement relevant and applicable provisions consistent with the hazardous materials and waste management plans for Alameda County. (Source: Eden Area Plan, pg. 8-25)
- A6. Coordinate with the Alameda County Department of Environmental Health, Hazardous Materials Division and other appropriate regulatory agencies during the review process of all proposals for the use of hazardous materials or those involving properties that may have toxic contamination such as petroleum hydrocarbons, asbestos, and lead. (Source: Castro Valley Plan, pg. 10-34)
- A7. Require applicants of projects in areas of known hazardous materials occurrences such as petroleum hydrocarbon contamination, USTs, location of asbestos rocks and other such contamination to perform comprehensive soil and groundwater contamination assessments in accordance with regulatory agency testing standards, and if

contamination exceeds regulatory action levels, require the project applicant to undertake remediation procedures prior to grading and development under the supervision of appropriate agencies such as Alameda County Department of Environmental Health, Department of Toxic Substances Control, or Regional Water Quality Control Board. (Source: Castro Valley Plan, pg. 10-34)

- A8. Amend the County zoning regulations and project review processes to ensure that uses involving the use, storage, or transport of highly flammable, toxic, and/or highly water-reactive materials are located at an adequate distance from other uses and where they will not be adversely affected by disasters such as major fires, floods, or earthquakes. Regulate these uses to minimize the risk of on-site or off-site personal injury and property damage. (Source: Castro Valley Plan, pg. 10-34)
- A9. Educate businesses and residents (for example through information on the County's website, etc.) about the proper use, storage, and disposal of hazardous materials, but also ways to reduce or eliminate the use of hazardous materials, including the use of non-toxic or less-toxic alternatives.

3.0 AVIATION HAZARDS

Within Alameda County there are three airports: Oakland International, and the Hayward Executive, and Livermore Municipal Airports. The unincorporated areas are impacted by flights not only arriving and departing from these airports, but also from the nearby San Francisco International Airport. As a result, the airspace over Alameda County is quite crowded, making the potential for crash an ever-present concern.

3.1 Aviation Regulations Related to Land Use and Development

The Federal Aviation Administration (FAA) is the primary regulatory agency for airports. It establishes ground clearance for take-off and landing based on the type of aircraft that the airport supports. In addition, the Airport Land Use Commission (ALUC) is an advisory body that assists local agencies in their efforts to comply with the County's Airport Land Use Plan. The ALUC designates safety zones (also referred to Airport Protection Areas) to avoid high concentrations of people and/or high hazard situations in the vicinity of runways. The ALUC has also identified a Height Referral Zone in the vicinity of these airports, in accordance with FAA regulations, to prevent the construction of structures that may obstruct flight paths. Finally, CEQA requires that a project be screened for the creation of potential hazards within two miles of a public airport.

Emergency Response

The Alameda County Fire Department has staff capable of responding to aviation accidents, both on land and the sea. The City of Oakland also has a special fire-fighting unit at the Oakland International Airport equipped with special apparatus for aviation accidents. The US Coast Guard will respond to an aircraft incident over the water. The County, Port of Oakland, and the US Coast Guard have periodic drills to ensure readiness in the event of a water crash landing.

3.2. Goals, Policies and Implementing Actions

Please refer to the Airport Land Use Plan for information on this item.

DRAFT

PROPOSED PLANNING COMMISSION SAFETY ELEMENT UPDATE WORKPLAN

STAFF TASKS	SCHEDULE	CHAPTER/DOCUMENT	MEETINGS	MEETING OBJECTIVES
Kick off meeting	May 2012	N/A	Planning Commission May 21, 2012	Provide overview of the Element; establish subcommittee to oversee the preparation of the Element.
Draft chapter on man made hazards	May 2012	Hazardous materials and aviation hazards	Planning Commission June 18, 2012	Discuss element chapter and related goals, policies and actions
Draft chapter on emergency preparedness	June 2012	Emergency Preparedness	Planning Commission July 16, 2012	Discuss element chapter and related goals, policies and actions
Draft chapter on natural hazards	July 2012	Seismic/geologic, fire and flood	Planning Commission August 6, 2012	Discuss element chapter and related goals, policies and actions
Draft CEQA Document	July 2012	CEQA Document	Planning Commission August 20, 2012	Discuss the draft CEQA document
Circulate CEQA Document and Draft Element	August - September 2012	N/A	N/A	N/A
Review complete Element and CEQA document	October 2012	All	Planning Commission TBD	Discuss the entire Element